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# Recrafting the accounting curriculum to enhance employability of graduates: A Ghanaian case

 Justice Stephen Tetteh Zotorvie<sup>1+</sup>
Annelien Adriana Van Rooyen<sup>2</sup>
Christina Cornelia Shuttleworth<sup>3</sup> <sup>1</sup>Department of Financial Accounting, College of Accounting Sciences, University of South Africa, South Africa and Department of Accounting and Finance, HTU Business School, Ho Technical University, Ghana. Email: jzotorvie@htu.edu.gh <sup>2</sup>Department of Financial Accounting, College of Accounting Sciences, University of South Africa, South Africa. Email: <u>vrooyaa@unisa.ac.za</u> <sup>3</sup>Department of Management Accounting, College of Accounting Sciences, University of South Africa, South Africa. Email: <u>vrooyaa@unisa.ac.za</u>

**ABSTRACT** 

#### Article History

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#### **Keywords**

Accounting curriculum Accounting education Fourth industrial revolution Ghana Higher education Information and communication technology Universities. This paper examined the need to update the accounting curricula in Ghanaian universities to address the issue of unemployment among accounting graduates, particularly in the context of the fourth industrial revolution (4IR). A qualitative approach involving document analysis and in-depth interviews was employed. Both purposive and snowball sampling methods were used to select a diverse group of participants, comprising government officials, accounting academics, employers, and graduates for the interviews. Data were analyzed using thematic review procedures. The study established the need for substantive changes in the accounting curricula in Ghanaian universities to teach 21st-century multi-disciplinary skills, balance practical and theoretical skills, provide a comprehensive range of financial and management accounting expertise, combine academic and professional credentials, and uphold strong ethical standards and integrity. Substantial modifications must be undertaken to the accounting curriculum to effectively address the issue of unemployment among accounting graduates. The findings require a stronger collaboration among government, academics, employers, graduates, and other interested parties in accounting to create an accounting curriculum that will focus on 21st-century skills and adequately blend theory and practice to reduce unemployment among accounting graduates.

**Contribution/Originality:** This study contributes to the accounting education literature by providing a framework for the development of a functionable curriculum by universities, strategically tailored to elevate the job prospects of accounting graduates in the Ghanaian context.

## **1. INTRODUCTION**

Recently, accounting graduates' employability has become a major concern for various stakeholders, including policymakers, parents, and the graduates themselves (Ampadu-Ameyaw, Jumpah, Owusu-Arthur, Boadu, & Fatunbi, 2020; Baah-Boateng, 2018). The term "employability" has varied meanings and importance for both job seekers and those already employed (Misni, Mahmood, & Jamil, 2020). Employers see employability as the abilities and qualifications needed from new hires, while universities regard it as the attributes and skills necessary for graduates to secure jobs and effectively address workplace challenges (Peeters et al., 2019). Employability also involves developing a skill set that equips individuals with the necessary knowledge, abilities, and adaptability to secure and



maintain employment throughout their entire career (Tran, 2016). Suleman (2018) posits that the skills associated with employability should make an individual consistently sought after, regardless of fluctuations in the labor market or shifts in government policies.

It is evident that the extent of employability is contingent upon one's knowledge, skills and attributes, the context in which such individuals search for work, and how they apply and showcase these attributes to employers. Accountants have a vital role in recording, analyzing and presenting financial reports to organizations (Miller, 2019). Some accountants serve as independent or internal auditors or consultants in various fields of specialization (Melnyk, Trachova, Kolesnikova, Demchuk, & Golub, 2020). An accounting graduate without the necessary skills and key qualities for a particular position would be unable to effectively carry out the tasks required for that position (McGunagle & Zizka, 2020; Puckett et al., 2020). Therefore, accounting education qualifications need to equip future accountants with the relevant knowledge, skills and attributes required to provide services to businesses in a satisfactory manner, especially during the 4IR where most accounting work will demand the use of technology.

However, international studies have established that the challenge faced by accounting graduates in obtaining stable employment stems from their frequent deficiency in the skills demanded by employers (Mooney, 2020; Svaldi, 2022; Tysiac, 2019). Notable among these skills are information and communication technology (ICT) and higher order thinking (HOT) skills. ICT skills comprise the essential proficiencies necessary for using computers and telecommunications to store, retrieve, transmit, and manipulate data (Ogundana, Ibidunni, & Jinadu, 2015). HOT skills encompass the capacity for critical, creative, analytical, and systematic thinking, as well as the ability to make equitable and valuable judgments (Mrah, 2017). Consequently, accounting graduates are often perceived as lacking the competencies required to effectively carry out essential tasks within the workplace to the extent that Douglas and Gammie (2019) reported that employers in some countries are employing non-accounting graduates, who they perceive to have better developed the skills needed for the competent execution of tasks related to accounting.

Accounting graduates in Ghana also experience employment challenges (Ampadu-Ameyaw et al., 2020; Baah-Boateng, 2018; Institute for Fiscal Studies, 2019). While some studies blame the employment difficulties experienced by Ghanaian graduates on the unavailability of employment opportunities (Affum-Osei, Asante, Forkouh, Aboagye, & Antwi, 2019; Dadzie, Fumey, & Namara, 2020), the employment difficulties encountered by accounting graduates in Ghana are frequently ascribed to shortcomings in the country's accounting education system, which is criticized for its failure to adequately equip students with the relevant knowledge and skills that employers require (Institute for Fiscal Studies, 2019).

Education is universally recognized as a potent instrument for bringing about change in every society (Ndille, 2020). To equip accounting graduates with the necessary knowledge and skills required to be able to bring change in society, accounting institutions have been asked to overhaul their curricula (Dawkins, Dugan, Mezzio, & Trapnell, 2020; Timpson, 2017). However, there is limited research in Ghana on the essential skill sets and competencies expected from accounting graduates and how these skills and competencies can be incorporated into the accounting curriculum to produce competent graduates for the labor market (Asabere, Togo, Acakpovi, Torby, & Ampadu, 2017; Kwarteng & Mensah, 2022). As a result, this study explores the need to update the accounting curricula at universities in Ghana to emphasize teaching skills and competencies that will prepare graduates for employment in the 4IR era.

This study was guided by the following research questions:

- 1. What are the perceptions of government officials, academics, employers, and graduates regarding the current accounting curricula in Ghanaian universities?
- 2. What specific changes are required in the accounting curricula in Ghanaian universities to enhance the employability of accounting graduates?

The study contributes to the accounting education discourse by proposing directives for accounting curricula changes. These directives are geared toward prioritizing the instruction of skills and proficiencies aimed at enhancing the employability of accounting graduates, as discerned through the perceptions of government officials, accounting academics, employers, and accounting graduates. Moreover, the study offers valuable insights to guide academics, professional accounting bodies, and other regulatory entities in formulating policies concerning the education and employment landscape for accounting graduates.

## **2. LITERATURE REVIEW**

The following sub-sections explain accounting education in the Ghanaian context and the demand for change in the accounting curriculum.

#### 2.1. Accounting Education in the Ghanaian Context

In Ghanaian educational institutions, accounting is a core element of various business programmes. As of March 31, 2021, the Ghana Tertiary Education Commission (GTEC) accredited ten public universities in Ghana, commonly known as traditional universities. These institutions offer a range of four-year accounting degree programmes, including a Bachelor of Science (BSc) in Accounting, a Bachelor of Commerce (BCom) in Accounting, and a Bachelor of Business Administration (BBA) in Accounting (Ghana Tertiary Education Commission, 2021). The GTEC approves the course content and prerequisites for universities to operate effectively, ensuring they meet satisfactory academic and professional standards (Kamran, Liang, & Trines, 2019). In addition to the ten traditional universities, Ghana has ten accredited technical universities and several private universities, all of which offer accounting degree programmes.

### 2.2. Demand For Change in the Accounting Curriculum

The university accounting curriculum specifies the topics, learning objectives, learning activities, instructional materials and assessment criteria for the implementation of the curriculum (Akamigbo & Eneja, 2020). Various scholars have expressed different perspectives on the need for the accounting curriculum to change in order to fulfil the accounting requirements in the business world. For instance, Surianti (2020) found that the accounting curriculum had failed to meet the skills needs of employers, did not develop the attitudes and values necessary for continuous learning in the 21st century, and did not promote higher order thinking among accounting graduates. Consequently, Surianti (2020) called for an education that will equip accounting graduates with a broad spectrum of knowledge, skills, values and qualities, in addition to the ability to think critically, with less emphasis on technical competencies. Kwarteng and Mensah (2022) suggest reorganizing the accounting curriculum to teach generic skills such as computer and technological skills, analysis and problem-solving skills, and innovative and creative skills that will make accounting graduates relevant in the current employment market and society in general.

On a similar note, White (2018) reminds accounting academics to develop a curriculum that equips accounting graduates with more analytical and critical thinking skills in addition to excellent soft skills, such as writing and communication, because these attributes are necessary for effective performance in the 21st century. Abedin (2019) also called for an accounting curriculum that will train accountants to exercise sound financial judgements, communicate effectively, work in teams and provide results on time.

Increasing the call in Indonesia for a change in the accounting curriculum, Handoko, Mulyawan, Samuel, and Rianty (2019) posit that the responsibility of accountants is rapidly changing from the processing of financial transactions to providing management with information for decision-making purposes. There is an increasing need for accountants to understand Big Data and business analytics because of the proliferation of the large volumes and complexity of data (Handoko et al., 2019). Primarily, Big Data pertains to the extensive volume of information continually gathered through tools and technologies such as credit cards, the internet, and social media.

Additionally, the use of Wi-Fi sensors and electronic tags is on the rise for data collection purposes (Yaseen & Obaid, 2020). Accordingly, accounting educators should leverage Big Data technology and information systems to adequately train accounting graduates to satisfy the changing requirements of the accounting industry. Also, Andiola, Masters, and Norman (2020) recommended that accounting departments implement specific data analytics skills throughout the accounting curriculum to train accounting graduates to perform data analytics and data visualizations to support managerial decisions.

To ensure the survival of accounting graduates and the accounting profession as a whole in the 4IR, Ismail, Ahmad, and Ahmi (2020) advise accounting educators to modify the curriculum and focus more on using appropriate teaching methodology, instructional materials, and evaluation strategies in the teaching and learning of accounting than is the case currently. Dawkins et al. (2020) suggest that accounting educators must use pedagogical approaches that are interactive and experimental. The study by Wang (2020) advocates for incorporating classroom discussions, presentations, small group projects, and problem-solving strategies. These methods facilitate the comprehensive understanding of accounting principles and theories among students, enabling them to apply this knowledge logically and consistently. Due to the perpetual evolution of the world surrounding us in terms of technology, Ackerman (2019) concluded that accounting academics must employ technology in the teaching of accounting education should focus on technical knowledge, but because of the 4IR accounting educators, must move toward Big Data and the skills to analyze and interpret this data.

One notable gap identified in the literature is the lack of clear guidelines for the changes required in the accounting curricula that focus on teaching ICT and HOT skills and competencies. This study seeks to enhance the employability of accounting graduates, specifically in Ghana, based on the views of key stakeholders in education and the industry. Based on the findings, the study provides a framework for the development of a functionable curriculum by universities, particularly those that offer accounting, to adequately train competent accountants for businesses and government establishments.

### 3. METHODOLOGY

This study employed a qualitative methodology to answer the research questions. This approach involves gathering and analyzing descriptive data to gain insights into social or human challenges (Aspers & Corte, 2019). The study utilized document analysis and conducted semi-structured face-to-face interviews to gather data.

Document analysis systematically examines documentary evidence to offer insights into predetermined research questions or confirmation of the results (Bowen, 2009). In this article, the undergraduate accounting curricula (course structure) of ten public universities in Ghana were examined and analyzed to find details of accounting, ICT and HOT skills, including methods of teaching and assessing these skills.

A total of 30 participants, comprising three government officials, ten accounting academics, seven employers, and ten accounting graduates were interviewed for this research. Ethics approval was obtained from the university through which the research was conducted, and permission was obtained from the individual participants. The study employed a purposive sampling approach to choose accounting academics, employers, and government officials, while the snowball method was utilized to enlist accounting graduates. By employing purposive and snowball sampling techniques, the study ensured the selection of optimal participants to address the research inquiries (see Tongco (2007)). Different types of interview schedules were used to collect data from these four participant categories.

In a qualitative study, ensuring trustworthiness encompasses the establishment of credibility, transferability, dependability and confirmability (Lemon & Hayes, 2020; Lincoln & Guba, 1985). Before data were collected, a pilot test was conducted to validate and assess the efficacy of the data collection instruments (Gani, Rathakrishnan, & Krishnasamy, 2020). Based on the feedback, the interview questions were reorganized and some of the questions

were reworded to provide a clearer understanding to participants to obtain valuable information for the study. An electronic audio recorder was used to record the interviews which were transcribed for further analysis.

To ensure credibility and dependability, member checking was conducted by sharing interview transcripts with selected participants. This allowed them to validate the accuracy of the quotations presented in the study. To achieve triangulation, the data and interpretations between each research participant category were cross-checked by the researchers and other expert qualitative researchers. Since this study was conducted in a unique setting, generalization is irrelevant, but to ensure transferability, the researchers carefully reviewed and analyzed all findings.

In this study, a thematic review approach was employed to systematically identify, analyze and interpret significant themes, categories and associated codes within the interview data. This approach was used to effectively address the research questions at hand (Clarke & Braun, 2017). The themes, categories and corresponding codes that were discovered served as foundational elements for advancing reasoning, facilitating discussions, and constructing syntheses. These components played a crucial role in shaping the study's conclusions. The coding was executed by a professional coder from whom an Independent Coder Certificate was secured to validate the reliability and confirmability of the analysis process regarding the coding and categorizing of the data. The data analysis process was facilitated by ATLAS.ti<sup>TM</sup> 9 computer software.

## 4. FINDINGS

This section presents the details of the research participants, the need for change in the accounting curricula, and how the curricula can be changed to elevate the job prospects of accounting graduates in the age of the 4IR.

## 4.1. Demographic Details of the Research Participants

In addition to their academic credentials, a substantial portion of the participants held professional accounting qualifications. Moreover, these individuals possessed notable combined experience in both academic and professional work settings. The accounting academics possessed work experience spanning from 4 to 21 years, while the employers and government participants had work experience ranging from 3 to 15 years and 4 to 10 years, respectively. The graduates' work experience also fell within the range of three years, which aligned with the required criteria for the study. To uphold privacy and protect confidentiality, pseudonyms were assigned to the participants in lieu of their real identities. In the context of this research, the following labels are employed: AS1U1 pertains to accounting academics from university 1; GRAD1U1 refers to graduates from university 1; EMP signifies employers; and GOV represents government officials. Themes were identified based on the responses from the interviewees and are discussed below.

## 4.2. The Accounting Curriculum Needs Substantive Changes

When asked about the need to revise the accounting curriculum in Ghanaian universities, nearly all participants expressed a consensus that significant changes are necessary. They emphasized that these changes are essential to effectively prepare future accounting graduates for the dynamic demands of the accounting profession. One academic staff member stated, "We are several years behind compared to other universities in developed countries, and we need to catch up quickly" (AS1U3).

The following statements from different stakeholders support the call for the accounting curriculum to be changed:

"We need to develop our curriculum to reflect what is happening in the industries and what the professional institutions are testing" (AS1U4).

"We do not have a choice not to revise or change our programmes to reflect current business trends and meet workplace requirements" (AS2U1).

"Yes, I think that there is a need more than before for the accounting curriculum to be completely overhauled" (EMP5).

"We need to go that direction and strengthen our curricula because we are now in the world of technology" (GOV2).

The abovementioned statements consolidate the calls by many researchers (see (Abedin, 2019; Ackerman, 2019; Dawkins et al., 2020; Kwarteng & Mensah, 2022)) to make changes to the accounting curriculum to meet the everchanging needs of businesses and the accounting profession. The following section presents information regarding the specific changes required in the accounting curriculum.

### 4.3. Changes Required in the Accounting Curriculum

Based on the coded interview data, the changes in the accounting curriculum must focus on:

- 1. Twenty-first-century multi-disciplinary skills (GRAD2U5)
- 2. Balancing theoretical knowledge and practical skills (EMP7)
- 3. Offering comprehensive proficiencies in financial and managerial accounting (EMP6)
- 4. Integrating academic and professional qualifications (AS2U5)
- 5. Upholding robust ethical standards and unwavering integrity (AS2U2).

Comprehensive discussions of the corresponding codes are provided in the subsequent sections.

### 4.3.1. Twenty-First-Century Multi-Disciplinary Skills

The study revealed an increasing need for accounting graduates to acquire 21st-century skills to stay relevant in the evolving job market. GRAD2U5 remarked that in the 21st century, we need skills that will enable us to secure employment and thrive in our workplaces. As specified by the interview data, these skills are categorized into four groups:

- Computer application packages, including internet utilization, accounting applications, cloud-based computing, data analysis, as well as Microsoft Word and Microsoft Excel. According to the participants, "acquiring these skills will equip accounting graduates to competently produce final accounts, conduct analyses, generate reports, and formulate schedules" (GRAD2U5) "with both swiftness and precision" (GRAD1U5).
- 2. HOT skills, including proficiency in analyzing and interpreting data for informed decision making, along with creative and innovative thinking (AS1U5).
- 3. Interpersonal skills, such as the capability to collaborate effectively with individuals of varying personalities, along with desirable qualities such as emotional intelligence and proficient verbal and written communication skills (GRAD2U3).
- Entrepreneurship and innovative skills, including a combination of accounting, marketing, communication, public relations, and managerial abilities that enable individuals to create opportunities to produce goods and services to meet societal demands (EMP1).

This position of participants on relevant skills expected from graduates in the field of accounting corroborates with the literature that in the present landscape of intense workplace competition, there is a call for accounting graduates to possess skills aligned with the 4IR demands, enabling them to swiftly adapt and attain success (see (Ackerman, 2019; Alshare & Sewailem, 2018; McGunagle & Zizka, 2020; Odole-Adeyemi & Oni, 2022)). Accordingly, participants wanted the accounting curriculum to comprehensively prioritize the development of these competencies. As far as GRAD2U3 was concerned, there should be separate courses taught by separate lecturers for effective development of these skills.

#### 4.3.2. Balancing Theoretical Knowledge and Practical Skills

According to EMP2, the graduates are comfortable with the theoretical aspects, but they face challenges when it comes to practical application. It is therefore essential to provide students with more opportunities for hands-on experience in their chosen subjects to bridge this gap. EMP7 believed that they should be provided with opportunities to gain hands-on experience in processing accounting transactions, enabling them to perform industry-required tasks effectively. AS1U3 commented that academics should not aim to produce robots who are rewarded solely for memorizing the teacher's words. Similarly, GRAD1U3 mentioned that the courses were too theoretical and overly centered on examinations. Consequently, students struggled to grasp how to apply this knowledge in a practical workplace setting, which has become a significant challenge for some graduates.

Interestingly, even though some of the academic staff interviewees possessed industry experience and a keen awareness of prevailing industry dynamics, they struggled to effectively translate these practical insights into their methods of teaching. AS1U4 mentioned that academics continue to carry out tasks in an environment where practicality is lacking. Consequently, there is a disparity between the subjects taught by accounting educators and the actual occurrences within industries, primarily attributed to the absence of practical applicability.

The document analysis of the accounting curricula of the universities disclosed that lectures, group discussions, and presentations were the main methods of teaching the courses. EMP6 believed that these methods cannot effectively produce tangible outcomes. Accordingly, recommendations have emerged advocating for the accreditation and quality assurance bodies to supervise the alignment of teaching and examination procedures of accounting courses. This alignment should prioritize hands-on assessments over traditional paper-based examinations to produce highly competitive future accountants (EMP7). EMP6 also recommended that incorporating more case studies and accounting software into teaching and learning would enhance the practicality of accounting education.

Other interviewees also recommended that accounting should be taught in a way that mirrors real-world business practices rather than simply as a course (AS1U3), and the learning experience should present more challenges for students, as they are used to merely retrieving information from textbooks and reproducing it (AS1U4). The results of the present study corroborate the conclusions drawn by Dellaportas (2019) emphasizing the need for transformation in accounting education. This shift pertains to a reorientation from focusing solely on the subject matter of educational programmes in accounting to emphasizing the pedagogical dynamics of education. This revised approach should encourage students to take on an engaged and self-reliant role in their learning journey. By adopting this approach, students could evolve into self-directed learners, proactively acquiring knowledge through their individual endeavors and progressively nurturing skills in inquiry and innovation.

### 4.3.3. Providing the Full Spectrum of Financial and Management Accounting Skills

The analysis of the accounting curricula revealed a prevailing focus on key subjects such as public sector accounting, cost and management accounting, financial accounting, auditing, taxation, and related accounting disciplines. These specific courses, particularly financial accounting, are integrated across various levels of study, each marked by varying degrees of complexity and emphasis. It is anticipated that the study of these subjects will provide graduates with the required competencies and knowledge in managerial and financial accounting, thereby contributing to industrial and socio-economic progress (Musov, 2017). However, despite these considerations, indications emerged suggesting a degree of dissatisfaction among the participants regarding the quality of education in financial and managerial accounting provided by the universities. This sentiment led to the proposition for a curriculum revision intended to enhance both the substance and pedagogical approach of these courses. As conveyed by GRAD1U1, who believed that there is room for improvement in financial reporting courses, there should be a greater focus on enhancing the understanding and application of the International Financial Reporting Standards (IFRS). As an endorsement of GRAD1U1, EMP1 was concerned that the graduates' understanding of

IFRS is limited. Many of them lack substantial knowledge in this area, and it is essential for graduates to understand how to apply IFRS principles in real-world business transactions. EMP6 emphasized that adequate knowledge of the accounting standards enhances an accountant's ability to consistently create year-end financial statements, analyze financial information, and forecast operational and managerial budgets.

The remarks made by the research participants concerning their views on financial and management accounting competencies align with the assertion put forth by Rosi and Mahyuni (2021) which underscores the need to enhance the financial reporting proficiencies of accountants to ensure the continued relevance of the accounting field. The following section deliberates on the importance for accounting graduates to obtain both academic and professional credentials as a means of augmenting their employment prospects.

# 4.3.4. Blending Academic and Professional Qualifications

The data revealed that when selecting candidates for accounting positions, employers prefer accounting graduates who have both academic and professional accounting qualifications rather than those with only academic credentials. Consequently, the prospects for securing employment are notably challenging for accounting graduates lacking professional accounting qualifications. In some instances where fortunate individuals managed to secure jobs with just an accounting degree, they were assigned fewer responsibilities in comparison to someone holding a professional qualification (AS2U5). GRAD2U3 mentioned that in addition to a bachelor's degree, certain employers require professional accounting certifications such as Chartered Institute of Management Accountants (CIMA), Chartered Accountants Ghana (CAG), or Association of Chartered Certified Accountants (ACCA), which some of the new accounting graduates had not yet acquired.

With reference to employers' preference for graduates holding both an academic and professional qualification, AS2U5 believed that there is a widespread perception that education standards are declining, which seems to lead employers to prioritize candidates with professional qualifications over those with only academic credentials. EMP7 perceived that while degree programmes primarily concentrate on teaching conceptual knowledge, professional programmes aim to equip graduates with the skills required for practical roles within the industry.

Earlier research ascribes employers' inclination toward graduates who possess professional qualifications to the perceived practical skills they offer, the international scope, and the ongoing revisions of the professional bodies' syllabi to align with business needs and the demands of the broader accounting profession (Abdulrahamon, Toyin Adeleye, & Adeola, 2018; Asonitou, 2015). However, among the academic participants, AS2U1 regarded the requirement for a professional accounting qualification from accounting graduates as a "missing gap" and argued that at this educational level, our objective is to nurture their intellectual capabilities and provide them with the necessary knowledge. This way, when graduates enter the job market, regardless of the setting, they can adapt and function effectively with additional in-house training. Academics do not anticipate their accounting graduates to be able to immediately take on professional accounting roles. However, if they choose to pursue a career as accountants after graduation, they should acquire professional qualifications and obtain the necessary licenses.

To address the ongoing debate surrounding the academic and professional qualifications of accounting graduates, AS2U5 stated that there ought to be more alignment between the contents of accounting academic degrees and professional education, with the aim of minimizing the perception that professional qualifications are vastly distinct from academic qualifications. Consequently, a government interviewee called for public universities to collaborate with professional accounting bodies to develop accountants through the amalgamation of professional bodies' curricula and those of public universities that provide accounting programmes (GOV2). This standpoint aligns with Ackerman (2019) who underscores the importance of incorporating professional accounting courses and examination approaches into university accounting curricula. This integration will ensure that upon graduation, students will have already acquired the necessary professional qualifications, alleviating the need to achieve additional professional examinations beyond their university studies.

#### 4.3.5. Ensuring Sound Ethical Requirements and Integrity

To secure enduring employability for accounting graduates, participants underscored the significance of a curriculum designed to cultivate a foundation of robust ethical traits and unwavering integrity in students. A sentiment shared by one of the employer participants stated that, "in the accounting profession, it is a matter of integrity, and without integrity you are not an accountant" (EMP6). Accordingly, this aspect must be included in the curriculum.

Ethics pertains to the established codes of conduct that delineate actions and interactions among individuals (see Tazuddin (2020)). Integrity encompasses qualities such as understanding, compassion, honesty, transparency, and ethical conduct. These attributes facilitate the establishment of trust and respect among individuals (Duggar, 2009). Recognizing the vital and delicate nature of organizations' financial statements, many entities currently place strong emphasis on principles of ethics and integrity. These principles are deemed integral to the roles of accountants and auditors, inter alia, in the drafting of financial reports (Jaijairam, 2018). One of the research participants reflected that accounting graduates should show ethical commitment because "everybody is afraid of people who do not have a conscience so that when they are employed, they will not defraud the organization" (AS2U2). The inclusion of ethics in the accounting curriculum will help accounting graduates develop appropriate behavior for a successful accounting career.

The analysis of the universities' curricula through document analysis also revealed a consistent inclusion of a 3credit business ethics course. This course provides students with insights into ethical matters and their relevance to individual, organizational, and societal levels. Nonetheless, participants conveyed that the business ethics course fell short in nurturing sound ethical conduct among the graduates. This is because "there are a lot of them, including those who are pursuing professional accounting programmes with attitudinal and ethical problems. They need to humble themselves and apply the ethical principles that they acquired at university to be able to add value to their organizations" (EMP1). It is possible to address all these concerns if there is a specific focus on ethics in the accounting curriculum. Based on the document analysis and the interviewees' responses, the paper provides a framework for the development of a functionable curriculum in universities to enhance the employability of accounting graduates (refer to Figure 1).



Figure 1. A framework to develop a functionable curriculum to enhance the employability of accounting graduates.

The figure above depicts the key changes required in the accounting curriculum through the collaborative efforts of government, academics, employers and graduates to equip accounting graduates with marketable skills.

### **5. CONCLUSION**

The literature highlights the global predicament faced by a substantial number of newly qualified accounting graduates, with Ghana being no exception, as they struggle with the challenge of securing sustainable employment.

This predicament primarily stems from a mismatch between the skill sets imparted by universities and the practical proficiencies sought by employers. In response to this disparity, scholars have called for the modification of accounting curricula, particularly at the university level, to align them more effectively with the skills required in the workplace. The current study delves into the necessity of overhauling the accounting curricula within Ghanaian universities, with a focal point on cultivating skill sets and competencies for employment in the 4IR era. By employing a qualitative methodology, this study gathered data from a comprehensive document analysis of the accounting curricula at five public universities in Ghana, and in-depth interviews involving government officials, accounting academics, employers, and graduates.

The findings indicated an immediate imperative for the substantial revision of university accounting curricula aimed at adequately equipping accounting graduates with multi-disciplinary 21st-century skills that are vital for navigating the ever-changing world of work. These curriculum changes should focus not only on theoretical knowledge but also practical proficiencies, encompassing a full spectrum of financial and management accounting knowledge.

Furthermore, the modifications should encompass a blend of academic and professional qualifications coupled with a commitment to ethical requirements and integrity, thus underscoring the recalibration required within the accounting curricula of universities in Ghana.

To effectively train future accountants, accounting academics should adopt interactive pedagogical approaches in both teaching and assessment, diverging from the conventional lecture-centric and paper-based examination model. Encouraging students to assume an active and independent role in their learning journey is pivotal. This engagement will empower them to acquire the proficiencies and insights needed for future employability demands. This further requires opportunities to be provided for accounting academics to engage in continuous professional development. This can involve workshops, seminars, and industry immersion experiences that enable accounting academics to stay abreast of current industry trends and practices.

The results also show that equipping accounting graduates with marketable skills should be a collaborative effort of government, academics, employers, graduates, professional accounting bodies, such as the Institute of Chartered Accountants Ghana, and other accounting-related stakeholders. Regular consultations and partnerships can ensure that the skills and knowledge being imparted align closely with the current needs and trends of the industry.

This collaboration can help bridge the gap between academic theory and real-world application. There is also the need for government, universities and industry to develop effective employment plans so that accounting graduates are employable, thus solving the unemployment problem. Accreditation bodies, such as the GTEC, can consider the findings of the current study in accrediting programmes for universities to adequately train competent accountants needed for businesses and government establishments. This paper does not only confirm the many calls for change in the curricula of public universities but also provides comprehensive information regarding the expectations of government, academics, employers and graduates concerning the curriculum that will meet the needs of future accounting professionals in the 4IR.

This research focuses mainly on the leading five public universities in Ghana. Consequently, the outcome might not exhibit direct generalizability to other universities within the country or beyond. Nevertheless, it is worth noting that the insights obtained from this study could potentially offer valuable insights to other higher education institutions, particularly those engaged in the education of accounting graduates. Based on the findings and the limitations of the current study, a cross-cultural study on the relationship between accounting education gaps in the development of accounting-related skills offered by public business universities and employability can be considered for further study.

Additional research is also needed to examine the role of the industry in reducing the unemployment of accounting graduates.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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Authors' Contributions: Conceptualization, material preparation, data collection, and analysis also wrote the first draft of the manuscript, J.S.T.Z.; supervised, reviewed, edited, and approved the manuscript, A.A.V.R. and C.C.S. All authors have read and agreed to the published version of the manuscript.

# REFERENCES

- Abdulrahamon, A., Toyin Adeleye, S., & Adeola, F. (2018). Impact of educational, professional qualification and tears of experience on accountant job performance. *Journal of Accounting and Financial Management*, 4(1), 32-44.
- Abedin, R. (2019). Employers expectation towards global certified accountants and financial management graduates: A study on focal spot. *International Journal on Government Al Financial Management*, 19(1), 59–74.
- Ackerman, J. L. (2019). The accounting curriculum needs a complete overhaul. The CPA Journal, 89(9), 74-74.
- Affum-Osei, E., Asante, E. A., Forkouh, S. K., Aboagye, M. O., & Antwi, C. O. (2019). Unemployment trends and labour market entry in Ghana: Job search methods perspective. *Labor History*, 60(6), 716–733. https://doi.org/10.1080/0023656X.2019.1640356
- Akamigbo, I. S., & Eneja, R. U. (2020). Evaluation of financial accounting curriculum in senior secondary schools in Nigeria. *Nnadiebube Journal of Education in Africa*, 6(1), 108–119.
- Alshare, K., & Sewailem, M. F. (2018). A gap analysis of business students' skills in the twenty-first century: A case study of Oatar. *Academy of Educational Leadership Journal*, 22(1), 1–22.
- Ampadu-Ameyaw, R., Jumpah, E. T., Owusu-Arthur, J., Boadu, P., & Fatunbi, O. A. (2020). A review of youth employment initiatives in Ghana: Policy perspective. FARA Research Report, 5(5), 1–41. https://doi.org/10.1596/978-1-4648-1579-9\_ch4
- Andiola, L. M., Masters, E., & Norman, C. (2020). Integrating technology and data analytic skills into the accounting curriculum: Accounting department leaders' experiences and Insights. *Journal of Accounting Education*, 50(1), 1–18. https://doi.org/10.1016/j.jaccedu.2020.100655
- Asabere, N., Togo, G., Acakpovi, A., Torby, W., & Ampadu, K. (2017). AIDS: An ICT model for integrating teaching, learning and research in technical university education in Ghana. *International Journal of Education and Development Using Information and Communication Technology*, 13(3), 162-183.
- Asonitou, S. (2015). The evolution of accounting education and the development of skills. In 11th Interdisciplinary Workshop on Intangibles, Intellectual Capital and Extra-Financial Information, 17, 1-11.
- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. Qualitative Sociology, 42(2), 139-160. https://doi.org/10.1007/s11133-019-9413-7
- Baah-Boateng, W. (2018). The youth unemployment and joblessness challenge in Ghana: Revisiting the issues. African Centre for Economic Transformation, 2, 1-10.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. https://doi.org/10.3316/QRJ0902027
- Clarke, V., & Braun, V. (2017). Thematic analysis. Journal of Positive Psychology, 12(3), 297-298.
- Dadzie, C. E., Fumey, M., & Namara, S. (2020). Youth employment programmes in Ghana: Options for effective policy making and implementation. *In International Development in Focus*, 1-63. https://doi.org/10.1596/978-1-4648-1579-9
- Dawkins, M. C., Dugan, M. T., Mezzio, S. S., & Trapnell, J. (2020). The future of accounting education: In-demand skills, workplace readiness, the 150-hour requirement, MAcc programs, and the CPA exam. *Pacific Accounting Review*, 11(2), 28-35. https://doi.org/10.1108/eb037920

- Dellaportas, S. (2019). RMIT accounting educators' conference: 2016 accounting education what it is, and what it is not. Accounting Education, 28(2), 119–126. https://doi.org/10.1080/09639284.2019.1584964
- Douglas, S., & Gammie, E. (2019). An investigation into the development of non-technical skills by undergraduate accounting programmes. *Accounting Education*, 28(3), 304-332. https://doi.org/10.1080/09639284.2019.1605532
- Duggar, J. W. (2009). The role of integrity in individual and effective corporate leadership. *Journal of Academic and Business Ethics*, 3(1), 1-7.
- Gani, N. I. A., Rathakrishnan, M., & Krishnasamy, H. N. (2020). A pilot test for establishing validity and reliability of qualitative interview in the blended learning English proficiency course. Journal of Critical Reviews 7(5), 140–143. https://doi.org/10.31838/jcr.07.05.23
- Ghana Tertiary Education Commission. (2021). List of accredited tertiary education institutions as at 31 March 2021. Ghana Tertiary Education Commission (GTEC), Accra, Ghana, 31, 1–18.
- Handoko, B. L., Mulyawan, A. N., Samuel, J., & Rianty, K. K. (2019). Facing industry revolution 4.0 for millennial accountants. International Journal of Innovative Technology and Exploring Engineering, 9(1), 1037–1042. https://doi.org/10.35940/ijitee.a4681.119119
- Institute for Fiscal Studies. (2019). Strong economic growth and significant reduction in employment: The critical issues to address in Ghana's 2019 budget. Occasional Paper No. 17, Institute for Fiscal Studies, Accra.
- Ismail, Z., Ahmad, A. S., & Ahmi, A. (2020). Perceived employability skills of accounting graduates: The insights from employers. *Elementary Education Online*, 19(4), 36-41.
- Jaijairam, P. (2018). Ethics in accounting. Journal of Finance and Accountancy, 23(1), 1-13.
- Kamran, M., Liang, Y., & Trines, S. (2019). Education in Ghana world education news and reviews. Retrieved from https://wenr.wes.org/2019/04/education-in-ghana
- Kwarteng, J. T., & Mensah, E. K. (2022). Heliyon employability of accounting graduates: Analysis of skills sets. *Heliyon*, 8, e09937. https://doi.org/10.1016/j.heliyon.2022.e09937
- Lemon, L. L., & Hayes, J. (2020). Enhancing trustworthiness of qualitative findings: Using leximancer for qualitative data analysis triangulation. *The Qualitative Report*, 25(3), 604-614. https://nsuworks.nova.edu/tqr/vol25/iss3/3
- Lincoln, Y. S., & Guba, E. A. (1985). Naturalist inquiry. Beverly Hills, CA: Sage.
- McGunagle, D., & Zizka, L. (2020). Employability skills for twenty-first century STEM students: The employers' perspective. Higher Education, Skills and Work-Based Learning, 4(16), 1-22. https://doi.org/10.1108/HESWBL-10-2019-0148
- Melnyk, N., Trachova, D., Kolesnikova, O., Demchuk, O., & Golub, N. (2020). Accounting trends in the modern world. Independent Journal of Management and Production, 11(9), 2403-2416. https://doi.org/10.14807/ijmp.v11i9.1430
- Miller, K. (2019). What does an accountant do? Responsibilities, skills and trends Northeastern University. Retrieved from https://www.northeastern.edu/bachelors-completion/news/what-does-an-accountant-do/
- Misni, F., Mahmood, N., & Jamil, R. (2020). The effect of curriculum design on the employability competency of Malaysian graduates. *Management Science Letters*, 10(4), 909-914. https://doi.org/10.5267/j.msl.2019.10.005
- Mooney, B. (2020). *ICT and business skills in high demand*. Retrieved from https://www.irishtimes.com/news/education/ict-and-business-skills-in-high-demand-1.3401958. [Accessed October 27, 2020]
- Mrah, I. (2017). Developing higher order thinking skills: Towards a rethinking of EFL coursebooks in Moroccan High schools. Journal of English Language Teaching and Linguistics, 2(3), 225–243. https://doi.org/10.21462/jeltl.v2i3.79
- Musov, M. (2017). It doesn't matter how we assess the competencies in accounting education? *Economic Alternatives*, 3(1), 429-448.
- Ndille, R. (2020). Rethinking the African space in a global education project: A representational reflection in the context of nationalism. *African Renaissance*, 17(1), 203–231.
- Odole-Adeyemi, M. M., & Oni, S. (2022). Sustainable development through innovation and ICT entrepreneurship in Africa. *African Renaissance*, 2022(si1), 57–69. https://doi.org/https://doi.org/10.31920/2516-5305/2022/SIn1a3

- Ogundana, O. M., Ibidunni, A. S., & Jinadu, O. (2015). ICT integration in accounting education: Evidence from two private higher institutions in Nigeria. Acta Universitatis Danubius. Communicatio, 9(2), 114–126. https://doi.org/10.5267/j.msl.2016.11.007
- Peeters, E., Nelissen, J., De Cuyper, N., Forrier, A., Verbruggen, M., & De Witte, H. (2019). Employability capital: A conceptual framework tested through expert analysis. *Journal of Career Development*, 46(2), 79-93. https://doi.org/10.1177/0894845317731865
- Puckett, J., Boutenko, V., Hoteit, L., Polunin, K., Perapechka, S., Stepanenko, A., . . . Bikkulova, G. (2020). Fixing the global skills mismatch: Boston Consulting Group. Retrieved from https://www.bcg.com/publications/2020/fixing-global-skills-mismatch.
- Rosi, N. M. K., & Mahyuni, L. P. (2021). The future of accounting profession in the industrial revolution 4.0: Meta-synthesis analysis. *E-Jurnal Akuntansi*, 31(4), 1010–1024. https://doi.org/10.24843/eja.2021.v31.i04.p17
- Suleman, F. (2018). The employability skills of higher education graduates: Insights into conceptual frameworks and methodological options. *Higher Education*, 76, 263-278. https://doi.org/10.1007/s10734-017-0207-0
- Surianti, M. (2020). Development of accounting curriculum model based on industrial revolution approach. *Development*, 11(2), 116–123. https://doi.org/10.7176/rjfa/11-2-12
- Svaldi, A. (2022). Talent shortage forcing accounting firms to recalculate their approach the Denver Post. Retrieved from https://www.denverpost.com/2022/09/10/accounting-jobs-talent-shortage-kpmg-denver/. [Accessed September 12, 2022]
- Tazuddin, S. (2020). Importance of morality, ethics & values in our lives. *Journal of Emerging Technologies and Innovative Research*, 7(11), 428-431.
- Timpson, L. B. M. (2017). Do accredited undergraduate accounting programmes in Australia meet the needs and expectations of the accounting profession? *Education* + *Training*, 59(3), 1–27.
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and Applications*, 5(1), 147–158. https://doi.org/10.17348/era.5.0.147-158
- Tran, T. T. (2016). Enhancing graduate employability and the need for university enterprise collaboration. *Journal of Teaching and Learning for Graduate Employability*, 7(1), 58-71. https://doi.org/10.21153/jtlge2016vol7no1art598
- Tysiac, K. (2019). Report finds shift in accounting firm hiring. Journal of Accountancy, 8(1), 1-2.
- Wang, Y. (2020). The uses of critical thinking in accounting and how it improves accounting students' professional skills. Paper presented at the 2020 3rd International Conference on Education Technology and Social Science, Tianjin, China, 13-14 June, 156-161.
- White, A. (2018). Employability of accounting graduates-Talking accounting. Retrieved from https://www.talkingaccounting.com/2018/06/15/employability-of-accounting-graduates-2/. [Accessed November 10, 2022]
- Yaseen, H. K., & Obaid, A. M. (2020). Big data: Definition, architecture & applications. JOIV: International Journal on Informatics Visualization, 4(1), 45-51. https://doi.org/10.30630/joiv.4.1.292

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