



A framework for skills development for employability in Botswana's competitive accounting environment



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Orientation: The accounting labour market has undergone a metamorphosis in recent years, leading to new demands for generic skills. Universities have responded to the new demands by implementing several reforms in the accounting curriculum to address skills gap. Despite these major reforms, educational expectation gap is persistent in Botswana.

Research purpose: The purpose of this study was to develop a framework for skills development for employability in the competitive and dynamic accounting environment in Botswana.

Motivation for the study: A skills gap was identified, implying the need for a framework for skills development for employability in the competitive and dynamic environment, thereby improving the graduate's pervasive skills.

Research design, approach and method: This study employs a qualitative research approach to extract and analyse key themes, quotes and insights from recent reports submitted to Institutions of Higher Learning (IHLs) by students and industrial supervisors. Utilising thematic data analysis, this research systematically examines the qualitative data gathered to elucidate the effectiveness of competency frameworks as perceived by both parties.

Main findings: Institutions of Higher Learning in Botswana are mandated to equip students with job market-relevant skills. However, graduates often fall short in critical areas such as advanced cognitive abilities, socio-behavioural competencies and information technology (IT) proficiency, hindering their effective transition from academia to the workforce.

Practical and/or managerial implications: The contribution and societal impact of this study are summed up in a proposed framework for skills development for employability in the competitive and dynamic accounting environment in Botswana.

Contribution and/or value-add: The proposed framework is designed so that universities can equip students with soft skills needed in ever changing accounting environment.

Keywords: job; graduates; accounting; employability; IHL; skill gap; generic skills.

Introduction

The accounting labour market has undergone a metamorphosis in recent years, leading to new demands for generic skills or soft skills (or pervasive skills) (Habiyaremye, Habanabakize & Nwosu 2022; Ravikumar, Puthukulam & Sharma 2022). The issue of skills gap between theory and practice or 'schism in accounting' is not new but has been contentious since 1900 (Srdar 2017:1). A common finding received from the labour market is that accounting graduates do not possess the pervasive skills (or soft skills) required in the modern competitive labour market (Anastasiou 2019; Mallak 2018). Globally, the skills gap is viewed as a barrier to the economic development of a country; it is also believed to be a threat to the sustainable economic development of a country (ISE 2018). While several universities in the Southern African Development Countries (SADC) as well as local Institutions of Higher Learning (IHLs) are producing many accountants on an annual basis, 'there is a limited supply of those considered by employers to be of "quality"' (Shamsuddin, Ibrahim & Ghazali 2015:22). Thus, there is a perceived educational expectation gap. In the accounting market, a skills gap arises when an accounting graduate successfully completes his or her 4-year academic degree with only technical or cognitive skills but lacks the soft skills expected by employers. Countries in the Global South, such as Zimbabwe, South Africa and Zambia, as well as other countries, are similarly affected by skills gap issues affecting the accounting industries. They reported a high incompatibility of skills or a mismatch between skills acquired through formal education and

the demands of the accounting labour market (industry) (Al-Aroud 2021; Business Tech 2021). Well-documented evidence about skills gap issues in Southern Africa shows that the 'gross inadequate skilled' labour force is a major hindrance to sustainable economic development (Habiyaemye et al. 2022).

A wealth of literature shows that the skills gap affects the economies of several countries (Fisher & Scott 2011; Perryman et al. 2002); hence, rapid responses are needed (Human Resource Development Council [HRDC] 2015). The industry at large has confidence that accounting graduates from universities lack the job-related competencies required to drive productivity and economic transformation (HRDC 2019). Scholars have proposed that the skills acquired through formal education are insufficient to meet the demands of the 21st century accounting firms worldwide (Abayadeera & Watty 2014). The extant literature reveals that accounting graduates around the world are well equipped with technical (or basic) accounting and logical skills but lack soft skills and employability skills such as teamwork, problem solving, communication skills and interpersonal skills (Abayadeera & Watty 2014). The results from studies assessing the skills gap in developing countries show skills mismatches or misalignments of what the accounting degree provides to students and what the industry expects from graduates (Mohammed 2021). These research findings have demonstrated that IHLs are not equipped with the generic skills needed by the labour market locally, regionally or internationally (Anastasiou 2019). Regardless of Botswana's stage of economic development, the skills gap remains a critical challenge that hampers its ability to align with 'real-world job' requirements (Hamaluba 2023). This highlights the skills gap in Botswana, as evidenced by unsatisfactory performance and expertise requisites at the workstation (ISE 2018). The labour market is gradually becoming skill intensive or skill oriented in all sectors (Pheko & Molefhe 2017). Therefore, accounting graduates must master higher-order pervasive skills in addition to cognitive or basic accounting skills (Abayadeera & Watty 2014; Kwarteng & Mensah 2022).

There have been negative reports from the industry regarding the qualities of accounting graduates in Botswana (HRDC 2019). For instance, the World Bank (2010:2) states that 'however, employers in Botswana itself, appear unsatisfied with the skill level of their employees, and the labour force available in the country'. In the similar vein, Wally-Dima (2011) observes that universities in Botswana are not imparting necessary or appropriate industry-ready skills to students before they enter the job market. Lecturers might not also be aware of dynamics in the modern accounting workplace – and the core skills needed for accounting tasks and what IHLs are expected to impart to learners to increase their employability level (Abayadeera & Watty 2014). The literature shows that graduates from universities are generally semi-skilled and not adequately trained for actual work (World Bank 2015). Reports from these industries show that accounting graduates lack the job-specific skills and soft or generic skills (Kwarteng & Mensah 2022; World Bank 2010) necessary to carry out accounting-related assignments in industry (Damoah, Pephrah & Brefo 2021; HRDC 2014).

Although studies have been extensively conducted to address the issue of the graduate skills gap and the causes of the skills gap in Botswana (e.g. Gumbo, Serefete & Oats 2023; HRDC 2019; ISE 2018; Pheko & Molefhe 2017), the extant literature appears to reveal that no known local study has been conducted to bridge the accounting skills gap in Botswana. Key findings from these studies reveal skills gaps, which are similar to those investigated in this study of the accounting education and skills gap in Botswana (HRDC 2019; ISE 2018). Various IHLs in Botswana that offer Botswana Qualifications Authority (BQA) accredited accounting degrees have implemented measures to address mounting pressure from key stakeholders such as policymakers and employers to produce employable accounting graduates with core skills, pervasive competencies and technical (or basic) skills, which are necessary for them to be 'job-ready'. Despite these various initiatives, including integrating employability skills and industry engagement within the curriculum (Twyford & Dean 2021), implemented by the IHLs in Botswana, the educational expectation gap is relentless, especially in accounting (Mhlongo 2022).

The purpose of this study is to develop a framework for skills development for employability in a dynamic accounting environment in Botswana. Based on the foregoing discussion, this study aims to answer the following research question: does an accounting employability skills gap in accounting exist between the labour market and accounting students in Botswana?

The remainder of this article is organised as follows. The next section explores the literature on the skills and skills gap, which is followed by the description of the methodology used. Thereafter, the research findings are presented. The final section includes a discussion of the findings and conclusions.

Literature review

The word 'skill' is understood, defined and conceptualised as a set of proficiencies of existing employees or the capability of the employees to discharge duties to the set satisfaction of the employer or set standards (Kampamba 2023). In contrast, the skills gap is a mismatch or misalignment between the skills one possesses and the skills the employer expects from the potential employee (Atanasovski, Trpeska & Bozinovska 2018). In other words, the skills gap is the disparity between the skills the graduate (employee) possesses and what employers expect the worker to have to perform a job to the ideal standards (Iradukunda 2022).

Universities are expected to equip students with soft skills such as communication, team playing and resilience, similar to technical and cognitive skills (Tsiligiris & Bowyer 2021). Bachelor graduates are expected to possess the following skills: negotiation, language, leadership, creativity, subject knowledge, technical skills and organisational skills. Furthermore, bachelor's degree holders must also possess the following skills: resilience, data analysis, interpersonal skills, adaptability, communication skills, teamwork, problem

solving and commercial awareness (Kampamba 2023; Martin et al. 2009). However, the importance of these skills varies from one region to another or from one firm to another. For example, in Asia Pacific, Latin America, Western Europe and North America, adaptability, problem solving, teamwork and communication are considered key employment skills, while in Eastern Europe, Africa and the Middle East, problem solving, teamwork and communication are considered as important employment skills (ISE 2018). The ISE (2018) found that problem solving, teamwork, communication, adaptability and personal skills are essential for recruiters or employers worldwide. Firstly, it is imperative to understand the discrepancies between pervasive skills that employers expect from fresh university graduates and the actual (real) skills that graduate possess, the importance score and the satisfaction score of each skill to focus on specific skills to address the specific skills gap (Gumbo et al. 2023; Mainga, Daniel & Alamil 2022a).

On the other hand, master's graduates are expected to have the following key skills that differentiate them from first-degree holders: risk management, computer skills, international awareness, marketing skills, corporate social responsibility, e-business, multilingual skills, strategic thinking, academic achievement, finance skills, entrepreneurship skills, data skills and management skills (Hossain, Haque & Rahman 2020). Globally, recruiters voted for communication, strategic thinking, interpersonal skills, management and leadership as key skills master's graduates must possess for them to increase their chance of employability (Iradukunda 2022). The extant literature shows that most graduates across the globe do not have the soft skills required by industry; hence, there is a skill gap (Iradukunda 2022).

To mitigate skills gaps, IHLs are urged to design curricula for specific target labour markets, regions or countries and for the size of a company or firm to increase graduate employability and employers' levels of satisfaction (Well et al. 2009). For example, in large corporations and medium companies, problem solving, teamwork and communication are key skills employers are looking for in graduates, while in small corporations, adaptability and interpersonal skills are considered essential skills (Ayton, Belcher & Hristov 2023).

Formal and non-formal education are pillars that can aid in bridging the gap between universities, the labour market and graduates (ISE 2018) and accordingly can enable the impartation of these essential skills – that is, bridging theory and actual practice (HRDC 2019; Kaye & Modise 2000). In other words, universities must design curricula based on accurate and reliable job market information, demand and recruiters to address the existing conflict between theory and practice (Twyford & Dean 2023). Universities are deemed to be institutions of excellence that are responsible for training and equipping graduates with the necessary skills (Crawford, Brimble & Freudenberg 2024). These institutions of higher education are responsible for shaping or designing curricula that help address the skills needs of the job market.

There is a need for strong industry-academia collaboration in profile design to incorporate the key skills needed by employers (Development Bank of Southern Africa [DBSA] 2010). Institutions of Higher Learning and industry must jointly conduct research on core skills and industry needs, and IHLs should equip graduates with the soft skills required for the industry or labour market (Kampamba 2023). Institutions of Higher Learning are also encouraged to revamp their curricula to include both technical and soft skills at advanced levels and must make these core skills mandatory (Mainga et al. 2022b).

Moreover, professional bodies such as the Botswana Institute of Certified Accountants (BICA), Chartered Institute of Management Accountants (CIMA), Association of Certified Chartered Accountants (ACCA), Chartered Financial Analyst (CFA) and other socio-professional bodies are encouraged to develop core programmes that promote easy licensing and certification (Yu, Churyk & Chang 2013). Professional bodies should core-train graduates so that core skills are imparted to learners before they graduate (Phin n.d.). Institutions of Higher Learning, industries and professional bodies must establish synergies so that students acquire the right skills, and any mismatch of such skills should be addressed over time (Ngoo, Tiong & Pok 2015). Workplace training should help students acquire the soft skills and 21st century skills necessary for graduates to perform in industry (Hondonga & Chinengundu 2021).

Methodology

This study utilises a qualitative research approach to evaluate recent reports submitted to IHLs by both students and industrial supervisors, focussing on the adequacy of essential competencies in graduates. The analysis incorporates a diverse range of secondary data sources, including industrial attachment reports, student evaluations, minutes (from both the Faculty and department) and documents from the HRDC, the BQA as well as peer-reviewed articles and official policy documents from relevant websites. The study specifically covers the period from 2018 to 2024 to capture recent trends and shifts in educational and industry standards, providing a relevant and up-to-date assessment of competency development amid evolving educational and labour market dynamics. The population of this study consists of five IHLs in Botswana that offer accounting degree programmes with industrial training or internship components. With a wide scope and time and budget constraints, the present study did not gather documents from the targeted education and training providers (ETPs). The study used purposive sampling as opposed to random sampling to choose its sample. Thus, the ETPs selected in this study were based on (1) the accessibility of records, (2) the nature of the curriculum, (3) offering a Bachelor of Accounting degree, (4) the programme listed on the National Qualifications Framework (NQF) and (5) the attachment component element. Purposive sampling is therefore defined as the selection of individuals who are deemed to be more experienced and possess rich information about the problem in questions. The inclusion and exclusion criteria for ETPs included in this study were as follows: universities and

colleges that offer a Bachelor of Commerce, or Bachelor of Science, or Bachelor of Business in accounting and have practical experience or internships. Furthermore, the study employed expert sampling to select ETPs. The skills gap in this study is analysed through both the lens of graduates (students) and employers. Based on the search criteria, three public universities and two private universities were included in this study. These universities were selected because they met the inclusion criteria specified in this study.

In accordance with the regulations set forth by the Ministry of Tertiary Education, Research, Science and Technology and the Department of Tertiary Financing (DTEF), any research involving student participation requires prior approval from DTEF. Given that this study was deemed low risk and did not involve direct physical participation by students, ethical clearance was obtained from the University of Botswana. Additionally, permission to access students' industrial attachment reports was secured through the Heads of Departments (HoDs). The study obtained student reports and industrial supervisor reports for 2022 and 2023, and the researcher sampled some past assessment instruments used, such as tests, assignments and final examinations.

The data for each ETP were also obtained from a Bachelor of Accounting degree curriculum. Five curricula were analysed to determine whether the degrees provided industrial attachment or training. Furthermore, 282 industrial attachment reports and 200 student reports received from IHLs (Table 1) were critically interpreted by the researcher. The researcher requested reports spanning from 2018 to 2024, specifying the number of reports required per year, to ensure a comprehensive analysis of recent and relevant data trends. This method was employed to capture a representative and current overview of student competencies over an extended period, enhancing the study's validity and relevance. There were two reasons for requesting these reports. The first was to determine whether ETPs received industrial attachment supervisor reports. The second reason was to establish whether students indicated or recommended changes to the IHLs that must be made in the curriculum to enhance skills acquisition and increase chances of employability.

The study also perused accounting qualifications listed on the BQA's NQF to gain an understanding of the programme structure. The study assigned alpha-numeric values or keys to the document groupings, marking Bachelor of Accounting

curriculums with a C, industrial supervisor reports with an I and students' industrial attachment reports with an S. In addition, the researcher also attached an alpha numeric key indicating a specific IHL from which the document had been collected, which was assigned before the C, I and S. For ethical matters, the names of the IHLs remained anonymous, and as such, the researcher used PU1 for public university 1 and PRU1 for private university 1. Thematic analyses were used to analyse qualitative data sourced from documents.

Ethical considerations

An application for full ethical approval was made to the The secretariat, University of Botswana Institutional Review Board, Office of Research and Development and ethics consent was received on 15 January 2024 with prerequisites to protect the identity of all participants. The ethics approval number is UBR/RES/POSTGRAD/ACC/638/2024.

All direct quotes from students' attachment reports used in the study were obtained from the sampled universities, and as an ethical requirement, we only assigned document numbers (pseudo-codes) to participants from the various universities as identifiers.

Presentation and discussion of findings

Findings from the company supervisor assessment form: evaluation of students by the organisation supervisor

This study revealed a mismatch between the skills accounting students have and job market skills expected; hence, there is a need for collaboration between higher education institutions and industry (Van Oordt & Sullivan 2017). The issue of the skills gap is well documented, and policymakers have advocated for the revamping of curricula across all levels, aligning training with industry and retooling skills in areas that have been identified as critical for improving the performance of the economy (National Development Plan [NDP] 11:70). These policy measures are aimed to improve the quality of graduates, leading to increased employability and positively contributing to economic growth in all key sectors of the economy (Botswana Training Authority [BOTA] 2010). The five core skills ranked as essential by the global labour market were assessed during the documentary analysis, namely, problem solving, teamwork, communication, adaptability and personal skills (BOTA 2010; Pheko & Molefhe 2017).

Based on the student evaluation form completed by the industrial attachment supervisor. The responses by the attachment supervisors were used to rank areas where students poorly performed during the attachment period using the following scale: 5 = excellent; 4 = very good; 3 = good; 2 = satisfactory and 1 = unsatisfactory.

Based on Table 2, students from IHLs in Botswana lacked the generic skills needed by accounting employers. In all, 245 supervisors reported that students did not have

TABLE 1: Number of reports per institution.

Institution*	Number of attachment reports				Curriculum or syllabus	Minutes
	Student		Industrial supervisor			
	Targeted	Actual	Targeted	Actual		
PU1	50	40	60	60	1	3
PU2	50	40	60	60	1	2
PU3	50	50	60	60	1	2
PRU1	50	22	60	38	1	3
PRU2	50	48	60	54	1	1
Total	250	200	300	282	5	11

PU, Public University; PRU, Private University.

*, Pseudonyms were applied for the institutions to comply with confidentiality requirements.

problem-solving skills, while approximately 211 industrial supervisors reported that most students did not possess teamwork. In addition, 70% of the industrial supervisors scaled computer skills as unsatisfactory – in other words, the students did not have practical experience with the use of accounting packages such as pastel partners. Sixty-eight per cent of the industry supervisors rated interpersonal skills as satisfactory (2/5) and analytical skills as satisfactory. This suggests that students are not adequately equipped with interpersonal and analytical skills in IHLs.

It is also noteworthy that written communication factors were scaled as excellent, thus suggesting that students at IHLs were equipped with these written and technical skills during their academic training sessions. Based on the research findings, graduates may not be adequately equipped with the pervasive skills needed in the accounting labour market.

Findings from students' industrial attachment reports

Table 3 shows the communication modules, auditing and financial accounting modules and courses that laid the foundation for the successful attachment of students. The students rated the modules based on the extent to which the course or module assisted them during the attachment period. The students reported that communication (31%), auditing (20%) and financial accounting (25%) modules were the key modules that assisted them in carrying out their industrial attachment tasks. In addition, taxation (4%), cost and management accounting (6%), ethics in accounting (5%) and accounting information and system (9%) were considered as least modules that helped them during industrial attachment period. However, it is not clear in the research findings whether students are insinuating that the modules they ranked least have little or no significance in the industry or whether students know how important the specified modules are in the accounting field.

According to the industrial attachment reports, this study revealed that students made several recommendations to the university to increase their employability skills. The presumed

TABLE 2: Key skills expected by the company or industrial supervisors.

Evaluation factor	Scale (reported in %)					Ranked poorly performed
	1	2	3	4	5	
Quality of work	5	10	65	17	3	13
Quantity of work	10	15	3	50	22	12
Written communication	2	3	5	12	78	13
Oral communication	30	40	15	7	8	8
Cooperation	49	31	11	3	6	7
Planning skills	33	33	14	8	12	10
Initiative	32	38	12	7	1	9
Analytical	67	23	6	3	1	5
Judgement	2	45	33	10	10	11
Teamwork	75	2	13	8	2	3
Problem solving	87	7	4	1	1	1
Interpersonal skills	68	21	6	4	3	4
Adaptability	50	27	13	7	3	6
Computer skills and knowledge	70	18	10	10	2	2

changes to the accounting curriculum are clearly reflected in the following excerpts from the students' attachment reports:

'The university should increase the period for industrial attachment to six months because, according to my observation, two months was insufficient. The time you try to adapt and familiarise yourself with the environment the time has already lapse.' (Student report no. 151)

'The university needs to make changes to the time that students spend on internships, especially accounting students. The time is too short for one to accumulate the much-needed industrial experience. The attachment period should be extended to 12 months to enable students to gain more practical skills.' (Student report no. 187)

'I was a novice in the accounting department because I didn't have professional skills. I recommend that the accounting curriculum must integrate or work with professional bodies such as CIMA, BICA, ICAEW, ACCA and core-train accounting learners to meet the standards in the industry.' (Student report no. 99).

TABLE 3: Courses and changes in the accounting curriculum that positively affect students' industrial attachment tasks.

Courses	Performance (%)	Rank	Changes expected in the accounting curriculum
Taxation	4	7	<ul style="list-style-type: none"> Extend work integrated learning (WIL) period to 12 months to gain more practical skills. Develop a curriculum that addresses accounting professional skills. Introduce accounting package in the curriculum. Teach accounting related courses. Questions based on case studies are included as part of the assessment. Guest lectures - interfacing with the industry. Group presentation assignments. Students should affiliate with professional bodies (CIMA, ACCA, BICA, etc.). Examination must be moderated by both IHLs lecturers and professional bodies. Accounting Information System project. Field trips (to meet with captains of the industry). Open discussion with industry, students and the faculty or Department of Accounting and Finance. Specialisation in the 3 years - Financial Accounting or auditing Industrial work-related learning should be done at the end of the degree programme. Student mentoring programme. Including the following emerging technologies: <ul style="list-style-type: none"> Artificial intelligence (AI) Machine learning (ML) Deep learning (DL) Data mining (DM) Generic artificial intelligence (GAI). Cryptocurrency - Bitcoin. CAAD. E-tax system. E-audit system. Critical thinking. Project management. Pretraining training on workplace etiquette and professional communication
Financial accounting	25	2	
Cost and management accounting	6	5	
Accounting information systems	9	4	
Ethics in accounting	5	6	
Professional communication	31	1	
Auditing	20	3	

CIMA, Chartered Institute of Management Accountants; ACCA, Association of Certified Chartered Accountants; BICA, Botswana Institute of Chartered Accountants; CAAD, Computer-Aided Architectural Design.

'The accounting curriculum must train students on the latest version of accounting packages that are used in the firms. The purpose of accounting is to enable students to gain the computer skills and knowledge needed by the industry. The university should make the accounting package a 24-hour credit module and be examined like other modules.' (Student report no. 81)

'The university must collaborate with professional bodies so that students studying accounting will automatically become members of what is happening in the School of Medicine and Architecture who are affiliated with their professional bodies. This will enable accounting students to attend workshops and receive new updates regarding accounting labour market demands or new skills.' (Student report no. 97)

'The accounting curriculum should incorporate the following emerging technologies as subjects or modules (Student report no. 29):

- Artificial intelligence (AI)
- Machine learning (ML)
- Deep learning (DL)
- Data mining (DM)
- Generic artificial intelligence (GAI)
- Cryptocurrency – Bitcoin
- Computer-Aided Architectural Design (CAAD)
- E-tax system
- E-audit system

The research findings call for overhauling or revamping of the accounting curriculum to align with modern skill demands. Ahmed and Senan (2019) noted that current accounting curricula are designed to provide a theoretical accounting foundation rather than the generic or pervasive skills needed by the industry. As a result, accounting curricula should aim to develop labour-relevant skills, especially problem solving and critical thinking skills (Abayadeera & Watty 2014). Integrating generic skills into the accounting curriculum to address the perceived skills gap would mean a transition from the traditional model to facilitating the acquisition of soft skills (Van Oordt & Sullivan 2017). Despite research on the need to realign or match curricula to industry, conflicts between theory and practice (skill mismatch) in the job market persist (HRDC 2019; Kelly & Kenneke 1989; Srdar 2017). Human Resource Development Council (2019) further suggested that the skills acquired by graduates from formal education systems are misaligned with the demand to propel the economy, leading to a high rate of graduate unemployment in Botswana.

Findings from the accounting curriculum and sampled assessments

The accounting curriculum currently in use is an old version and has not been revised for the last 10 years. This study established that some topics and course content are no longer relevant in this dynamic accounting environment (Georgiou 2019). Examples include departmental accounting, branch accounting and manufacturing accounting. The existing curriculum on the NQF is silent about the critical skills that are expected in the industry, such as critical thinking, decision-making skills, analytical and problem-solving skills,

creativity and accounting packages. However, Hossain et al. (2020) emphasised the importance of aligning accounting curricula with job market skill demands.

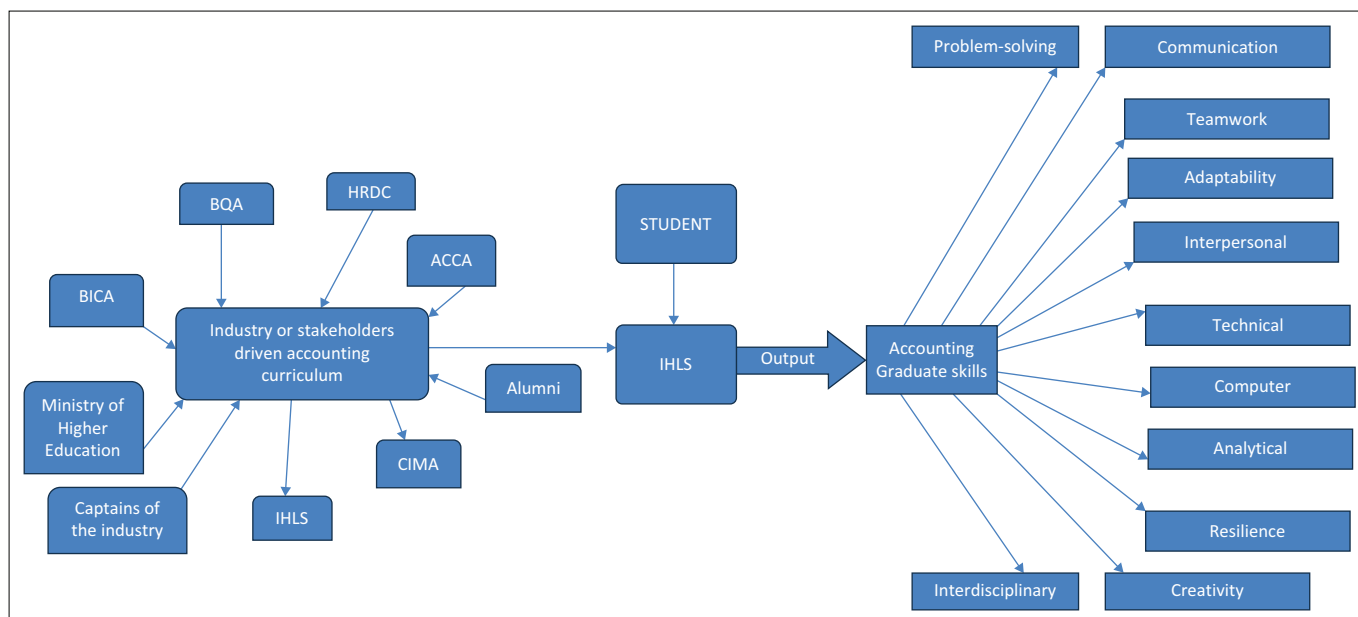
It has also been established that assessments such as assignments, tests and final examinations did not include case studies (Yadav et al. 2007). The exclusion of case studies in assessments imply that the university is equipping students with cognitive or knowledge-based skills rather than the transition from recalls of knowledge to higher levels of Bloom's taxonomy of cognitive learning of analysing, evaluation and application (Bonney 2015). The inclusion of case studies in accounting assessments facilitates the development of analytical skills, critical thinking and interdisciplinary skills in learners (Financial Services Skills Commission [FSSC] 2024; Knechel 1992), which are key skills in this rapid changing environment. Case studies also enable students in groups to solve complex problems in real-world situations (Foll, Röder & Thiesse 2021; McNair & Hersum 1954). Accordingly, the use of case-based assessments that involve real-life situations should be fortified to equip students with modern accounting skills (Daka et al. 2023).

The study also revealed that most IHLs in Botswana have practical industrial experience of 2 months, which is too short for students to gain the hands-on experience needed by the labour market. The results confirm that the limited time allocated to industrial attachment is a deterrent factor to the development of industry-led skills. Universities are thus urged to extend attachment to at least 12 months to increase employability and develop on-the-job soft skills. According to the foregoing discussion, the current accounting curriculum listed on the NQF does not address the skill requirements of ever-changing business ecosystems, hence widening the educational expectation gap. It is therefore implied that IHLs in Botswana are producing graduates who are not well equipped with pervasive skills relevant for modern competitive accounting societies.

Chartered Institute of Management Accountants (CIMA); Association of Certified Chartered Accountants (ACCA); Botswana Institute of Chartered Accountants (BICA); Institutions of Higher Learning (IHL); Human Resource Development Council (HRDC); Botswana Qualifications Authority (BQA).

Stimulated by the recommendations made in the literature, this study developed a framework for skills development for a modern accounting graduate. This raises a very important issue about the contributions of various stakeholders in the development of modern accounting curricula: professional bodies, regulatory bodies and IHLs. This study endorses the role played by professional bodies, stakeholders and regulatory authorities in shaping an accounting graduate who is 'job ready'. According to the World Bank (2015):

The path to successful development involves reforms that facilitate collaboration around a strategic vision for skills development involving employers, education systems, individuals, and labour market institutions. (p. 6)



Source: Authors' illustration (2024) based on Sterling, R.R., 1973, 'Accounting research, education and practice', *Journal of Accountancy (pre-1986)* 136(000003), 44; and Wilensky, H.L., 1964, 'The professionalisation of everyone?', *American Journal of Sociology* 70(2), 137–158. <https://doi.org/10.1086/223790>

ACCA, Association of Certified Chartered Accountants; BICA, Botswana Institute of Chartered Accountants; BQA, Botswana Qualifications Authority; CIMA, Chartered Institute of Management Accountants; HRDC, Human Resource Development Council; IHLs, Institutions of Higher Learning.

FIGURE 1: A framework for skills development for employability in the competitive and dynamic accounting environment.

Figure 1 shows the various participants in the development of a skill-driven accounting curriculum that helps narrow and bridge the gap between theory and practice (educational expectation gap) (Almeida, Behrman & Robalino 2012; World Bank 2013a). This study emphasises the need for strong collaboration among IHLs, accounting regulatory bodies, the BQA and the HRDC in developing a skills-based accounting curriculum that addresses the needs of the industry, where the HRDC, BQA and industry can collectively provide a real-world societal climate for skill development and acquisition. Institutions of Higher Learning should prioritise research to identify areas for advocacy, improvements and reforms. According to the World Bank (2015), academic institutions should take a leading role in advocating for curriculum reforms and responding to structural and digital transformations.

The BQA and HRDC will continue to monitor and evaluate how the developed curriculum is being delivered according to standard delivery methods and advise ETPs on best practices. These regulatory bodies must, in partnership with IHLs, constantly review the accounting curriculum to assess whether it is still addressing the needs of the labour market in Botswana.

Conclusion and recommendations

This study has demonstrated that the accounting curricula used in most IHLs in Botswana are outdated and are widening the skills gap in Botswana. The study also revealed the significance of generic skills such as problem-solving skills, computer skills (knowledge of accounting packages and/or software), teamwork, interpersonal skills and analytical skills in the actual workplace (Shuttleworth et al. 2013). These pervasive skills or soft skills were also aired by the World Bank (2015), which urges that there is a

need to revamp the accounting curriculum and include some professional skills for the modern job market rather than technical skills. Furthermore, in the 21st century, most employers are more concerned about generic skills over and above employee's academic achievements (Rutkowski 2015). In this study, students scored poorly in generic skills, which shows that students have not been taught or exposed to these skills (Kupets 2015). Based on the findings from this study, there is uncontested evidence of a skills gap in accounting students, both observed from the industry perspective and from the student perspective (World Bank 2013b, 2015).

This paper has presented industrial supervisors' comments on the core skills needed to perform actual accounting tasks by students on attachment. The following key pervasive skills needed in a modern accounting job market workstation – problem-solving skills, computer skills (knowledge of accounting packages/software), teamwork, interpersonal skills and analytical skills – have emerged as lacking in students from universities in Botswana. Students also proposed or recommended some changes to the curriculum to equip them with employability skills that are currently missing from the accounting curriculum. According to the faculty minutes, the accounting curriculum is too old and hence not compatible with the current changes in both the digital world and accounting professions. This raises the need for a comprehensive review of the accounting curriculum by integrating the recommendations put forward by the students based on their industrial working environment experiences. The role of key stakeholders such as the BQA, HRDC, other professional bodies and IHLs in the development of accounting curricula is a lasting solution to this issue of skill gaps and equips learners with much needed industrial-led skills.

The study cross-examined the accounting qualifications listed on the NQF and selected assessments. One novel finding to emerge from this study is the duration of attachment, which is 2 months. Two months is a hindrance to proper training and acquisition of essential skills by the student. Hence, there is a need to revamp the programme. This, in turn, supports claims by the World Bank (2015) that the attachment period should range from 6 to 12 months for skills acquisition. The findings also indicate that assessments emphasise technical or cognitive (academic) skills, thus relegating or ignoring generic or pervasive skills that prepare students to be 'work-ready'. Furthermore, it was established that accounting qualifications have not been reformed for more than 10 years, which makes them highly redundant and incompatible with the current economy and transformation in the new accounting and digital environment.

Based on the foregoing discussion and research findings, it can be inferred that IHLs in Botswana have an obligation to equip all students with job market-relevant skills, but in practice, they are not adequately equipped with the labour market-relevant skills needed to migrate smoothly from universities to workplaces. This is in line with Sondergaard and Murthi (2012), who emphasise the need for the acquisition of skills for academic certificates. A framework for skills development was developed and recommended for use in Botswana to close skills gaps among accounting students.

Limitations and areas for future research

This study's reliance on secondary data sources, such as institutional minutes, curricula and industrial attachment reports, presents notable limitations. These sources, while informative, offer only a surface-level understanding of the specific skill gaps experienced by graduates, lacking the depth required for comprehensive insights into competency deficiencies (Smith & Jones 2021). Additionally, the qualitative nature of the data restricts the generalisability of the findings, as the results may not be applicable to broader contexts or diverse populations (Brown, Green & Thompson 2020). To enhance the robustness of future research, it is recommended to adopt a mixed-methods approach that combines qualitative insights with quantitative data. Utilising primary data collection methods, such as structured interviews and surveys, would provide a more nuanced and generalisable understanding of skill gaps, thereby addressing the limitations observed in this study (Doe & Lee 2022).

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this research article.

Authors' contributions

E.M. implemented the research, analysed the results and wrote the manuscript with input from D.S. who also acted in a supervisory capacity.

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Data availability

The data that support the findings of this study are available from the corresponding author, E.M., upon reasonable request.

Disclaimer

The views and opinions expressed in this article are those of the authors and the product of professional research. The article does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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