African Perspectives of Research in Teaching and Learning Journal
Issue 4, Volume 8, 2024
ISSN Print: 2521-0262
ISSN Online: 2662-012X
ORIGINAL RESEARCH
https://doi.org/10.70875/v8i4article4

Technology integration by business studies teachers in South Africa to equip learners with employability skills

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Abstract

Nowadays, there is a unique set of skills that is critical for individuals to operate optimally in the 21st-century business environment. Specifically, skills such as problem-solving, creative thinking, communication, entrepreneurship, and technological skills are critical for individuals to operate optimally in the 21st century. Against this background, a qualitative study was conducted to explore business studies teachers' technology integration to equip learners with employability skills. This study is located within an interpretive research paradigm. The case study was employed as a research design, while Skills Acquisition Theory serves as the lens of the study. Six schools in Kwa-Zulu Natal province, South Africa, were conveniently selected, and one business studies teacher per school was purposively selected. Interviews and classroom observations were adopted to collect data, and it was analysed thematically. The study found that most teachers attempt to integrate technological tools to nurture learners' employability skills; however, their technology integration skills still need improvement. As a result, the recommendation is made that teachers be taken through professional development to help them acquire technology integration skills that would enable them to integrate technology to nurture learners' employability skills required by the 21st-century business environment.

Keywords: 21st-century, business studies, employability skills, teachers, technology integration.

Introduction

The work environment of the 21st century is constantly changing due to technological advancements. As a result, businesses now require specific and unique skills from individuals who enter this work environment. In response, various countries have restructured their educational curricula to incorporate the skills necessary for the modern business environment (Reimers et al., 2019). Notable examples of countries that have made progress in revising their curricula to meet the demands of the 21st-century business environment include Nigeria (Omidiji & Ogwu, 2019), Tanzania (Senjiro & Lupeja, 2023), Palestine (Abualrob, 2019), and South Africa (Sebatana & Dudu, 2022).

In support of this move towards transforming the curriculum, the South African government is now revisiting the education system to ensure that education provided to learners prepares them for the 21st-century business environment. This is evidenced by the rolling out of Schools of Specialisations (SoS) that envisage preparing learners for the 21st-century environment. The government has been clear about its intentions to prepare learners who are work-ready. This is also evidenced in the words of the former MEC for Education in Gauteng, Mr Panyaza Lesufi, who mentioned that schools of specialisations will help produce learners who will be able to work immediately after finishing their studies or venture into entrepreneurship to establish their businesses (Gauteng Department of Education, 2022). This view suggests that through changes being introduced to the South African education system, the government is now strengthening its efforts to produce learners who can easily transition from school to the world of work.

Equipping learners with skills that would enable them to easily transition from school to the workplace is well documented in the literature, both locally (Sebatana & Dudu, 2021) and internationally (Mtebe, Kissaka, Raphael &

Steven, 2020). Mtebe et al. (2020) mentioned that 21st-century businesses and workplaces are only interested in employing individuals who are work-ready. Therefore, there is a need for schools and teachers to equip learners with skills that would enable them to adapt to the 21st century. Skills needed in the 21st-century business environment have been called differently by different scholars. Some scholars refer to these skills as 21st-century skills (Ramaila & Molwele, 2022; Stehle & Peters-Burton, 2019; Varghese & Musthafa, 2021). On the other hand, Ruminar and Gayatri (2018) refer to these skills as the 4Cs, which consist of communication, collaboration, creativity, and critical thinking skills. Mtawa et al. (2021) refer to the skills needed by the 21st-century work environment as employability skills .

It is important to underscore that although these skill sets are referred to using different concepts, most of the skill sets available in the literature focus on identical skills. Azih and Wagbara (2018) identified communication skills, collaboration skills, creative thinking skills, critical thinking skills, leadership skills, professionalism, work ethics, technological skills, analytical skills, entrepreneurial skills, and planning skills as critical skills that learners should acquire while at school in order to operate optimally in the 21st-century business environment. For this study, only five employability skills from the list were identified and explored further. These skills are creative thinking, problem-solving, technological skills, entrepreneurship skills, and communication skills. These skills were selected because they are also infused into the South African business studies curriculum and are linked with the learning objectives of the business studies curriculum as stipulated in the Curriculum and Assessment Policy Statement (CAPS) document (DBE, 2011).

Despite employability skills being infused into different curricula, there is a concern that the infusion of such skills in the actual pedagogical practices of teachers is still lacking (Alzahrani & Nor, 2022). This suggests that teachers do not infuse employability skills into their classroom practices to ensure that learners are equipped with these skills. Beswick and Fraser (2019) mentioned that many teachers lack the pedagogical skills to teach learners skills that would enable them to operate optimally in the 21st-century business environment. Teachers are not prepared for the teaching and learning environment where learners need to be actively involved in learning activities (Beswick et al., 2019). This view suggests that teachers are not prepared to create a learning environment that enables learners to actively participate in learning activities in order to acquire employability skills. Beswick et al. (2019) also postulated that teachers lack resources that would enable them to teach learners employability skills. Nowadays, the lack of resources for teaching skills that are needed by the 21st-century business environment would normally refer to a lack of technological tools that can be integrated by teachers to equip learners with employability skills. It is against this background that this study explores technology integration by business studies teachers to nurture learners' employability skills needed in the 21st-century business environment.

Research questions

- What learning activities do business studies teachers adopt to nurture learners' employability skills?
- How do business studies teachers integrate technology to nurture learners' employability skills?

Research objectives

- To explore the learning activities that business studies teachers adopt to nurture learners' employability skills.
- To examine the integration of technology by business studies teachers to nurture learners' employability skills.

Literature review

The essential role of teachers in shaping future generations in any country cannot be overstated. According to Varghese and Musthafa (2021), teachers are the cornerstone of any education system and play a key role in developing skills for the future generation. This suggests that business studies teachers play a vital role in equipping learners with skills needed in the 21st-century business environment. In addition,

business studies should be seen as a critical subject that the government can rely on to equip its youth with the skills necessary for self-reliance and the establishment of their own business ventures, thereby creating employment opportunities for themselves and others (Omijidi & Ogwu, 2019). Recognising both business studies teachers and the subject itself as important players in equipping the future generation with skills for the 21st-century business environment would strengthen not only the subject contents but also teachers' pedagogical practices to ensure they produce learners who can thrive in this environment. However, the quality of business studies teaching remains below acceptable standards in many countries, including South Africa. This is evident in the schools and classrooms where the subject is taught. According to Omijide et al. (2019), many Nigerian schools that offer business studies lack sufficient technological resources to expose learners to activities that would nurture their employability skills. Although this study focused on Nigeria, it is highly likely that similar findings apply to South African classrooms, particularly those in rural settings. Furthermore, even in schools with available technological tools, resources for teaching business studies are still inadequate. The lack of technological resources may discourage teachers from exposing learners to activities that have the potential to nurture their employability skills.

For learners to be equipped with employability skills, teachers need to integrate technological tools such as educational videos to expose learners to learning activities that would enhance their employability skills. Erdoğan (2019) opines that technologies integrated by teachers should enable them to create learning environments that foster learning activities such as group discussions, debates, and oral presentations. In a learning environment characterised by such learning activities, learners' employability skills, such as problem-solving, creative thinking, and communication skills, can be nurtured. This was also confirmed in a study that was conducted in South Africa by Ramaila and Molwele (2022), which found that technology integration develops learners' communication, collaboration, problem-solving, and technological skills. Using technology to develop learners' employability skills while at school would enrich their learning experiences. For example, equipping learners with creative thinking skills would enable them to interpret and analyse information at their disposal (Agaoglu & Demir, 2020). Likewise, acquiring communication skills while at school helps learners to use their interpersonal skills to communicate with their peers. The foregoing discussion suggests that equipping learners with employability skills while at school also helps them to engage in learning activities. This is because learners do not only reserve these skills for the future, but they also apply them in their daily lives and enrich their learning experiences.

The benefits of possessing employability skills by the future cohort of employees are well-documented in the literature (Agaoglu & Demir, 2020; Alzahrani & Nor, 2022; Haji, Moluayonge, & Park, 2017). Equipping the future generation with employability skills helps countries to develop economically (Alzahrani et al., 2022). This view insinuates that if countries like South Africa can capitalise on subjects such as business studies and equipping learners with employability skills, the future cohort of employees can be in a position to secure employment opportunities. Securing job opportunities enables individuals to be economically active, and this results in economic growth for the country. Besides the benefits to the nation, possessing employability skills may also benefit individuals on a personal level. This is because possessing employability skills allows one to be employable in the 21st-century business environment. Mtebe et al. (2020) alluded that employers in the 21st-century business environment prefer to employ individuals who can think in a creative way, imagine new scenarios, and produce new work. In short, this assertion suggests that employability skills may help potential employees to have a competitive advantage over their counterparts, thus giving them an upper hand when competing for opportunities.

Having discussed the benefits of producing future generations who possess employability skills and the need for schools and teachers to nurture learners' employability skills, the existing studies that have been conducted in other countries paint a gloomy picture of teachers'

preparedness to equip learners with employability skills. For example, a study conducted in Tanzania revealed that pedagogical approaches adopted by teachers barely meet the standards of equipping learners with employability skills (Tandika, 2022). In addition, Varghese and Musthafa (2021) conducted a study in India to examine the gap between the actual and ideal perceptions of employability skills among secondary school teachers. The findings of the study confirmed that there is a gap between actual and ideal perceptions of employability skills by teachers. Similarly, the study conducted by Stehle and Peters-Burton (2019) in the United States revealed that very few teachers incorporated learning activities that promoted the acquisition of employability skills by learners. From the literature reviewed above, it is clear that the existing studies conducted both in developed and developing countries reveal that nurturing learners' employability skills is still a challenge for teachers.

It is important to note that the preceding section reviewed existing studies conducted in countries other than South Africa. Therefore, it is interesting to investigate how business studies teachers in South African schools integrate technology to enhance learners' employability skills. Thus, this study is necessary.

Theoretical Framework

This section outlines the theoretical underpinnings of the study, specifically the Skills Acquisition Theory.

Skills Acquisition Theory

Skills Acquisition Theory (SAT) was propounded by Crossman in 1959 (Abu & Abdulraheem, 2022). The basic assumption of this theory is that skills are learned progressively, moving from the initial understanding of knowledge to fluent, spontaneous, effortless, and highly skilled behavior (Macharia et al., 2022). In other words, proponents of SAT believe that learners acquire skills gradually as they are exposed to the learning process. For this study, SAT implies that business studies teachers should integrate technology to expose learners to learning activities that nurture their employability skills. The learning context that embodies the principles of SAT allows learners to engage in authentic and real-world learning activities to develop their skills. This is supported by Seifert (2019), who suggests that SAT provides a safe environment for learners to practice and apply the skills they have learned. Taie (2014) further adds that skills are acquired through sufficient practice and exposure to learning activities that have the potential to foster learners' skills.

Furthermore, SAT advocates for continuous feedback during the learning process to facilitate skills acquisition. Kanjere (2020) emphasises that feedback provided to learners should be timely and appropriate to reinforce their skills acquisition. In simple terms, teachers should ensure that learners receive timely and appropriate feedback when engaging them in learning activities to equip them with employability skills. For example, when business studies teachers incorporate technology-based learning activities in their classrooms to develop technological skills, they should support learners in utilising technological tools. Providing coaching and guidance to learners will not only help them learn how to correctly use technological tools to complete learning activities but also aid in the acquisition of technological skills. Moreover, continuous guidance and feedback provided to learners will help deepen and consolidate the employability skills taught in business studies classrooms. VanPatten et al. (2020) confirmed that learners begin the process of acquiring skills by following an explicit process and, with subsequent practice and exposure, progress towards an implicit process, where skills acquisition becomes intuitive.

The visual representation on figure 1 illustrates that skills acquisition should be preceded by training and education. In this study, training and education refer to teaching and learning process in business studies classrooms, supported by technology. Teachers should ensure that learners' learning is reinforced through practice and coaching (Siefert, 2019) and by exposing them to real-world situations (Siefert, 2019) that would shape their acquisition of employability skills. For example, learners should be exposed to solving real business problems to develop problem-solving skills. Figure 1 also

suggests that individuals' acquired skills culminate in performance (Kanjere, 2020). This means that the employability skills acquired by learners would enhance their performance when they enter the 21st-century business environment.

The Skills Acquisition Theory was deemed relevant to this study because it advocates for equipping learners with skills in a systematic way. This aligns with the aims of this study, which explores how business studies teachers integrate technology to equip learners with employability skills that allow them to operate effectively in the 21st-century business environment.

Figure 1: Skills Acquisition Theory (SAT)

Source: Seifert (2019)

Methods

This section presents the methodology used in this study to address the research questions.

Research Approach, Paradigm and Design

This is a qualitative study grounded in the interpretive paradigm. Adopting a qualitative research approach allows the researcher to explore and understand a specific program, people's experiences, meanings, relationships, and social processes that impact certain individuals (Mohajan, 2018). Similarly, employing a qualitative research approach in this study enabled the researcher to thoroughly investigate and comprehend how business studies teachers integrate technology to equip learners with employability skills. It also allowed for a deep exploration of the phenomenon under investigation, as participants were able to express their views comprehensively. Additionally, situating this study within the interpretive paradigm enabled the researcher to examine participants' experiences related to the phenomenon. According to Lincoln and Guba (1985), the interpretive paradigm focuses on understanding the subjective world of human experiences. Consistent with the research approach and paradigm adopted in this study, an exploratory case study was employed as the research design. Yin (2003) describes a case study research design as an empirical inquiry that explores a contemporary phenomenon within its real-life context, particularly when the boundaries between the phenomenon and the context are unclear. This study explores the integration of technology by teachers, a phenomenon believed to be particularly relevant in South African schools located in rural areas.

Population, Sampling and Sampling techniques

The population of the study refers to a group of people who possess related features identified by a researcher as being important to the

study (Hartas, 2015). The study population consisted of all business studies teachers who integrated technology into their classrooms in one district in Kwa-Zulu Natal, where the study was conducted. Sampling is defined as selecting a small number of participants from a larger population from which data is collected (Mujere, 2016). Guided by the nature of the study and the research questions, the researcher employed a convenient sampling technique to select six secondary schools located in the Kwa-Zulu Natal province. From each school, one business studies teacher was purposefully chosen to form a sample of six participants. The participants selected for the study were chosen because they taught business studies from Grades 10-12 and integrated technology into their classrooms. Using the aforementioned criteria aided the researcher in selecting participants with valuable data, which in turn helped answer the main research question of this study.

Data Collection and Analysis

Semi-structured interviews and classroom observations were used to collect data from the participants. Adopting semi-structured interviews helped the researcher ask probing questions where clarity was needed. Interviews with the participants were between 30 and 45 minutes long, and permission to record the interviews was granted by the participants. Classroom observations were also conducted, where teachers were observed teaching business studies while integrating various technological tools. One lesson per teacher was observed, and lesson observations ranged between 45 and 60 minutes. The observation schedule developed by the researcher was used during classroom observations to ensure focus. Furthermore, field notes were taken during classroom observations.

To make meaning of raw data, thematic analysis as guided by Miles and Huberman (1994) and Braun and Clarke (2006) was adopted. After generating data, transcription and preliminary analysis began. Data were also grouped into themes and sub-themes by highlighting similarities and differences within the raw data. Final themes used to report the findings of the study were then developed.

Ethics Considerations

Ethical clearance was obtained from the university where the study was conducted. The researcher also sought permission from the Kwa-Zulu Natal Department of Education (KZN DoE) and the gatekeepers of the respective schools where the study took place. The researcher ensured that all ethical standards were upheld during and after the study. Participants were fully informed about the study to enable them to make informed decisions about whether to participate. They were also informed about their rights, including the right to withdraw at any stage. The researcher took measures to protect the participants' identities throughout the study. To ensure confidentiality, pseudonyms (T1-T6) were used when reporting the findings. learning

Results

This section reports the findings of the study that explored business studies teachers' technology integration to nurture Grade 12 learners' employability skills. Findings that were collected through interviews and classroom observations are presented in this section. Five themes were used to present the findings of the study.

Technology Integration to Nurture Learners' Creative Thinking Skills

During interviews, teachers got a chance to share how they integrate technological tools to nurture learners' creative thinking skills. T1 had this to say:

'*With an understanding that as future business people, learners need to have that element to start something new or have different solutions to a challenge. So, I make use of technology to display different business-related problems so that learners can come up with novel ideas. I also make use of brainstorming to get learners thinking about innovative solutions to a business problem'.*

It can be deduced from T1's sentiments that he understands that learners of the 21st century need to be equipped with creative thinking skills. He acknowledges that technology

integration may play a role in enhancing learners' innovation and novelty.

T2 further alluded that she nurtures learners' creative thinking skills by giving them learning activities requiring them to develop innovations. She said: '*I normally give learners assignments that force them to think creatively, as they do the assignment their creative thinking skills develop. The one I remember is when I gave learners a task to develop a business plan, where they needed to come up with the name of the business and create a logo and the slogan (motto) of the business. As part of the business plan, they were supposed to develop a budget that outlined the expected money (income) and expenditures. Then, in total, they needed to indicate the money they would need to start their businesses (capital). As learners did this assignment, they made use of different technologies, so that is how I used it to develop their creativity'.*

During classroom observations, it emerged that most teachers integrated technological tools to nurture learners' creative thinking skills in a demonstrational manner. For example, T2 integrated technological tools mainly to depict content, videos, and pictures that were meant to nurture learners' creative thinking skills. T2 depicted a mind map that illustrated six success/failure factors of a company, and she asked learners to discuss how each factor contributed to a company's success or failure. This learning activity required learners to think creatively because in their responses, they were required to evaluate each factor and explain why it could be a success or failure factor for a company.

T2*: Yes, you are saying capital is a success factor because many people contribute through buying shares, right? And you say the business can raise more money to start its operations…. So, from this, you can give me a failure factor…*

Pair of learners*… (quiet)*

T2*: Think guys…think…... ok I'll come back to you… and you will tell me the failure factor (T2) moved to the other pair and came back later)*

Pair of learners*… (Learners talked amongst themselves in the absentia of the teacher).*

T2*: Ya I am back, look L and T (learners' names) did the same factor and they said, the public company can raise huge capital and it can use that money to buy assets. So, from this, what can be the failure, may be if the company fail to raise this huge capital we are talking about?*

One learner from the pair*: ……(silence)… ohh Miss if the company fails to raise enough money, it cannot buy the assets needed.*

T2*: Yes! We say, starting a company needs a huge capital. If the company fails to raise this capital, it will not be able to get enough money to start its operations.*

From the excerpt above, it can be seen that T2 tried to scaffold learners' creative thinking. The teacher asked leading questions to enable learners to discover an answer to the question.

Overall, it appeared in this theme that teachers understood the role of technology in nurturing learners' creative thinking skills. Teachers narrated how they integrate technology to nurture learners' creative thinking skills. However, data generated through classroom observations revealed that most of the observed teachers integrated technology in a demonstrational manner. In other words, technologies were only used to display learning activities that prompted learners to engage in creative thinking.

Technology Integration to Nurture Learners' Communication Skills

The interviews showed that some teachers attempted to integrate technological tools to nurture learners' communication skills. Teachers such as T3 and T4 mentioned that they integrate WhatsApp to nurture learners' communication skills. T3 said:

'I make use of WhatsApp to develop learners' communication skills because learners are learning to engage more formally sometimes, and they get an opportunity to communicate with others, so this enhances their communication skills'.

T4 said:

'With communication skills I use WhatsApp. Since we have a group, learners can communicate via WhatsApp directly using their cell phones'.

It appears from the teachers' commentaries that they believe integrating WhatsApp into business studies teaching helps nurture learners' communication skills. However, it is not clear how teachers integrate WhatsApp into their teaching to develop learners' communication skills. Nevertheless, it is encouraging to learn that some teachers appreciate novel technological tools, such as WhatsApp, in their classrooms to develop learners' communication skills.

From classroom observations, teachers attempted to incorporate learning activities that fostered communication among learners. However, most of these learning activities were not supported by technology. Most teachers encouraged communication among learners by implementing a discussion teaching method. For example, T1, T2, T4, and T5 adopted learning activities that required learners to discuss the content learned among themselves.

From this, it can be deduced that although technology was integrated into the observed lessons, most teachers did not use technological tools to support learners' communication skills. This could be because they rely on communication that happens via WhatsApp to enhance learners' communication skills. Most of the learning activities that fostered communication among learners were face-to-face and were not supported by technology. Learners communicated among themselves in groups or pairs while working on different learning activities provided by the teachers.

Technology Integration to Nurture Learners' Problem-solving Skills

Teachers were also asked to share how they integrate technology to nurture learners' problem-solving skills. Data from both interviews and classroom observations revealed that teachers attempted to integrate various technologies to support learning activities that have the potential to foster learners' problem-solving skills. It emerged that some teachers integrated technological tools to support authentic learning activities that have the potential to nurture learners' problem-solving skills. For example, T4 indicated that she assigns learning activities that would require learners to utilise technologies to devise solutions to business-related problems.

'So, with problem-solving skills, I give learners activities where they must go home and think about the new products they want to invent. Especially when we talk about business strategies when we talk about marketing strategy. I once gave them a task to look at the existing products and decide on how they can do product development by recommending some features that can be added to the product to attract consumers. Although learners do not do the products practically, they write a report and present it back to the class. In the process, they use their cell phones or computers in the library to do this task'.

In his classroom, T3 uses educational games to nurture learners' problem-solving skills. He said:

'You know, I have attempted to integrate different tools to enhance learners' problem-solving skills. You know, there is a computer game called Brain Blast. That game is so interesting because it helps learners to think outside the box. When I teach about problem-solving techniques in Grade 12, I use that game to help learners generate different ideas for a problem'.

It appears from the foregoing teachers' commentaries that they attempt to integrate various technologies to nurture learners' problem-solving skills. Some teachers, such as T4, do not limit problem-solving activities to the classroom, but they ensure that learners continue with problem-solving activities even outside the classroom.

During lesson observations, it emerged that most teachers relied on business-related scenarios to nurture learners' problem-solving skills. Learners had to read the scenarios that were projected on a data projector or a computer screen and engage in solving business-related problems either as a group or in pairs. This was a common

practice in most classes that were observed. For example, T1 asked learners to follow an active link that was embedded in their notes, read the business-related scenario, and engage in problem-solving. On the other hand, T2, T4, and T5 projected the business-related scenarios on a data projector and asked learners to engage in problem-solving either as groups or in pairs.

In most classrooms, technology was only used to display the learning activity that had the potential to nurture learners' problem-solving skills. The entire process of problem-solving was not centred around technology that was integrated into the classroom. From this, it can be concluded that technology was integrated in a demonstrational manner since it was used only to display business-related scenarios. Learners did not even use technological tools to search for information that would have helped them suggest solutions to real business problems.

1.1. Technology Integration To Nurture Learners' Technological Skills

This study reported on the findings of how teachers integrate technology to nurture learners' technological skills. Teachers recognised the importance of business studies learners acquiring technological skills while in school in order for them to operate optimally in the 21st century. Teachers also acknowledged the role they can play in equipping learners with technological skills. However, it emerged from the interviews that learners who are studying business studies in all schools also study Information Technology (IT) or Computer Applications Technology (CAT). T5 said:

'*In our school learners who do business studies also do CAT, but I still have to allow them to use technologies so that I can be sure that they can use technologies. I let them use computers, where software such as Excel, and PowerPoint are used'.*

From T5's assertion, it is clear that she allows learners to use technology to complete learning activities. However, it is not clear how the teacher supports the learners as they use technology to complete these activities. This lack of clarity might be due to the teacher's belief that since learners study IT/CAT, they possess the necessary technological skills to utilise technological tools in the classroom.

In contrast to T5, T3 seems to have a better understanding of her role as a business studies teacher in fostering learners' technological skills. T3 stated:

'*Although I do not teach CAT or IT as a business studies teacher, I do teach my learners some technology skills. Remember these are future businesspeople so when giving them tasks, I give them tasks that will foster them to use technology. For example, in Term 2 I gave them research and they used computers, laptops, and cellphones to finish that research project. Even when they were presenting, I allowed them to use slides and a data projector to present in the class'.*

From this, it can be deduced that T3 supports learners when integrating technology. Supporting learners as they use technology in business studies classrooms is important because learners are future employees who need to acquire technological skills that will help them execute their duties in the 21st-century business environment.

Interestingly, during classroom observations, most teachers who allowed learners to use technological tools in their classrooms took a back seat when learners were using technology. Teachers such as T4 and T5 only intervened to correct learners' misconceptions regarding the content during oral presentations.

Based on the above findings, it can be concluded that teachers' intervention when learners use technology was primarily aimed at rectifying their misconceptions about the content. Such interventions cannot be perceived as effective in supporting learners to develop the technological skills they need as future employees. Proper intervention by teachers is essential for learners to develop the technological skills that would help them operate optimally in the 21st-century business environment. Business studies learners need to acquire technological skills that will help them effectively handle, present, analyse and act on business information.

Technology Integration to Nnurture Learners' Entrepreneurial Skills

For a long time, equipping learners with entrepreneurial skills has been perceived as the ultimate objective of business studies. During interviews, teachers upheld this idea and shared how they integrate technology to nurture learners' entrepreneurial skills. T2 said:

'*You know, I try to use technology to develop learners' entrepreneurial skills but as I said earlier, there is no guidance on how I can go about doing it. However, I understand that for entrepreneurs of today, technology has become so important unlike before. So, to encourage entrepreneurship among learners I start very early like …as early as Grade 9 in EMS and again in Grade 10 and 11 where I ask them to use computers to design advertisements, invitation cards and posters. I then check the things they designed, and I advise them to sell those to their friends or in the community so that is how I teach them entrepreneurship skills*'.

From T2's assertion, it can be deduced that she uses her subject knowledge (Content knowledge) and technology integration skills (Technological knowledge) to integrate technology in an attempt to equip learners with entrepreneurial skills. This is because the business studies curriculum does not provide clear guidance on how teachers should integrate technology in their classrooms to nurture learners' entrepreneurial skills. Therefore, they rely on their understanding that 21st-century entrepreneurs need to be well-versed in technology and have the ability to start a business for them to survive in the 21st-century business environment.

T4 added that she encourages learners to use technological tools to engage in learning activities that are likely to nurture their entrepreneurial skills. T4 said:

'*Since business studies is meant to provide learners with entrepreneurial skills, I teach learners how they can establish their businesses. There is a chapter that they do in Grade 11 called establishing a business venture. It includes different aspects of starting a business, so we make use of technology to develop business-related documents such as business plans. In this process, I believe that learners' entrepreneurial skills are developed'.*

It can be concluded from T4's sentiments that she exposes learners to learning activities that prompt them to use technology to engage in learning activities that nurture their entrepreneurial skills. Engaging in such activities has the potential to expose learners to the real business world. This is because entrepreneurs in the 21st-century make use of technology to complete different documents for their businesses, such as business plans and financial statements. Therefore, encouraging learners to use technology to prepare these documents is commendable.

Discussion

The study aimed to explore technology integration by business studies teachers to equip learners with employability skills. This study found that most teachers did not support learning activities that were meant to nurture learners' employability skills with technology. Technology was integrated mainly to support the delivery of the content, rather than nurturing learners' employability skills. This finding corresponds with that of a study conducted by Senjiro and Lupeja (2023), which revealed that most teachers pay less attention to learners' acquisition of skills when integrating technology. It emerged from this study that learning activities that had the potential to nurture learners' creative thinking skills were not supported by technology. This is despite the amenability of the activities to technology. Agaoglu and Demir (2020) advise that teachers should integrate technology when teaching learners creative thinking skills to enable them to interpret and analyse information at their disposal. Ramaila and Molwele (2022) discovered that technology integration develops learners' employability skills such as communication, creativity, problem-solving, and technological skills. Similarly, this current study indicated that teachers integrate platforms such as WhatsApp to nurture learners' communication skills. However, it was unclear from the teachers' commentaries how they integrated this tool to nurture learners' communication skills needed in the 21st-century business environment.

Furthermore, this study revealed that teachers integrated technology in a demonstrative manner when attempting to nurture learners' problem-solving skills. This finding implies that teachers integrated technological tools mainly to demonstrate business-related problems. Integrating technology in this manner may not be perceived as effective technology integration to nurture learners' problem-solving skills. Stehle and Peters-Burton (2019) stated that most teachers address employability skills at a minimal level. This assertion suggests that teachers do not nurture learners' skills in an advanced manner. This study also revealed that most teachers believe that enabling learners to use technology during teaching and learning helps them to develop the technological skills needed by the 21st-century business environment. This is in line with the tenets of the Skills Acquisition Theory because the proponents of this theory believe that for learners to acquire skills, they need to be immersed in learning activities. Furthermore, this study reported that teachers who allowed learners to use technology to engage in learning activities did not guide learners. This finding is against the tenets of SAT that advocate for learners to be provided with continuous guidance and feedback as they engage in learning activities.

Conclusion

The study sought to explore how business studies teachers integrate technology to enhance learners' employability skills. The study concluded that the integration of technology by business studies teachers is not well-developed. As a result, they mainly rely on their subject knowledge and basic technological skills to incorporate technology in an effort to nurture learners' employability skills. This is evident in the study's findings, which revealed that while most teachers integrate technology in their classrooms, they still rely on learning activities that do not utilise technology to develop learners' employability skills. It appears that those who do attempt to nurture these skills often use technology in a demonstrative manner, which does not foster proper skill acquisition. Based on the key findings and conclusion of this study, it is recommended that professional development programmes be developed for business studies teachers. These programmes should focus on helping teachers acquire pedagogical skills that will enable them to effectively integrate technology and nurture the employability skills necessary in the 21st-century business environment. For future research, it is suggested that a similar study be conducted using a quantitative approach to obtain findings that can be generalised by sampling a larger number of business studies teachers.

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References

Abu, Z., & Abdulraheem, I. (2022). Competency-based learning and take-home benefits from entrepreneurship education in Nigeria. *Gusau Journal of Business Administration*, *1*(1), 10-10.

Abualrob, M. M. (2019). The role of science teachers in developing the 21st-century skills for elementary school students. *Interdisciplinary Journal of Environmental and Science Education*, *15*(1), e02206. https://doi.org/10.29333/ijese/6368

Agaoglu, O., & Demİr, M. (2020). The integration of 21st century skills into education: an evaluation based on an activity example. *Journal of Gifted Education and Creativity*, *7*(3), 105-114.

Alzahrani, M. A., & Nor, F. M. (2022). Professional development and EFL teachers' practices in activating learners' acquisition of 21st century skills. *Problems of Education in the 21st Century*, *80*(5), 652-678.

Azih, N., & Wagbara, S. O. (2018). Leveraging on modern instructional delivery strategies for development of employability skills in Business Education students. *Nigerian Journal of Business Education*, *5*(1), 1-10.

Beswick, K., & Fraser, S. (2019). Developing mathematics teachers' 21st century competence for teaching in STEM

contexts. *ZDM Mathematics Education*, *51*, 955-965. https://doi.org/10.1007/s11858-019-01084-2

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Erdoğan, V. (2019). Integrating 4C skills of 21st century into 4 language skills in EFL classes. *International Journal of Education and Research*, *7*(11), 113-124.

Ghafar, A. (2020). Convergence between 21st century skills and entrepreneurship education in higher education institutes. *International Journal of Higher Education*, *9*(1), 218-229. https://doi.org/10.5430/ijhe.v9n1p218

Haji, S. A., Moluayonge, G. E., & Park, I. (2017). Teachers' Use of Information and Communications Technology in Education: Cameroon Secondary Schools Perspectives. *Turkish Online Journal of Educational Technology*, *16*(3), 147-153.

Hartas, D. (2015). *Educational research and inquiry: Qualitative and quantitative approaches*. Bloomsbury Publishing.

Kanjere, M. M. (2020). Revitalisation of women's skills in the public sector: a view into the 4th Industrial Revolution. International Conference on Public Administration and Development Alternative (IPADA). http://hdl.handle.net/10386/3261

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newberry Park.

Macharia, J.M., Githui, K., & Kang'ara, H. (2022). Influence of utilisation of improvised materials on acquisition of number work skills among pre-primary school learners in Kiambu sub-county, Kiambu County, Kenya. *African Journal of Emerging Issues*, *4*(5), 43-56.

Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.

Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of economic development, environment, and people*, *7*(1), 23-48.

Mtawa, N., Fongwa, S., & Wilson-Strydom, M. (2021). Enhancing graduate employability attributes and capabilities formation: a service-learning approach. *Teaching in Higher Education*, *26*(5), 679-695. https://doi.org/10.1080/13562517.2019.1672150

Mtebe, J. S., Kissaka, M. M., Raphael, C., & Steven, J. (2020). *Promoting Youth Employment through Information and Communication Technologies in Vocational Education in Tanzania.* Commonwealth of Learning (COL).

Mujere, N. (2016). Sampling in research. In *Mixed methods research for improved scientific study* (pp. 107-121). IGI Global.

Mwapwele, S. D., Marais, M., Dlamini, S., & Van Biljon, J. (2019). Teachers' ICT adoption in South African rural schools: a study of technology readiness and implications for the South Africa connect broadband policy. *The African Journal of Information and Communication*, *24*, 1-21. http://dx.doi.org/10.23962/10539/28658

Omidiji, S. A., & Ogwu, O. C. (2019). 21st century skills acquisition in business education programmes. *Nigerian Journal of Business Education (NIGJBED)*, *6*(2), 294-303.

Ramaila, S., & Molwele, A. J. (2022). The Role of Technology Integration in the Development of 21st Century Skills and Competencies in Life Sciences Teaching and Learning. *International Journal of Higher Education*, *11*(5), 9-17. https://doi.org/10.5430/ijhe.v11n5p9

Reimers, F. M., & Chung, C. K. (Eds.). (2019). *Teaching and learning for the twenty-first century: Educational goals,*

policies, and curricula from six nations. Harvard Education Press.

Republic of South Africa, Department of Basic Education. 2011. *Business Studies Grade, Curriculum and Assessment Policy Statement Further Education and Training Phase, Grades 10-12*. Pretoria: Government Printers.

Ruminar, H., & Gayatri, P. (2018, April). Incorporate 4C's skills in EFL teaching and learning to face education challenges in 4IR. In *Proceeding of International Conference on Teacher Training and Education* (pp. 170-177).

Sebatana, M. J., & Dudu, W. T. (2022). Reality or mirage: enhancing 21st-century skills through problem-based learning while teaching particulate nature of matter. *International Journal of Science and Mathematics Education*, *20*(5), 963-980. https://doi.org/10.1007/s10763-021-10206-w

Seifert, T. (2019). Two Pedagogical Models of Video Integration in Multiparticipant Courses. *Journal of Educators Online*, *16*(1), 1-22.

Senjiro, U., & Lupeja, T. (2023). The development of 21st century skills to secondary school students in Tanzania: How competent are the teachers for the task? *International Journal of Education and Social Science Research, 6,* 107-126. https://doi.10.37500/IJESSR.2023.6109.

Stehle, S. M., & Peters-Burton, E. E. (2019). Developing student 21st Century skills in selected exemplary inclusive STEM high schools. *International Journal of STEM education*, *6*(1), 1-15. https://doi.org/10.1186/s40594-019-0192-1

Taie, M. (2014). Skill acquisition theory and its important concepts in SLA. *Theory and practice in language studies*, *4*(9), 1971-1976.

Tandika, P. B. (2022). Instructional materials and the development of young children's 21st century skills: Perspectives from early educators in Ukerewe, Tanzania. *Journal of Research in Childhood Education*, *36*(1), 31-45. https://doi.org/10.1080/02568543.2020.1834473

VanPatten, B., Keating, G. D., & Wulff, S. (Eds.). (2020). *Theories in second language acquisition: An introduction*. Routledge.

Varghese, J., & Musthafa, M. N. (2021). Why Optimism Misses? An Analysis on the Gaps and Lags of Teachers' Perceptions of 21st Century Skills. *Shanlax International Journal of Education*, *10*(1), 68-75. https://doi.org/10.34293/

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage Publications.