



## Expectations Gap, Market Skills, and Challenges of Accounting Education in Saudi Arabia

Sulaiman A. Alsughayer<sup>a</sup> Nuha Alsultan<sup>b</sup>

<sup>a</sup> Corresponding Author, Imam Mohammad Ibn Saud Islamic University (IMSIU), College of Economics and Administrative Sciences, Accounting Department, sasojur@imamu.com.sa

<sup>b</sup> Imam Mohammad Ibn Saud Islamic University (IMSIU), College of Economics and Administrative Sciences, Accounting Department, nuha.1411@hotmail.com

### **Keywords**

Accounting education, accounting programs, market skills, graduate employability, general skills.

### **Jel Classification**

L32.

### **Paper Type**

Research Article

### **Received**

08.10.2022

### **Revised**

06.11.2022

### **Accepted**

18.11.2022

### **Abstract**

**Purpose:** This study investigates accounting graduates' skills gap and the required market skills from the perception of accounting faculty and professionals in accounting firms in Saudi Arabia. It also explores the challenges accounting programmes and faculty face in due rapid changes.

**Methodology:** The research uses a combination of methods and data sources.

**Findings:** The findings show a gap between accounting education and the labour market demands. Accounting programs focus on technical skills and less on other general skills. Accounting graduates lack interpersonal, dialogue, and language skills. These employability skills should be integrated into accounting education to narrow the gap. The results show that the accounting graduates' willingness to learn beyond classrooms and university is one of the critical challenges to equip them with the required skills.

**Originality/Value:** The study contributed to the understanding of the accounting education. Understanding the graduate skills gap and the challenges will be helpful to professional bodies, university administrators, business school deans, accounting faculty, careers guidance professionals in Saudi Arabia.

## **1.0 Introduction**

Profound changes in the business environment have been spurred by global economic factors, legal reforms, increasing demands of society for social responsibility, and emerging technologies. These changes send a loud signal to businesses that what the market needs today differs significantly from what it needed in the past or may need in the future. Unsurprisingly, the same factors affecting business are also driving changes in higher education worldwide. An increasingly dynamic environment requires accounting departments in business schools to respond to the market-changing needs by equipping accounting graduates with relevant knowledge and skills to serve the communities. Business schools must update current programs while innovating and developing new programs, curricula, and courses to address current needs. The accounting profession and some academics have acknowledged the need for accounting education to remain relevant (McNamara, 2006).

The argument about the goals of university-based accounting education has attracted international attention (Akbulaev et al., 2021; Jackson and Meek, 2021; Phan et al., 2020; Maali and Al-Attar, 2020; Efanimjor and Okolocha, 2020; Pierre and Rebele, 2014; Wilson et al., 2009). Stakeholders in this debate realise that the nature of accounting employment for graduates and practitioners is rapidly changing (Karsten et al., 2020; Daff, 2021; Howieson, 2003). Shifts in necessary workplace skills would require universities and colleges to alter their methods and teaching styles to design and deliver curricula with relevant learning goals and outcomes that can maximize and improve the potential for graduates' employment opportunities. Accounting programs must prompt students to develop knowledge and skills related to required market skills, which means academics are the key players for skills innovation and should adapt to changes and emerging technologies. They must now embrace new learning practices in every aspect of their teaching and find ways to keep students engaged by using advanced integrated learning techniques.

Employability means the information, skills, and competencies that workers need to improve their ability to acquire and hold a job, advance at work, deal with change,

find other employment if they want to resign or if they are fired, and enter the labour market more easily at various stages of their lives. People with substantial education and training, high talents, the ability to work in teams, the capacity to use information and communication technology (ICT), the ability to solve issues, and communication skills will have an easier time finding a job. They are able to adapt to changes in the workplace because of this mix of talents (Fajaryati et al. 2020).

For decades, accounting education programmes have been subject to significant criticism for their failure to produce the necessary competencies and skills in graduates for the ever-changing business environment (Maali and Al-Attar, 2020; Abelha et al., 2020; Sangster, 2010; Evans et al., 2010; Gallhofer et al., 2009; Dixon, 2004; Hassel et al., 2005; De Lange et al., 2006; Albrecht and Sack, 2000). Employers, professional bodies, and accounting practitioners have expressed concerns that the quality of accounting education is in decline. Despite this expectation gap, many studies covering accounting education and market-demanded skills have rarely covered required skills from the perceptions of key stakeholders, such as academics and practitioners (McNamara, 2006). Further, most accounting education research has focused on developed countries, while few assess accounting education issues in developing countries (Gallhofer et al., 2009). The bulk of research on the relevance of generic skills in the accounting education and profession has been conducted in Western and/or developed countries such as the United Kingdom, Australia, New Zealand, the United States, and Canada (Bui and Porter, 2010; De Lange et al., 2006; Jackling and Keneley, 2009; Kavanagh and Drennan, 2008; Milner and Hill, 2008). Non-Western nations, on the other hand, have conducted comparatively little research on the general abilities of accounting graduates (Al Mallak et al., 2020).

This study addresses the gap in the literature on the required market skills of accounting graduates by exploring the skills gap issue as perceived by academics and professionals in Saudi Arabia: a non-Western nation in the Arab world. The present study investigates the accounting education skills required by accounting graduates in Saudi Arabia. It focuses on the relevance of accounting programmes to ensure graduates have marketable knowledge and skills and highlight some of the

challenges facing accounting education. The main objectives are: first, to investigate the expectation gap and the relevance of accounting programs in Saudi Arabia; second, to identify the required market skills for accounting graduates as perceived by academics and practitioners in Saudi Arabia and outline the differences in perceptions of the two groups; third, to outline and discuss challenges facing universities seeking to remain relevant in a changing environment. The lack of research about anticipated changes in accounting practice and the implications of these changes in accounting education, especially in Saudi Arabia, make this area of study vital for accounting faculties who need to keep pace with rapid changes in the market. Furthermore, the study can be used as a basis to enable universities to improve and redesign the current accounting programmes and curriculum and align with the expectations of employers in the present job market.

## **2.0 Literature Review**

### **2.1 Accounting education and the accounting profession**

Accounting education and the quality of accounting programmes have been the subject of repeated debate and discussion among accounting researchers, academics, professional practitioners, and international accounting standard setters for a long time (e.g., Abelha et al., 2020; Berry and Routon, 2020; Evans et al., 2010; Carnegie and Napier, 2010; Jackling and De Lange, 2009; IFAC, 2007). Since the 1980s, an enduring focus of the work of academics and practitioners within the field of accounting education has been how education systems might produce accounting graduates who are job-ready with skills that they are able to use and apply to their jobs. Accounting education is expected to provide suitable graduates for a business environment, which entails developing professional skills demanded by the labour market and met by the person practicing accounting work (Nofal, 1995).

Accounting programmes are monitored by professional accounting bodies through professional accreditation processes to provide more assurance of producing market-oriented graduates. As such, both local and international accreditations scrutinise the content of accounting programs in business schools to assure employers that accounting programmes meet externally validated quality standards

and provide graduates with relevant market skills (AlMotairy & Stainbank, 2014). However, accounting programmes cannot rely on accreditation alone to enhance and promote their curricula. The employability of accounting graduates may not necessarily increase simply by aligning accounting programmes with accreditation guidelines (Lightbody, 2010; Jackling and Keneley, 2009). Therefore, increasing the effectiveness of accounting programmes in Saudi universities is necessary to provide competent accounting graduates equipped with the skills regarded by the market as desirable for professional accounting practice to contribute positively to business and society, as well as the accounting profession itself in a changing business environment (Herbert et al., 2020; Jackson and Meek, 2021; Karsten et al., 2020; Hancock et al., 2009; Johns and Abraham, 2008; AECC, 1990; AAA, 1986).

The International Federation of Accountants (IFAC) instituted the International Accounting Education Standards Board (IAESB) in 1977 to boost the accounting profession worldwide through the improvement and development of accounting education (IFAC, 2008). In 2003, the IAESB released its International Education Standards (IESs) for professional accountants (the “Framework”), revised in 2015, in an attempt to ensure the consistency and quality of accounting education worldwide. One of the main goals of the IESs is to help accounting programmes and academics at the international level ensure the development of accounting graduates and achieve the required competencies required by society (Maatoug, 2014). By large, IESs establish the key elements that education and development programmes are expected to include and grant accredited programmes opportunities for international application, acceptance, and recognition of these elements, including practices, methods, and subjects (IFAC, 2010). In this connection, IESs ensure that IFAC membership candidates are equipped with the proper knowledge (IES2), skills (IES3), values, ethics, and attitude (IES4) to function as competent accountants in an increasingly changing and demanding market.

The right skills that accounting graduates should obtain are specified in IES3 (2008), revised in 2015, and are classified into five main headings: personal skills; functional and technical skills; intellectual skills; communication and interpersonal skills;

management and organisational skills (p.59). IES2 only identifies headlines and major topics, so students need to constantly develop their skills and knowledge as conditions around their business environments change. In IES2, IFAC stresses that changing market demands change the accounting curriculum and will continue to do so in the future; hence members of IFAC should modify the contents of their accounting programmes to respond to the changing needs and market demands (IES2, 2008). Starting with this international framework, countries and institutions must guarantee that their standards are consistent with their historical, social, economic, and political values. It is clear that accounting education must be flexible to adapt to the environment (El-Sayed Ebaïd, 2020; Helliær, 2013); and should therefore be designed to ensure that accountants have a deep understanding of the economic, social, and political contexts in which they work.

## **2.2 Accounting education and the accounting profession in Saudi Arabia**

Accounting education in Saudi Arabia has expanded rapidly and dramatically in line with the general development of Saudi higher education to accommodate the growing college-age population (Ibeaheem et al., 2018). There are now 29 public universities and 12 private universities that offer accounting degrees. Accounting programmes have been the primary driver of expanding accounting education and accounting skills and practices (Alsamkari, 2021; Al Mallak et al., 2020; Shareia, 2010; Ahmad & Gao, 2004; Buzied, 1998 Abdeen & Yavas, 1985). Accounting programme accreditation standards and processes are also designed to validate quality accounting and business education, promote impactful research, and provide leadership, encouragement, and support for educational development in business schools and accounting departments (Al-Hazmi, 2021). The standards provide a platform for business schools and academic units to advance business and accounting education.

The accounting profession in Saudi Arabia has also undergone remarkable changes in a short period. A major step was taken by the Saudi government in 1965, with the promulgation of the Company Regulation Act. As per this law, companies are obliged to prepare and audit their financial statements. In 1980–1981, as part of the efforts

to further improve and regulate the accounting profession in Saudi Arabia, a comprehensive study of the accounting and auditing professions in other countries concerning different regulations, laws, and pronouncements was proposed and conducted. As a result of this study, in 1982, the Ministry of Commerce prepared and approved a framework that identifies the main concepts and objectives of financial accounting and related standards. This step led to the eventual foundation of the Saudi Organization for Chartered and Professional Accountants (SOCPA) in 1992, which endorses, develops, and improves the accounting and auditing profession in Saudi Arabia (SOCPA, 2014). As a member of IFAC, SOCPA plays a vital role by providing guidance and expertise to help achieve economic stability and confidence in the market. Until recently, the standards adopted by SOCPA were influenced by the US accounting systems but have recently shifted toward the International Financial Reporting Standards (IFRS).

Another institution contributing to the complexity of skills development in accounting programmes in Saudi Arabia is the National Commission for Academic Assessment and Accreditation (NCAAA). Globally, various governments have developed standardized quality assurance strategies and systems. This role is played by the NCAAA which is specifically directed towards encouraging, supporting, measuring, monitoring, and assessing higher education and research quality. The NCAAA has developed a national qualifications framework to ensure standardised student learning outcomes and compatibility with global higher education standards. To achieve these outcomes for higher education degrees and certificates, the NCAAA outlines certain best practices and guidelines for modeling systems of standardised quality assurance in higher education institutions. To establish a new academic programme or modify an existing one, a programme specification must be prepared along with detailed course specifications and learning outcomes to assure excellence in programme quality and focus on diverse skills that graduates should acquire, namely thinking skills, problem-solving skills, interpersonal skills, leadership, ability to work in groups, information technology skills, communication skills, and technology use skills.



### **2.3 Accounting graduate employability skills**

Higher education institutions use different strategies to enhance the development of competencies for graduate employability, which depend on implementing a strong sense of innovation and collaboration practices (Abelha et al., 2020). The term employability has no specific definition but generally refers to a graduate's ability to be employed and is related to the skills that allow the employer and employee to benefit the most from the employment (Franz, 2008). Little (2007) defines employability skills as a set of personal attributes, understandings, and skills that make graduates more likely to be employed and succeed in their selected professions, which supports the economy, community, workforce, the graduates themselves, and their dependents. Further, employability skills lead to progress within a company to achieve personal potential and make contributions (Tam, 2011). Adopting the above definitions, employability for graduates of accounting programs is determined by the personal attributes, understanding, knowledge, and skills that accounting graduates possess to make them likely to gain employment in accounting positions, as well as progress and contribute to the profession and society. The literature shows that accounting programmes are expected to equip graduates with the knowledge and technical accounting expertise (functional competencies), general business skills (broad business competencies), and personal attributes such as strategic and critical thinking, self-learning, management, communication, leadership, teamwork and interpersonal skills (personal competencies) (Mills, 2001; Novin and Pearson, 1989; Berry and Routon, 2020; Blanthorne et al., 2005; Arab, 2014; Klibi & Oussii, 2013; Ibrahim et al., 2018). Different terms have been used in the literature to refer to general and personal employability skills including generic skills, soft skills, non-technical skills, personal skills, and personal attributes. Such skills are considered relevant to both established and entry-level employees (Al Mallak et al., 2020).

Borzi and Mills (2001) indicated that general skills are considered a major criterion in employing new accounting graduates, such as written and oral communication skills and teamwork skills (Novin and Pearson, 1989). Berry and Routon (2020)



called for more inclusion of both technical and soft skills within accounting education. Blanthorne et al. (2005) examined the skills needed in accounting and found that they vary according to the senior employee, manager, or partner level. Senior employees and managers rank interpersonal, leadership, and communication skills as the most important attributes. Arab (2014) analysed Saudi universities' accounting departments to identify the desired skills, including information technology, communication skills, analytical skills, critical thinking skills, problem-solving skills, oral and written skills, and teamwork skills. Similarly, Ibeaheem et al. (2018) used 220 questionnaires distributed to employers, faculty members, and graduates to review the role played by Saudi universities in preparing graduates for the job market and argued that Saudi accountants need necessary skills such as cooperation, awareness of the importance of work, and communication. Klibi & Oussii (2013) carried out research that included data gathering from 81 accounting students and 48 practitioners from five Tunisian business schools. Also, accounting graduate skills are made up of a variety of knowledge and skills acquired through programme curricula and practice, with the five most essential skills for an entry-level accounting employee being the ability to inspire confidence, ethical awareness, dialogue capacity, desire for personal success, and the ability to collaborate with other teams.

Studies have been conducted or sponsored by professional accounting bodies and standard-setting and accrediting bodies to identify the desired competencies of professional accountants (Palmer et al., 2004; IFAC,2002; AICPA, 1999; Birkett, 1993;4 ICAEW, 1996). These studies have concluded that accounting graduates require broad business, functional, and personal attributes. Palmer et al. (2004) compiled a list of nine studies conducted by accounting bodies in the US from 1989 - 2003 on accounting competencies including IFAC, AICPA, the Institute of Internal Auditors (IIA), the Institute of Management Accountants (IMA), the big accounting firms, and the Accounting Education Change Commission (AECC). Identified competencies across the nine studies include general business knowledge; accounting knowledge; communication skills; interpersonal skills; computer skills;

problem-solving skills; information technology; capabilities; attitudes; leadership; professionalism. Even though these studies were carried out more than three decades ago, the latest literature indicates that most of the competencies needed in the past are still required today (Dolce et al., 2020; Hossain et al., 2020; Hart, 2013; Dauda and Olawale, 2020).

Other studies have investigated competencies valued by employers (Dolce et al., 2020; Hossain et al., 2020; Kim et al., 1993; Hassall et al., 2005; Simons et al., 1995; Ahadiat and Smith, 1994). Dolce et al. (2020) explored the viewpoints of both graduates and employers focusing on soft skills in accounting education. Employers, compared to graduates, overestimated the importance of soft skills and underestimated other technical skills. Hossain et al. (2019) examined the relationship between employability and skills of business major graduates in two public universities. The results showed that both technical and soft skills were positively related to employability. Hassall et al. (2005) surveyed 214 employers in Spain and the UK to explore the competency criteria used by them in selecting accounting graduates for recruitment. They found general skills prevailed over technical skills and concluded that teamwork, time management, organization, and computing and communication skills were the most highly valued generic skills for accounting graduates.

Similarly, Simons et al. (1995) surveyed 167 employers in the US. They found that motivation and drive were the most desired attributes, followed by oral communication, interpersonal sensitivity, teamwork, enthusiasm, and numerical skills. They concluded that the least important skills were degree-specific skills. In contrast, Ahadiat and Smith (1994), in their sample of 357 US companies and accounting firms, found that although social characteristics and personality were ranked the most important competencies, academic achievement and advancement potential also ranked highly in large accounting firms. Hart (2013) found that 93% of employers believe that the capacity to think critically, solve complex problems, and communicate clearly are more important than a graduate's undergraduate major. Nelson (1995) stated that practitioners look for active knowledge, communication,

and interpersonal and intellectual skills among graduates rather than technical skills, which could be attained from work and not universities. Myers (2005) argued that most universities focus on technical skills in teaching the technical aspects of accounting rather than building business, analysis, and communication skills in their graduates.

One area for development is assessing the desired competencies from the viewpoint of accounting graduates. A few researchers have studied this area (Dolce et al., 2020; Carr et al., 2006; De Lange et al., 2006). Dolce et al. (2020) explored the viewpoints of 251 Italian accounting graduates about the desired competencies. They concluded that graduates attributed importance to interpersonal relationships, task orientation, valorisation, motivation, and self-awareness. De Lange et al. (2006) surveyed 310 accounting degree graduates from two Australian universities to seek their views on the skills required for accountants. They found that communication, application, problem-solving, analysis, adaptability and practicality, decision-making, and time management are the most critical general business competencies for accounting graduates. They concluded that the curriculum emphasises the development of technical skills in accounting while placing less emphasis on generic skills, especially oral communication and interpersonal and computing skills. They further revealed gaps between what was desired and what was taught in many technical skills, one of which was computing skills. Another Australian study by Kavanagh & Drennan (2008) tested the perceptions of both employers and students concerning the demanded accounting skill sets. Employers classed basic accounting skills, problem-solving, analytical skills, real-life experience, and business awareness as the top skillsets for accounting graduates. Students rated problem-solving, decision making, and continuous learning as the top three skills (p.291).

De Lange et al. (2006) drew attention to computing skills, another aspect of employability valued in the workplace, and called for further investigation regarding the desired types of computing skills as accounting graduates in Australia still perceived that they were not well-prepared for their jobs despite the use of accounting packages in various accounting courses. Stoner (2009) describes IT skills

as a subset of employability skills quickly growing in importance in the higher education agenda. Mohammed (2013) emphasized the importance of using computers in the educational process and stressed the positive dimensions of such accounting packages. Dauda and Olawale (2020) investigated the integration of educational technology in accounting education. They concluded that educational technology helps to influence the culture of computer literacy in future accountants. Marriott (2004) believes that computer simulation provides students with substantial accounting experience identical to actual business practice. Hurt (2007) argues that software helps students learn and understand general ledger packages and other accounting tools. Effectively integrating accounting software into coursework covers the requirement of both practitioners and accounting organizations while also enhancing active learning. However, several studies have pinpointed the adverse effects of accounting software packages as they decrease the understanding level of students for ledgers and other concepts of the accounting cycle (Gujarathi and McQuade, 1998; Peters, 1999).

Burnett (2003) conducted a study seeking employers' views about the technological skills that are considered necessary for new hiring. The study reported the top four general IT skills for accounting graduates: Windows, word processing, spreadsheets, and the World Wide Web. Burnett also notes that accounting information systems (AIS) such as accounting packages, IT controls, and Electronic Data Processing (EDP) are required skills for accounting graduates. However, Burnett asserted that one generic computer course might not be enough to prepare accounting graduates for the desired technological skills. Another study on knowledge and skills development of accounting graduates by Awayiga et al. (2010) surveyed graduates and employers and reached remarkably similar results to Burnett (2003) by identifying technology skills as valuable skills for entry-level accountants.

**Table 1.** Summary of prior literature references to accounting education

Research Focus of Category	Subcategory	Literature Reference
Expectation gap and competency lacking in accounting graduates	Expectation Gap	Kavanagh and Drennan, 2008; Aziz, 2018; Albrecht & Sack, 2000; Weaver and Kulesza, 2013; David et al., 2011; Amer et al., 2010; Sin et al., 2012; Berry and Routon, 2020; El-Sayed Ebaid, 2021
	Failure of accounting programmes to respond to changes	Herbert et al., 2021; El-Sayed Ebaid, 2021; Karsten, 2020; Behn, et al., 2012; Black 2012; Siegel et al., 2010
	General lack of competence	Alharahsheh, 2020; Abelha et al., 2020; Hossain and Alam, 2019; Bui and Porter, 2010; Sangster, 2010; Mgaya and Kitindi, 2009; Lin et al., 2005; Dixon, 2004; Holmes, 2001; Albrecht and Sack, 2000
	Lack of general skills	Jackling & De Lange, 2009; Tempone et al., 2012; Wells et al., 2009
	Lack of teamwork and interpersonal skills	Albin and Crockett, 1991; Kavanagh and Drennan, 2008; Jackling and De Lange, 2009; Wells et al., 2009; Tempone et al., 2012; Jones and Abraham, 2007; Lin et al. 2005; Chang and Hwang, 2003;
	Lack of communication skills	Jackling & de Lange, 2009; Tempone et al., 2012; Arab, 2014; Ibrahim et al., 2018
	Lack of problem-solving skills	Tempone et al., 2012; Arab, 2014; Dauda and Olawale, 2020.
Identified employability skills for accounting graduates	1. Critical thinking skills	Crawford, et.al. 2011; Lin 2008; Parham, et.al. 2012; Zahid, et.al., 2013
	2. Ability to use advanced information technology skills	Awayiga, et.al. 2010; Jackling and DeLange, 2009; Crawford, et.al. 2011; Lin 2008; Senik and Broad, 2011; Zahid, et.al., 2013
	3. Problem-solving skills	Awayiga, et.al. 2010; Jackling and DeLange, 2009; Crawford, et.al. 2011; Lin 2008; Parham,et.al. 2012
	4. Communication and Connection skills	Awayiga, et.al. 2010; Jackling and DeLange, 2009; Crawford, et.al. 2011; Lin 2008; Parham, et.al. 2012; Senik and Broad, 2011; Zahid, et.al., 2013; Borzi and Mills, 2001
	5. The ability to work in a team skills	Jackling and DeLange, 2009; Crawford, et.al. 2011; Lin 2008; Parham, et.al. 2012; Zahid, et.al.,2013
	6. Leadership and innovation skills	Awayiga, et.al. 2010; Lin 2008; Parham, et.al. 2012; Senik and Broad, 2011; Zahid, et.al., 2013
	7. Interpersonal skills	Berry and Routon, 2020; Little; 2007
	8. Moral and ethical awareness skills	Awayiga et al. 2010; Jackling and DeLange, 2009; Zahid et al., 2013
	9. Dialogue and language skills	Ibrahim et al., 2018; Klibi & Oussii, 2013; Behn et al. 2012a
	10. Analytical skills	Kavanagh & Drennan, 2008; Mohammed, 2013
	11. Ability to use new accounting software skills	Klibi & Oussii, 2013; Stoner, 2009; Dauda and Olawale, 2020; Mohammed, 2013; Hurt, 2007; Burnett, 2003; Awayiga et al., 2010
Accounting education challenges	rapid and enormous developments in information technology and dramatic changes in the business environment	Alsamkari, 2021; Ahmad and Gao, 2004; Evans et al., 2010

## 2.4 Expectation gap

Despite a high expectation on tertiary accounting education in producing quality accounting graduates to fulfilling the demands of the labour market, a “graduate skills gap” still exists between education and practice (Kavanagh and Drennan, 2008; Aziz, 2018) and is considered to be very wide (Albrecht & Sack, 2000). Prior research indicates that accounting graduates are equipped with basic accounting and

analytical skills. However, they lack sufficient generic skills in areas such as teamwork and interpersonal and communication skills, which are essential for their employability and career success (Albin and Crockett, 1991; Kavanagh and Drennan, 2008; Jackling and De Lange, 2009; Wells et al., 2009; Tempone et al., 2012). Jones and Abraham (2008), Lin et al. (2005), Chang and Hwang (2003), Ahmed (2003) found low levels of integration of information technology and system skills in accounting programs in countries like the US, UK, China, and Australia.

Several studies have criticised contemporary accounting education, contending that accounting programmes have been unable to respond to dynamic business changes (Herbert et al., 2021; El-Sayed Ebaid, 2021; Karsten et al., 2020; Behn et al., 2012; Black 2012). Therefore, they are seen as producing incompetent graduates (Alharahsheh and Pius, 2020a; Abelha et al., 2020; Hossain et al., 2020; Bui and Porter, 2010; Sangster, 2010; Mgaya and Kitindi, 2009; Lin et al., 2005; Dixon, 2004; Holmes, 2001; Albrecht and Sack, 2000). Accounting curricula have been criticised for not considering distinctive contexts and fast-changing environments and focusing mainly on technical skills while neglecting non-technical skills. Yet, leaders in charge of accounting education have ignored these constant criticisms of accounting programs. Siegel et al. (2010) argued that “the primary focus of the accounting curriculum, at the undergraduate level, is not much different from what it was 10 to 20 or even 40 years ago” (p. 42).

Abelha et al. (2020) developed a systematic review on competence development and graduate employability in different disciplines including accounting, covering 69 research papers over the period 2009-2019. The findings showed a mismatch between employers' needs and graduates' competencies. Weaver and Kulesza (2013) carefully concluded that accounting programmes fall short in preparing accounting graduates for careers in the industry. Current accounting students should have a very different education from earlier generations, whose work environments were characterised by simple technological and computerised systems and manual processes and operations (Kotb et al., 2013). David et al. (2011) analysed the content of job descriptions, CVs for students, and business books and curricula. They found a

gap between what is taught in business schools and the expected skills that employment companies need. Many studies suggest that the gap between education and practice is widening, requiring curriculum change (Trigwell & Watts, 2000; Albrecht and Sack, 2000). To fill this gap, Amer et al. (2010) have proposed co-curricular student development activities, such as career panels, for providing an opportunity for students to interact with the members of the accounting advisory council. Sin et al. (2012) suggested adjustments be made to the curriculum to align existing accounting education with professional requirements. Bartunek (2007) called for a cooperative relationship between academics and practitioners and intense dialogues leading to the collaborative integration of common interests in specific topics. Berry and Routon (2020) urged accounting academics to be vigilant in developing curriculum content and determine whether they reflect changing market demands.

In the specific context of Saudi Arabia, the relevance of accounting programmes has been inconclusive. Shahid et al. (2018) studied new accounting programmes granting bachelor's degrees. Their findings have shown a favorable perception of the stakeholders for opening undergraduate accounting programmes that focus on knowledge, cognitive, interpersonal, and technology-based skills. Arab (2014) analysed the accounting departments of Saudi universities and concluded that accounting graduates are qualified to perform and practice accounting work in the labour market. In contrast, Al-Qahtani (1998) explored higher education outcomes, mainly accounting programmes, and concluded they are unsuitable for labour market requirements. The findings of this study are supported by Alain (2009), who asserts that there is a gap between the skills acquired through accounting degree programmes and the requirements of the Saudi labour market.

Al Mallak et al. (2020) conducted a study in Saudi Arabia to examine accounting students' perceptions of the importance of developing generic skills and the desired competencies they look for. The results showed that students valued generic skills such as ethical skills, but accounting education could not meet their expectations by providing them with these skills. El-Sayed Ebaid (2021) examined accounting



students' perceptions in Saudi Arabia on the extent of incorporating IFRS into accounting curricula in undergraduate accounting programmes in Saudi universities after the mandatory implementation of IFRS in 2017. The study concluded that accounting programmes failed to incorporate IFRS into the accounting curricula leading to the inefficiency of graduates. Alsamkari (2021) highlighted the challenges of implementing IFRS in Saudi Arabia and asserts such implementation must be incorporated in accounting education to minimize the gap. This gap is widened as accounting education in Saudi Arabia still suffers from other common problems in higher education that influence its ability to produce competent graduates. Many of these problems result from a lack of qualified academics and resources. These common problems are beyond the present study's scope.

Many of the graduate technical and non-technical skills identified in earlier studies (e.g., Brozi and Mills, 2001; Blanthorne et al. 2005; McNamara 2006; Gallhofer et al. 2009) are still considered important in recent studies (e.g., Ibeaheem et al. 2018; Berry and Routon, 2020; Dolce et al., 2020) despite the changing business environment. These studies, among others, highlight the fact that certain skills from the past remain relevant and essential for the employability of accounting graduates. The current paper addresses the expectation gap by investigating a list of eleven skills identified from prior literature (see Table 1) taking into consideration past and recent views concerning required skills.

The literature above indicates the shortcomings of accounting education in producing market-ready accounting graduates. Despite the existence of the expectation gap, academic research has not focused on examining and comparing graduates' skill gap in Saudi universities from the perception of faculty and professionals using a triangulation method. This gap has motivated researchers to explore the competency of accounting graduates in Saudi Arabia to ensure that accounting programs provide the appropriate knowledge and skills required by the market. Vision 2030 outlines 24 specific objectives for Saudi Arabia to achieve in economic, political, and societal development. Further, it articulates 18 commitments to achieve these objectives with specific initiatives in renewable energy,

manufacturing, education, e-governance, entertainment, and culture. There is a need to conduct an in-depth and more up-to-date study to gain a comprehensive understanding of the effect of these changes in accounting education and skills. This research provides a good insight into the quality of accounting education in Saudi Arabia. The study can be used as a basis to improve the current accounting curriculum to align with the expectations of the employers in the present job market. This study aims to add to the existing literature by presenting the perceptions of faculty in a university and professionals in accounting firms concerning required market skills for Saudi accounting graduates. The study uses grounded theory to investigate the effectiveness of current accounting programmes from the perceptions of academics and professionals. This theory is primarily used “to develop a theory of this process or action” that is being investigated (Creswell & Poth, 2018, p. 83). The main purpose is identifying the required market skills to better prepare accounting graduates for the market and assessing accounting education challenges to enhance accounting education. Corbin and Strauss (2015) asserted that according to grounded theory research questions should be broad to enable the data emerges and guides the uninterrupted collection related to the phenomena and the focus on analysis of data. Following the grounded theory structure and extant literature, the below broad research questions lead this study:

Q1: What are the perceptions of accounting faculty and professionals concerning the expectation gap?

Q2: What are the market skills required for accounting graduates from the perceptions of faculty and professionals?

Q3: What are the challenges facing accounting education in equipping accounting graduates with the required market skills?

### **3.0 Research methodology**

The study adopts an interpretive and grounded theory to investigate a process phenomenon: required market skills. The study's objective is to investigate, understand, and explain the phenomena from the data collected rather than test hypotheses as in most research. Grounded theory utilises emerging data to find out

phenomena instead of restricting research using a directive framework (Strauss & Corbin, 1990). In line with a grounded theory, this study adopted an "emergent study design" (Dahlgren et al., 2019) where the phenomena and data are approached from unassuming and unfolded position (Corbin & Strauss, 2015). As per Strauss and Corbin (1998), grounded theory dictates the research area to be appropriately defined and the site to be clearly identified. The area for this study is the required market skills for undergraduate accounting programs and Saudi Arabia accounting education serve as the site.

### **3.1 Design of the study**

Using grounded theory, it is essential to collect as much information as possible regarding focus of the study (Corbin & Strauss, 2015). Therefore, a combination of different methods and approaches has been used, comprising two data gathering stages using both primary and secondary data (see Table 2). The primary data includes a survey questionnaire and interviews. Survey and interview data are triangulated to develop an in-depth understanding of the skills required of accounting graduates and "to maintain some consistency over the concepts" that are discussed (Corbin & Strauss, 2015, p. 39). First, data is collected through a self-designed survey questionnaire based on a comprehensive review of the literature. The survey was prepared both in English and Arabic in a clear, simple, and easy-to-understand language using Google's online form sent via email to participants. A draft of the questionnaire was prepared then sent to experts for review and recommendations. In order to collect data from faculty in a university and professionals in accounting firms, the researchers contacted them with email requests to participate in the questionnaire. The questionnaires were distributed with a covering introduction to clarify the research objectives and the researchers' guarantee of information security to encourage respondents to answer the listed questions and increase the response rate effectively. The questionnaire consisted of 24 questions in four sections. Sections one and two have 4 questions each related to the demographic data and accounting education expectation gap in Saudi Arabia. Section three has 11 questions related to the required market skills of accounting

graduates, and the last section contains 5 questions related to the challenges facing accounting education.

Second, additional data is collected through semi-structured interviews to allow participants to expound on topics related to their education, history, experience, and personal interests. Corbin and Strauss (2015) asserted that the “whole point of grounded theory is to discover the issues and problems from the perspective of the participants” (p. 328). The preliminary review of studies in terms of educational attainment and accounting professionals' expectations of accounting graduates helped formulate the semi-structured interviews and prepare the skills and challenges lists which were provided to the interviewees to obtain feedback. The interviews were performed and completed in November and December 2021 and lasted an average of 44 minutes in length, with the longest interview being 45 minutes and the shortest taking 22 minutes. The interviews were either face-to-face, limited by the availability of the participants, or through telephone and Zoom. The interviews comprised a number of specific questions as well as prompts for follow-up questions if the interviewees had not already covered these in response to earlier questions. The questionnaire findings were presented and shared with the interviewees and their feedback was solicited during the interviews. Interviews were recorded and transcribed, and the transcripts were evaluated and analysed to identify differences, themes, and patterns.

Written consent was taken from each interviewee at the start of the interview, including permission for anonymously publishing statements made during the interview. Academics, professionals, and individual accounting firms or were not identified in the transcriptions. Two layers of codes were established to refer to them (AM and AF to represent both male and female academics and PM and PF to represent male and female professionals). This coding had been provided to the participants in order to reduce the confidentiality risks affecting respondents, which is a major disadvantage of interviews (Gall et al., 2003).

**Table 2.** Summary of data collection

Secondary Data	Primary Data	
Documents reviewed	Questionnaire (Appendix A)	Interviews (Appendix B)
<ul style="list-style-type: none"> <li>• Undergraduate Student Handbook</li> <li>• Published self-assessment reports and compulsory yearly program reports issued by various accounting departments in other universities</li> <li>• Standard learning program outcomes published by the NCAAA</li> <li>• Published materials by SOCPA</li> <li>• Job application forms and recruitment criteria</li> <li>• Course outline for accounting</li> <li>• Minutes of meetings of the department and the undergraduate education committee</li> </ul>	Selected 25 faculty with practical experience in accounting	Interviewed 10 academics (5 males and 5 females)
	Selected 50 professionals in accounting firms randomly and collected 17 surveys	Interviewed 6 professionals in 6 different accounting firms (3 males and 3 females)
	<b>42 questionnaires</b>	<b>15 interviews</b>

### 3.2 Research sample

In grounded theory research, the selection of participants should be “based on their contribution to the development of the theory” (Creswell & Poth, 2018, p. 318). Since this study investigates the required market skills and challenges in accounting education programmes, participants that could provide the proper theoretical data include those who design and deliver curricula and employ and qualify graduates. Therefore, the sample consisted of faculty with practical experience in accounting and professionals from randomly selected accounting firms. The faculty were selected from the accounting department of one of the largest (more than 75000 full-time students) and oldest (established in 1953) public universities in Saudi Arabia. The two researchers are faculty in the accounting department of the sample university. The accounting firms were selected randomly with different sizes from registered and licensed accounting firms by SOCPA. Professional accounting firms provide financial, auditing, and consulting services to all types of employers and are familiar more with the different required market skills in various industries; hence, they could be seen as representative of employers.

The online questionnaire was sent via email to 25 faculty out of 49 in the accounting department having professional experience and to 50 accounting firms, of which 17 surveys were returned. This sample is seen as a homogenous and as anticipated, fewer participants were enough to reach saturation as described by Hennink, et al. (2017).

As presented in Table 2, a total of 42 usable answers were received, which gives a response rate of 42.4%. This response rate is acceptable when using the survey method (Zikmund, 2000). To support the results from the questionnaire, 16 interviews were conducted with 10 faculty and 6 professionals from accounting firms from the same questionnaire sample, divided equally between males and females in each group. Even though the sample for the interview and questionnaire may appear to be small because it did not include firms as well as faculty and universities in the Central Region of Saudi Arabia, nor are all locations in the region, the fact that it did involve one of the largest universities with some of the most prestigious accountancy firms from one of the most vital socioeconomic regions implies that the population could be considered substantially representative.

#### **4.0 Empirical results and discussion**

##### **4.1 Descriptive analysis**

Table 3 presents the demographic characteristics of the study sample presented according to gender, education, occupation, and experience for each sample group. The percentage of males to females was equal (50%). The results show that the majority (45.2%) of participants held a master's degree, while (31%) of participants had a bachelor's degree and (23.8%) of them held a Ph.D. The largest participant ratio was from accounting faculty (59.5%), and the remaining (40.5%) work in accounting firms. Finally, the results showed that approximately (73.8%) of the study sample possessed more than five years of experience, with (33.3%) above ten years and (40.5%) at 6-10 years of experience.

**Table 3.** Demographic information

Details	Characteristics				
	Categories	Faculty	Professionals	Frequency	Percentage
Gender	Male	8	13	21	50%
	Female	17	4	21	50%
	<b>Total</b>	<b>25</b>	<b>17</b>	<b>42</b>	<b>100%</b>
Education	Bachelor	4	9	13	31%
	Master	11	8	19	45.2%
	PhD	10	0	10	23.8%
	<b>Total</b>	<b>25</b>	<b>17</b>	<b>42</b>	<b>100%</b>
Occupation	Faculty	25	0	25	59.5%
	Professionals	0	17	17	40.5%
	<b>Total</b>	<b>25</b>	<b>17</b>	<b>42</b>	<b>100%</b>
Experience	Less than 5 years	6	5	11	26.2%
	From 6 to 10 years	10	7	17	40.5%
	From 11 to 15 years	5	2	7	16.7%
	More than 16 years	4	3	7	16.7%
	<b>Total</b>	<b>25</b>	<b>17</b>	<b>42</b>	<b>100%</b>

#### 4.2 The Expectation gap in Saudi Arabia

Table 4 shows that faculty and professionals recognised the existence of a gap between accounting education in Saudi universities and market needs (means 3.72 and 3.49 respectively); hence, it can be concluded that what is taught in accounting programmes is not aligned with what the Saudi labour market demands. In the interviews, participants were also asked if there is still a gap between accounting education and market expectations. Fifteen (15) of the 16 participants confirmed that the gap exists and “can be identified easily in certain skills” PF5 and “will remain as it is the part of the skills which must be entertained by employers to complete the competency process of accounting graduates.” AF5. Further, AM5 noted that “the gap will always be debated as you will hear many arguing both sides.” However, the survey result indicates that professionals believe, contrary to academics, that the gap is widening and curricula must change (means 4.20 and 3.36 respectively). While most faculty interviewees confirmed that the gap is narrowed because universities



“have developed a lot at the present time” AF3 in terms of programmes quality and learning outcomes and “always work on improving their curriculum and try to meet market expectation” AM1, the majority of professionals believe the gap is widened. However, a couple of professionals supported the views of faculty and indicated that accounting programmes “are improving as graduates are getting better” PM1, academics “are trying to interact more” PF4 with employers and professionals, and accounting graduates “sound better and show better initiative and seem to know a bit more about what we expect” PM5.

**Table 4.** Perceptions of the respondents concerning the expectation gap

#	Statements	Occupation	N	Mean	S.D.	Std. Error Mean
1	There is a gap between accounting programmes in Saudi universities between what is taught and what is demanded by the Saudi labour market.	Faculty	25	3.72	0.843	<b>0.169</b>
		Professionals	17	3.49	0.928	<b>0.225</b>
2	The gap between accounting education and market demands is widening and the curriculum must change.	Faculty	25	3.36	1.186	<b>0.237</b>
		Professionals	17	4.20	0.586	<b>0.142</b>
3	Accounting education programmes in Saudi universities focus on teaching technical aspects of accounting more than developing intellectual and personal skills.	Faculty	25	3.12	1.130	<b>0.226</b>
		Professionals	17	4.06	0.726	<b>0.176</b>
4	Dialogues and meetings between academics and practitioners are necessary to discuss changes in labour market skills and ultimately reflect that in curricula.	Faculty	25	4.40	0.764	<b>0.153</b>
		Professionals	17	4.46	0.599	<b>0.145</b>

Such inconclusive results may suggest that accounting graduates might be suitable for the market to a certain extent but are not entirely perceived as equipped with the required market skills. Such results conform with many studies in the literature (Herbert et al., 2020; El-Sayed Ebaid, 2021; Karsten, 2020; Alharahsheh and Pius, 2020a; Abelha et al., 2020; Hossain and Alam, 2019; Sangster, 2010; Mgaya & Kitindi, 2009; De Lange et al., 2006; Hassel et al., 2005; Lin et al., 2005; Dixon, 2004; Albrecht & Sack, 2000; Trigwell & Watts, 2000). Fourteen (14) of the 16 participants confirmed that accounting programmes focus on technical aspects; hence accounting graduates were well prepared in technical skills but lacked non-technical skills. PF6 noted that “graduates are largely meeting our expectations but need more improvement on interpersonal and communication skills, and practical problem solving beyond textbooks.” Another professional asserted that “graduates still need more analytical skills, ability to use new accounting software skills, ability to use

advance information technology skills, and problem-solving skills” AF4. Faculty, however, argued that “technical aspects of accounting are very important and that is why accounting departments exist. Skills can be acquired at any time, but accounting knowledge can only be acquired through universities” AM1. Another faculty argued that academics are paying attention to general skills but must “focus on technical skills otherwise you will not get a real accountant but bookkeepers” AF5. Still, it can be argued that accounting departments must exert due care to evaluate their programmes' skills and outcomes to accommodate non-technical expected market skills. The majority of professionals (mean of 4.06) maintained that graduates were not fully meeting expectations and their non-technical skills need to be improved and “graduates cannot progress without non-technical skills” PF5, especially “interpersonal, teamwork and decision-making” PM2.

The responsibility of the expectation gap is assumed to be the responsibility of both universities and employers. A faculty argued that “some companies expect that accounting graduates should be able to work right after graduation and they should not need training...training is very important to any profession and training cannot be done in universities alone” AM1. Another faculty asserted that “businesses must train graduates to equip them with skills beyond the universities' scope” AM4. In line with this, a professional accepted sharing this responsibility and confirmed that “when graduates start work we don't expect them to have all the skills because it is part of our responsibility to train and provide them with the skills they need” PM3. Companies can identify and examine graduates' skills before hiring them to know if they need to be trained as noted by PM4 “we try them during co-ops and hire the best of them and then train them.”

The results in Table 4 also show the highest mean across all responses among faculty and professionals (4.40 and 4.60 respectively) for the need for dialogues and meetings among different stakeholders to improve the relevance of accounting programs and reduce the expectation gap. Surveyed respondents support the necessity of dialogues and meetings between academics and practitioners to discuss changes in the skills and labour market and reflect changes in curricula. Universities

should exert more effort to cultivate dialogues and meetings between academics and employers before developing accounting education curricula to serve the work environment better. All 16 participants confirmed that such a discussion process is necessary “to share thoughts and assign roles” AF5. PF6 noted that “to bridge the gap, we need to know where are we and where we want to be both as academics and auditors.” AM5 argued that constant debates among professionals and academics would “...enable both to understand their roles in equipping graduates with the proper skills”. This finding is similar to the results of other researchers who have claimed that debates and conferences play an important role in integrating common skills in particular disciplines, such as accounting (Smith and Benavot, 2019; Andiola et al., 2020; Shaikh and Talha, 2003).

#### **4.3 Perceptions of market required skills**

Table 5 presents the differences in respondents' perceptions regarding the market skills required for accounting graduates in Saudi Arabia, depending on whether they were faculty or professionals. Table 6 shows that the two highest-ranked skills among professionals are dialogue and language skills and moral and ethical awareness skills (means of 4.89 and 4.79 respectively); among faculty are moral and ethical awareness skills and analytical skills (means of 4.60 and 4.52 respectively). The results show that both professionals and accounting faculty agreed on the importance of moral and ethical skills (means of 4.79 and 4.60 respectively). Despite this agreement, the results show that while accounting faculty rank moral and ethical awareness skills as the first-highest required skills (mean of 4.60), accounting firms rank dialogue and language skills as the first-highest demanded skill in the market (mean of 4.89). The high ranking of moral and ethical skills indicates that participants in the study sample considered moral and ethical values in the accounting profession to be the most important skills needed and developed by accounting graduates because of their importance to the integrity and fairness of financial and accounting information. Furthermore, the result implies that accountants should be committed to clear standards of ethics in all interactions. This

finding is in line with the conclusions of Klibi & Oussii (2013), who argued that moral and ethical skills are crucial for entry-level accounting students.

Clearly, employers place more consideration on dialogue and language skills which seems lacking in accounting graduates. The results suggest that accounting programmes may need to focus more on dialogue and language skills. Opening new lines of communication might help reduce these gaps and increase levels of engagement amongst accounting academics and professionals. Academics and practitioners should respond to the issues in accounting education by pushing for "complete improvements." (IAESB, 2013; Behn et al., 2012) based on a variety of accounting education models. The fundamental model should be the development of future professional accountant skills. To facilitate reforms, accounting academics, professional accounting bodies, and higher education institutions in Saudi Arabia must work together. Conferences, discussion panels, and workshops need to be provided by accounting firms and SOCPA should conduct seminars, to boost accounting graduates' engagement in practical accounting issues and to open room for debate concerning required market skills or what is expected from both universities and the community as a whole. Courses and curricula must allow the graduates to interact and collaborate more to develop these skills. The more graduates are engaged in activities, the more they will increase their capacities for dialogue and navigating interpersonal skills. Language also must be given more attention. The English language is the language of business, and graduates must be well equipped to work in bilingual communities.

The two least-ranked skills among professionals are leadership and innovation skills and the ability to use new accounting software (means of 4.16 and 4.46 respectively). The results suggest that employers give less weight to leadership and innovation recognising the fact that such skills can be either developed at a later stage or the graduate "must develop himself" AF1. Such skills can be developed by graduates themselves. All the 16 interviewees confirmed that graduates should exert efforts to improve such skills. Further, the ability to use accounting software could be developed on the job with time through practical training. As noted by PM4,

graduates “need to be trained” on different software adopted by employers. The availability of numerous accounting software solutions indicates that the curriculum can de-emphasise the use of accounting software. Employers expect accounting graduates to receive sufficient training on their particular software applications since there are many different types of software and accounting programmes cannot include them all in their curricula. Furthermore, accounting software differs from programme to programme, and employers prefer to provide accounting graduates with on-the-job training rather than just relying on classrooms. This result contradicts Hurt (2007), who advocated for incorporating accounting software into the curriculum to improve active learning.

Furthermore, the results presented in Table 6 show that the least demanded skill from the viewpoint of faculty is interpersonal skills (mean of 4.16). This result does not mean that accounting faculty believe interpersonal skills are not required but that they have less weight in comparison to other skills. This result indicates the lack of accounting graduates in an essential skill for their employability and career success, as highlighted by prior research (e.g., Albin and Crockett, 1991; Kavanagh and Drennan, 2008; Jackling and De Lange, 2009; Wells et al., 2009; Tempone et al., 2012).

The overall results prove that all identified employability skills for accounting graduates should be integrated into accounting programs, as they have high market demand and are believed to be necessary for the employment of accounting graduates. The results in Table 6 show that all the skills are ranked highly among all participants in this study. Such results are in harmony with the literature presented earlier. Eight (14) of the (16) participants confirmed that the outlined skills list represents their perceptions of what is actually taught and thought of the required market skills.

**Table 5.** Faculty and professionals’ perceptions towards required market skills.

#	Accounting Skills Required for the Market	Occupation	N	Mean	S.D.	Std. Error Mean
1	Critical thinking skills	Faculty	25	4.36	0.757	<b>0.151</b>
		Professionals	17	4.52	0.484	<b>0.117</b>
2	Ability to use advanced information technology skills	Faculty	25	4.40	0.577	<b>0.115</b>
		Professionals	17	4.77	0.396	<b>0.096</b>
3	Problem-solving skills	Faculty	25	4.32	0.690	<b>0.138</b>
		Professionals	17	4.64	0.581	<b>0.141</b>
4	Communication and connection skills	Faculty	25	4.40	0.577	<b>0.116</b>
		Professionals	17	4.65	0.460	<b>0.111</b>
5	Ability to work in a team skill	Faculty	25	4.24	0.723	<b>0.145</b>
		Professionals	17	4.51	0.602	<b>0.146</b>
6	Leadership and innovation skills	Faculty	25	4.16	0.688	<b>0.138</b>
		Professionals	17	4.44	0.487	<b>0.118</b>
7	Interpersonal skills	Faculty	25	4.16	0.688	<b>0.138</b>
		Professionals	17	4.57	0.599	<b>0.145</b>
8	Moral and ethical awareness skills	Faculty	25	4.60	0.577	<b>0.115</b>
		Professionals	17	4.79	0.389	<b>0.447</b>
9	Dialogue and language skills	Faculty	25	4.32	0.627	<b>0.125</b>
		Professionals	17	4.89	0.273	<b>0.066</b>
10	Analytical skills	Faculty	25	4.52	0.586	<b>0.117</b>
		Professionals	17	4.78	0.392	<b>0.095</b>
11	Ability to use new accounting software skills	Faculty	25	4.36	0.638	<b>0.128</b>
		Professionals	17	4.46	0.696	<b>0.169</b>

#### 4.4 Challenges to accounting education in Saudi Arabia

The results shown in Table 6 indicate that the highest-ranked challenge to accounting education from faculty perceptions is the large classroom size due to flexible admission policies in universities and that the lowest-ranked challenge is to keep pace with rapid developments. University admission is high in Saudi Arabia because most well-known universities are public universities and offer free undergraduate education. The government supports universities financially and expects universities to accommodate more students. Academics believe that admitting a large number of students into business colleges, in general, and accounting departments, in particular, negatively affects the quality of teaching and programmes outcomes, representing a challenge in equipping graduates with the required skills. This result is consistent with the findings of El-Mosa et al. (2021),

who revealed that a huge number of student admission to universities resulted in unsatisfactory, poor teaching-learning outcomes. This factor presents a challenge and poses a hurdle to the educational environment's capacity to meet labour market demands. As a result, it might be argued that if universities want to be more responsive to market demands for competencies, they should regulate admission so that departments can enhance the learning process in order to equip students with the required future skills.

The results also indicate that the highest-ranked challenge to accounting education from the perceptions of professionals (mean of 4.57) is graduates themselves as specific skills need to be developed by them independently, not universities and that the lowest-ranked challenge being the admission of a large number of students. Professionals believe that accounting graduates should work hard in developing specific skills by themselves. This finding indicates accounting graduates should be ready and willing to learn beyond classrooms and universities.

Further, participants in interviews were asked to comment on the challenges facing accounting education outlined in the list by the researchers and specify any other challenges. All 10 academic participants confirmed the challenges in the list and added some additional challenges, including the need to improve the general "education system from pre-school to high school" AM1, control "the number of students that are increasingly graduating from accounting programmes" which "may result in the future in graduate students being unemployed" AM2, need to "attract talented students" AM2, and reduce "students in classrooms" and solve the issue of "limited references" AF3, refrain from "restricting the professor to the binding scientific material" AF4, and replace "the wrong notion that universities should provide all skills to graduate with no role to be played by employers" AF5 and graduates.

Five (5) of the (6) interviewed professionals confirmed some challenges in the list and specified other challenges including the effect of the professional background of academics as noted by PM2 "the whole thing depends on how prepared are academics in terms of professional experience, if you have never practiced



accounting, you would not know what real life looks like”, the commitment of students to self-learning as noted by PF4 “at the end of the day skills depend on the importance placed on learning by a graduate and that goes beyond the university or us”, and the business awareness related to specific contexts as asserted by PM1 “the demand for particular generic skills is context-specific and is based on the employer’s industry sector.”

**Table 6.** Challenges to accounting education

#	Items	Occupation	N	Mean	S.D.	Std. Error Mean
1	The admission of a large number of students in business leads to poor education outcomes.	Faculty	25	3.56	0.961	<b>0.192</b>
		Professionals	17	2.86	1.083	<b>0.263</b>
2	The inability of accounting education programmes to keep pace with rapid developments is due to the lack of periodic renewal of educational curricula.	Faculty	25	3.36	0.995	<b>0.199</b>
		Professionals	17	3.95	0.876	<b>0.212</b>
3	The large number of students in classrooms makes it difficult for academics to teach and employ skills.	Faculty	25	4.32	0.627	<b>0.125</b>
		Professionals	17	3.53	1.125	<b>0.273</b>
4	Students need training and workshops on skills needed in the future outside of the curriculum within the study plan, and if not provided, students will not be equipped with proper tools for the future.	Faculty	25	3.96	0.935	<b>0.187</b>
		Professionals	17	4.31	0.768	<b>0.186</b>
5	Certain skills need to be developed by students independently, and the university is not responsible for developing such skills.	Faculty	25	4.20	0.817	<b>0.163</b>
		Professionals	17	4.57	0.597	<b>0.144</b>

#### 4.5 Different results of respondents

The results in Table 7 show no significant statistical differences when comparing the responses of faculty and professionals concerning three questions related to the expectation gap, market required skills of accounting graduates, and challenges to accounting education. No remarkable difference was found between the two categories of the sample (faculty and professionals), confirmed by a "Sig. (2-tailed)" value greater than 5%.

**Table 7.** Independent samples T-test

		t-test for Equality of Means						
		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	90% Confidence Interval of the Difference	
							Lower	Upper
Q 1	Equal variances assumed	-1.33	40	0.19	-0.294	0.220	-0.647	0.077
	Equal variances not assumed	-1.42	39,82	0.16	-0.294	0.207	-0.642	0.055
Q2	Equal variances assumed	-1.61	40	0.12	-0.24	0.146	-0.481	0.011
	Equal variances not assumed	-1.69	39.1	0.10	-0.24	0.139	-0.469	-0.007
Q3	Equal variances assumed	0.26	40.0	0.79	0.058	0.225	-0.321	0.436
	Equal variances not assumed	0.25	31.0	0.81	0.058	0.231	-0.335	0.449

#### 4.6 The Reliability analysis

Table 8 shows a significant value of the Cronbach's Alpha, which means that all construct items are reliable and represent the same variable. The table also shows clearly that the coefficient of general reliability is high (0.828), which indicates that the questionnaire has a high degree of stability that can be relied upon in this study. The coefficient of stability of the study for all questions ranges between 0.884 and 0.630, which is higher than the acceptable value (0.60) as mentioned (Sekaran and Bougie, 2016).

**Table 8.** Reliability analysis of the construct

Questioner Dimensions	Cronbach's Alpha	N. of items
Reliability statistics for the first question: Market expectations of accounting graduates.	0.639	4
Reliability statistics for the second question: Skills required in the future	0.884	11
Reliability statistics for the third question: Challenges to equip graduates with the required skills	0.630	5
<b>General Constancy</b>	<b>0.828</b>	<b>20</b>

#### 5.0 Conclusion

The present research investigates the issue of expectation gaps between faculty and professionals in relation to accounting graduates' skills in Saudi Arabia. The study shows a gap between the perception of faculty and the expectation of professionals concerning the required market skills. Accounting curricula in Saudi Arabia focus more on technical skills and less on non-technical skills, including dialogue and language skills, interpersonal skills, information technology skills. The focus of accounting programmes and faculty on general skills will aid in narrowing the gap between the accounting curriculum and employer expectations and demands. It will enable accounting graduates to be job-ready with the skills they are able to use and apply to their jobs.

The current level of dialogue and communication between academics, professionals, accounting bodies, and other employers in Saudi Arabia is not satisfactory and has resulted in a loss of opportunities for collaboration in the preparation of accounting

graduates. Opening new veins of communications will increase levels of engagement amongst accounting academics and professionals, hence reducing the expectation gap. Academics and practitioners should respond to the issues in accounting education by pushing for "complete improvements." (Behn et al., 2012a). To facilitate improvements, accounting academics, professional accounting bodies, and higher education institutions in Saudi Arabia must work together through conferences, discussion panels, and workshops to discuss and open room for debate concerning employability skills and the roles of universities and employers in developing and boosting accounting graduates' skills.

The study's findings contribute to the body of knowledge in improving the teaching and learning process of accounting education, particularly in equipping graduates with the required market skills. Proper and constant dialogue and communication are the keys to tackling the expectation gap issue. All participants agree that the development of the skills of graduates is the responsibility of all stakeholders including graduates. Initiatives should start from academics and later be shared with professionals and graduates. Accounting graduates' willingness to learn beyond classrooms and university is one of the most important qualities employers look for when hiring new graduates. To demonstrate such willingness, graduates need to adopt and embrace the mindset, methods, and emerging technologies now available to determine their career direction and success. When hiring new graduates, employers evaluate graduates' current skills and their willingness and ability to learn new demanded skills. Growth potential is an important quality in a graduate, and a willingness to learn demonstrates that capability.

Future research can adopt the same questions and methods and conduct the research in different countries. The current research is exclusively applicable to Saudi Arabia. Researchers in other countries may use the findings of this study as a guide, but they should be conscious of variances across situations. Future research can also broaden the sample to include more diverse individuals such as graduates, employers, and government bodies to investigate the gap and other related topics.

## References

- Abdeen, A. & Yavas, U. (1985). Current status of accounting education in Saudi Arabia. *The International Journal of Accounting Education and Research*, (20)/2, 155-173.
- Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020). Graduate employability and competence development in higher education—A systematic literature review using PRISMA. *Sustainability*, 12(15), 5900, 1-27
- Accounting Education Change Commission (AECC) (1990). Objectives of education for accountants: position statement number one. *Issues in Accounting Education*, (5)/2, 307- 312.
- Ahadiat, N. & Smith, K. J. (1994). A factor-analytic investigation of employee selection factors of significance to recruiters of entry-level accountants. *Issues in Accounting Education*, 9, 59–67.
- Ahmad, N., & Gao, S. (2004). Changes, problems and challenges of accounting education in Libya. *Accounting Education*, (13)/3, 365–390.
- Akbulaev, N., Mammadov, I., & Shahbazli, S. (2021). Accounting education in the universities and structuring according to the expectations of the business world. *Universal Journal of Accounting and Finance*, (9)/1, 130-137
- Al Mallak, M. A., Tan, L. M., & Laswad, F. (2020). Generic skills in accounting education in Saudi Arabia: students' perceptions. *Asian Review of Accounting*, 28(3), 395–421
- Alain, A. (2009). The gap between the skills and knowledge gained from the accounting major and requirements. *Tishreen University Journal for Research and Scientific Studies- Economic and Legal Sciences Serie*, (31)/4.
- Albin, M. J., & Crockett, J. R. (1991). Integrating necessary skills and concepts into the accounting curriculum. *Journal of Education for Business*, 66, 325-327
- Albrecht, W. & Sack, R. (2000). Accounting Education charting the race-through a perilous future. *Accounting Education Series*, 16, 1-72.
- Alharahsheh, H., & Pius, A. (2020a). Exploration of employability skills in business management studies within higher education levels. *International Journal of Sustainable Economies Management*, (9)/1, 52–69.
- AlMotairy, S. & Stainbank, S. (2014). Compliance with international education standards in Saudi Arabia: Policy and Educational Implications. *Journal of Business Studies Quarterly*, (5)/4, 5-20.
- Al-Qahtani, S. (1998). The suitability of higher education outcomes for the requirements of the labor market in Saudi Arabia. *Institute of Public Administration*, (34)/3, 499-555.
- [Alsamkari, M., Zerban, A., Ataf, M.](#) (2021). Challenges and benefits encountering in the implementation of IFRS in Saudi Arabia: A road map. [Academy of Accounting and Financial Studies Journal](#); (25)/1, 1-12.
- Amer, T., Bain, C., & Wilburn, N. (2010). Increasing student awareness of the accounting profession: Utilizing accounting career panels as a cocurricular student activity. *Advances in Accounting Education: Teaching and Curriculum Innovations*, (11), 129-151.
- American Accounting Association (AAA) (1986). Future accounting education: preparing for the profession, *Issues in Accounting Education*, (1)/1, 168-195
- American Institute of Certified Public Accountants (AICPA) (1999). The AICPA core competency framework for entry into the accounting profession. Available at: <http://www.aicpa.org/edu/corecomp.htm>.

- American Institute of Certified Public Accountants (AICPA), CPA Vision Project: Focus on the Horizon. (1998). Executive summary and CPA Vision Project Focus Groups: Public Practice, Industry and Government CPAs. New York, NY: AICPA.
- Andiola, M. L., 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), 100655.
- Arab, M. (2014). Proposed framework for the development of university accounting education programs in the Kingdom of Saudi Arabia in the light of recent trends with the requirements of international standards of accounting education. *Journal of Financial And Commercial Research*, (1), 166-221.
- Awayiga, J., Onumah, J., & Tsamenyi, M. (2010). Knowledge and skills development of accounting graduates: The perceptions of graduates and employers in Ghana. *Accounting Education: An International Journal*, (19)/1, 139- 158.
- Aziz, H. (2018). Graduate skills gap. *New Straits Time*. Retrieved from <https://www.nst.com.my/education/2018/10/417327/graduate-skills-gap>
- Bartunek, J. (2007). Academic-practitioner collaboration need not require joint or relevant research: Toward a relational scholarship of integration. *Academy of Management Journal*, 50, 1323-1333.
- Behn, B., Ezzell, W., Murphy, L., Rayburn, J., Stith, M. and Strawser, J., (2012). The pathways commission on accounting higher education: Charting a national strategy for the next generation of accountants. *Issues in Accounting Education*, (27)/3, 595-600.
- Berry, R., & Routon, W. (2020). Soft skill change perceptions of accounting majors: Current practitioner views versus their own reality. *Journal of Accounting Education*, 53, 1-163
- Birkett, W.P. (1993). Competency based standards for professional accountants in Australia and New Zealand. Sydney: Institute of Chartered Accountants in Australia and the New Zealand Society of Accountants.
- Black, W. (2012). The Activities of the pathways commission and the historical context for changes in accounting education. *Issues in Accounting Education*, (27)/3, 601-625.
- Blanthorne, C., Bhamornsiri R. & Guinn. (2005). Are technical skills still important? *The CPA Journal*, (75)/3, 64-65.
- Borzi, M. & Mills, T. (2001). Communication apprehension in upper level accounting students: An assessment of skill development. *The Journal of Education for Business* (76)/4, 193-198
- Bui, B., & Porter, B. (2010). The expectation-performance gap in accounting education: an exploratory study. *Accounting Education: An International Journal*, (19)/1, 23-50.
- Burnett, S. (2003). The future of accounting education: A regional perspective, *Journal of Education for Business*, (78)/3, 129-134.
- Buzied, M. M. (1998). Enterprise Accounting and its Context of Operation: the Case of Libya. PhD Thesis, Durham University.
- Carnegie, G. D. and Napier, C. J. (2010). Traditional accountants and business professionals: portraying the accounting profession after Enron. *Accounting, Organizations and Society*, (35)/3, 360-376.
- Carr, S., Chua, F., & Perera, H. (2006). University Accounting Curricula: The Perceptions of an Alumni Group. *Accounting Education*, (15)/4, 359-376.
- Corbin, J. & Strauss, A. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory (4th ed.). Thousand Oaks, CA: Sage Publications.

- Creswell, J. W. & Poth, C.N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Daff, L. (2021). Employers' perspectives of accounting graduates and their world of work: software use and ICT competencies. *Accounting Education*,(6), 1-30.
- Dahlgren L, Emmelin M, Graneheim U, Sahlén KG, and Winkvist A. (2019). *Qualitative methodology for international public health 3rd*. Umeå: Umeå International School of Public Health: Umeå University.
- Dauda A. and Olawale B. (2020). Integration of educational technology in accounting education: evidence from selected tertiary institutions in North West region of Nigeria. *International Journal of Scientific Research and Engineering Development*, (3)/2, 191-198
- David, F., David, M., & David, F. (2011). What are business schools doing for business today? *Business Horizons*, 54(1), 51-62.
- De Lange, P. Jackling, B. & Gut, A. (2006). Accounting graduates perceptions of skills emphasis in undergraduate courses: An investigation from two Victorian universities. *Accounting and Finance*, 46/(3), 365-386.
- Dixon, K. (2004). Experiences of an accounting educator in Kiribati. *Accounting Education: an international journal*, (13)/3, 311-327.
- Dolce, V., Emanuel, F., Cisi, M., & Ghislieri, C. (2020). The soft skills of accounting graduates: Perceptions versus expectations. *Accounting Education*, (12), 1-33.
- Efanimjor, I. & P Okolocha, C. (2020). Assessment of the adequacy of curriculum content of business education for skills acquisition in colleges of education in Edo and Delta States. *IOSR Journal of Research & Method in Education*, (10)/1, 1-12
- El-Moussa, O., Alghazo, R., & Pilotti, M. (2021). Variables contributing to academic success among college students in Saudi Arabia. *Critical Studies in Teaching and Learning*, (9)/1, 115-134
- El-Sayed Ebaid, I. (2021). Accounting students' perceptions on e-learning during the Covid-19 pandemic: preliminary evidence from Saudi Arabia. *Journal of Management and Business Education*, 3(3), 236-249.
- El-Sayed Ebaid, I. (2021). Incorporating International Financial Reporting Standards (IFRS) into accounting curricula: Perceptions of undergraduate accounting students in Saudi Universities. *Journal of Advanced Research in Economics and Administrative Sciences*, (2)/2, 1-15.
- Evans, E., Burritt, R. and Guthrie, J. (2010). Challenges for accounting education at a crossroad in 2010, in Evans, E., Burritt, R. and Guthrie, J. (Eds). *The Institute of Chartered Accountants in Australia*, Sydney.
- Fajaryati, N., Budiyo, B., Akhyar, M., & Wiranto, W. (2020). The employability skills needed to face the demands of work in the future: Systematic literature reviews. *Open Engineering*, 10(1), 595-603.
- Franz, J. M. (2008). *A Pedagogical Model of Higher Education/Industry Engagement for Enhancing Employability and Professional Practice*. Proceedings work integrated learning (WIL). *Transforming Futures, Practice, Pedagogy, Partnerships*, 164-169. Sydney, Australia: Manly.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn & Bacon.
- Gallhofer, s., Haslam, j., & Kamla, r. (2009). Educating and Training Accountants in Syria in a Transition Context: Perceptions of Accounting Academics and Professional Accountants. *Accounting Education: An International Journal*, (18)/4, 345-368.



- Gujarathi, M.R. & McQuade, R. (1998). Problems and considerations in implementing technology-based solutions to address changes in accounting curricula. *Advances in Accounting Education*, (1)/1, 1-23.
- Hancock, P, Howieson, B, Kavanagh, M, Kent, J, Tempone, I, Segal, N & Freeman, M. (2009). The roles of some key stakeholders in the future of accounting education in australia, *Australian Accounting Review*, (19)/ 3, 249-260.
- Hart Research Associates. (2013). It takes more than a major: Employer priorities for college learning and student success. *Liberal Education*, (2)/99, 22-29.
- Hassall, T., Joyce, J., Arquero Montaña, J. L., & Donoso Anes, J. A. (2005). Priorities for the development of vocational skills in management accountants: A European perspective. *Accounting Forum*, (29)/4, 379-394.
- Helliar, C. (2013). The Global Challenge for Accounting Education. *Accounting Education: An International Journal*, (22)/6, 510-521.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation. *Qualitative Health Research*, (27)4, 591-608.
- Herbert, I. P., Rothwell, A. T., Glover, J. L., & Lambert, S. A. (2020). Does the changing world of professional work need a new approach to accounting education? *Accounting Education*, 1-25, 188-212
- Holmes, L. (2001). Reconsidering graduate employability: The 'graduate identity' approach. *Quality in Higher Education*, (7)/2, 111-119.
- Hossain, M., Alam, M., Alamgir, M., & Salat, A. (2020). Factors affecting business graduates' employability—empirical evidence using partial least squares (PLS). *Education and Training*, 62(3), 292-310.
- Howieson, B. (2003). Accounting practice in the new millennium: is accounting education ready to meet the challenge? *The British Accounting Review*, (35)/2, 69-103.
- Hurt, B. (2007). Teaching what matters: a new conception of accounting education. *Journal of Education for Business*, (82)/5, 295-299.
- Ibeaheem, H., Elawady, S., & Ragmoun, W. (2018). Saudi Universities and higher education skills on Saudi Arabia. *International Journal of Higher Education Management*, (4)/2, 69-82.
- Ibrahim, M., Khairudin, N., & Salleh, D. (2018). Innovation of flipped learning encouraging better communication and critical thinking skills among accounting students. *Journal of Physics: Conference Series*, (1019)/1, 1-8.
- IFAC (2015), Handbook of the code of ethics for professional accountants, International Federation of Accountants, New York, NY.
- Institute of Chartered Accountants of England and Wales (ICAEW). (1996). Education and Training Committee. *Added Value Professionals: Chartered Accountants in 2005*, London: ICAEW.
- International Education Standards IES 1. (2008). International Education Standards for Professional Accountants, Entry Requirements to a Program of Professional Accounting Education. New York: IFAC.
- International Education Standards IES 2. (2008). Content of Professional Accounting Education Programs. New York: IFAC.
- International Education Standards IES 3. (2008). Professional Skills. New York: IFAC.
- International Education Standards IES 4. (2008). Professional Values, Ethics and Attitudes. New York: IFAC.
- International Federation of Accountants (IFAC). (2002) International Education Standard on Professional Skills and Generation Education. New York: IFAC.
- International Federation of Accountants (IFAC). (2007). IEPS1 International Education Practice Statement 1, New York: IFAC.



- International Federation of Accountants (IFAC). (2008). International Education Standards 1-8. New York: IFAC.
- International Federation of Accountants (IFAC). (2009). Framework for International Education Standards for Professional Accountants. New York: IFAC.
- International Federation of Accountants (IFAC). (2010). Handbook of International Education Pronouncements 2010 Edition. New York: IFAC.
- International Federation of Accountants (IFAC). (2012). Facts about IFAC.
- International Federation of Accountants (IFAC). (2013). Compliance Responses and Action Plans.
- Jackling, B. & de Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence, *Accounting Education: An International Journal*, (18 )/5, 369-385.
- Jackling, B., & Keneley, M. (2009). Perceptions of generic skill development: International and local accounting students in Australia. Paper presented at the 2009 AFAANZ Conference.
- Jackson, D., & Meek, S. (2021). Embedding work-integrated learning into accounting education: The state of play and pathways to future implementation. *Accounting Education*, 30(1), 63– 85.
- Jones, G, & Abraham, A. (2007). Educational implications of the changing role of accountants perceptions of practitioners, academics and students, in the quantitative analysis of teaching and learning in business, economics and commerce, Forum proceedings, The University of Melbourne, 9 February 2007, 89-105.
- Jones, G. E., & Abraham, A. (2008). Preparing accountants for today's global business environment: The role of Emotional Intelligence in accounting education. 11th Annual International Conference of the American Society of Business and Behavioral Sciences Honolulu, Hawaii, September, 25-27.
- Karsten, I., van der Merwe, M., & Steenekamp, K. (2020). Empowering accounting students to enhance the self-determination skills demanded by the fourth industrial revolution. *South African Journal of Higher Education*, 34(2), 36–58.
- Kavanagh, M & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting and Finance*,(48)/2, 279-300.
- Kim, T. S., Ghosh, B. C., & Meng, L. A. (1993). Selection criteria: perception gap between employers and accounting graduates. *Singapore Accountant*, (9), 32–33.
- Klibi, M., & Oussii, A. (2013). Skills and attributes needed for success in accounting career: Do employers' expectations fit with students' perceptions? Evidence from Tunisia. *International Journal of Business and Management*, (8)/8, 118-132.
- Kotb, a., Roberts, c., & Stoner, g. (2013). E-business in accounting education in the UK and Ireland: Influences on inclusion in the curriculum. *International Journal of Management Education*,(11)/3, 150-162.
- Leveson, L. (2000). Disparities in perceptions of generic skills: academics and Employers. *Industry and Higher Education*, 14, 157-164.
- Lightbody, M. (2010). The impact of accreditation on accounting education in 2010. In Evans, E., Burritt, R. and Guthrie, J. (Eds), *Accounting Education at a Crossroad in 2010*, The Institute of Chartered Accountants in Australia, Sydney, 29-34.
- Lin, Z. J., Xiong, X. & Liu, M. (2005). Knowledge base and skill development in accounting education: Evidence from China. *Journal of Accounting Education*, (23)/3, 149-169.

- Little, B. (2007). Labour market issues and international employability. Employability seminar. Sheffield Hallam University. Retrieved from: <https://doi.org/www.enhancingemployability.org.uk>.
- Maali, B., & Al-Attar, A. (2020). Accounting curricula in universities and market needs: The Jordanian Case. *SAGE Open*, (10)/1, 1-12.
- Maatoug, A. (2014). Accounting Education in Libya: An Institutional Perspective. PhD Thesis. UK: University of Dundee.
- Marriott, D.N. (2004). Using computerized business simulations and spreadsheet models in accounting education: a case study. *Accounting Education: An International Journal*, (13)/1, 55-70.
- McNamara, D. E. (2006). The relevance of business school education, what do you think? *Journal of College Teaching & Learning*, (3)/11, 1-15.
- Mgaya, K., & Kitindi, E. (2008). IT skills of academics and practising accountants in Botswana. *World Review of Entrepreneurship, Management and Sustainable Development*, (4)/4, 366-379.
- Mgaya, K., & Kitindi, E. (2009). Essential skills needed by accounting graduates in a developing country: The views of practicing accountants and accounting educators In Botswana. *International Journal of Accounting and performance Evaluation*, (5)/3, 329-349.
- Miller, p. (1991). The new accounting history introduction organization. *Accounting organization and society*, (16), 395-403.
- Milner, M.M. and Hill, W.Y. (2008). Examining the skills debate in Scotland, *International Journal of Management Education*, (6)/3, 13-20
- Ministry of Education (2019). Brief about Saudi universities. Retrieved from: <https://www.moe.gov.sa/ar/Pages/default.aspx>.
- Mohammed, F. (2013). The Compatibility between accounting education in Sudanese universities with the requirements of contemporary business environment and the International Federation of Accountants from the perspective of employers and teaching staff. *Arab Journal for Quality Assurance in Higher Education*, (9)/23, 191-213.
- Myers, R. (2005). Accounting education changes course. *Journal of Accountancy*, (200)/4, 108-110.
- National Commission for Academic Accreditation & Assessment (NCAAA). (2018). NCAAA Standards for Program accreditations. Retrieved from: <https://etec.gov.sa/en/productsandservices/NCAAA/AccreditationProgrammatic/Pages/insprogdeve.aspx>
- Nelson, I. (1995), What's new about accounting education change? An historical perspective on the change movement, *Accounting Horizons*, (9)/4, 62-76.
- Nofal, M. (1995). The impasse of higher education policies in light of development directives. *Arab Future Magazine*,(3)/1, 96-118.
- Novin, A., Pearson, M., & Senge, S. (1989). Improving the curriculum for aspiring management accountants: The practitioner's point of view. *Journal of Accounting Education*, (8)/2, 207-224.
- Palmer, K. Ziegenfuss, D. & Pinsker, R. (2004). International knowledge, skills, and abilities of auditors/accountants: Evidence from recent competency studies. *Managerial Auditing Journal*, (19)/7, 889-896.
- Peters, J.M. (1999). A study focusing on the use of Peachtree software in introductory accounting: performance differences. working paper, College of DuPage, Glen Ellyn, IL.
- Phan, D., P. Yapa, and H. T. Nguyen. (2020). Accounting graduate readiness for work: a case study of South East Asia. *Education+Training*, (63)/3, 392-416

- Pierre, E., & Rebele, J. (2014). An agenda for improving accounting education, In R. M. S. Wilson (Ed.), *The Routledge companion to accounting education*, Oxford: Routledge, 102–121.
- Sangster, A. (2010). Making our students more fit for purpose: A commentary on A role for the compulsory study of literature in accounting education. *Accounting Education: An International Journal*, (19)/4, 373-376.
- Sekaran, U. and Bougie, R., (2016). *Research methods for business: A skill building approach*. Seventh edition. John Wiley & Sons, New York.
- Shahid, H., Alexander, A., & Abdalla, T. A. M. (2018). An exploratory study for opening accounting undergraduate program in Saudi Arabia: The stakeholders' perception & need analysis. *Advances in Social Sciences Research Journal*, 5(4), 212-227.
- Shaikh, J.M. and Talha, M. (2003). Credibility and expectation gap in reporting on uncertainties", *Managerial Auditing Journal*, (18)/6, 517-529.
- Shareia, B. (2010). The Libyan accounting profession: Historical factors and economic consequences. Paper presented at the Sixth Asia Pacific Interdisciplinary Research in Accounting Conference. Sydney, Australia, 1-29.
- Simons, K., Higgins, M., & Lowe, D. (1995). A profile of communication apprehension in accounting majors: Implication for teaching and curriculum revision. *Journal of Accounting Education*, 13(Spring), 159–176.
- Sin, S., Reid, A. & Jones, A. (2012). An exploration of students conceptions of accounting work. *Accounting Education*, (21)/4, 323-340.
- Smith, W. C., & Benavot, A. (2019). Improving accountability in education: The importance of structured democratic voice. *Asia Pacific Education Review*, 20(2), 193–205.
- Smith, W.C., Benavot, A. (2019). Improving accountability in education: the importance of structured democratic voice. *Asia Pacific Education*, (20), 193–205.
- SOCPA. (2014). Saudi organization for certified public accountants: List of licensed
- Stoner, G. & Milner, M. (2010). Embedding Generic Employability Skills in an Accounting Degree: Development and Impediments. *Accounting Education: An International Journal*, (19)/1, 123-138.
- Stoner, G. (2009). Accounting students IT application skills over a 10-year period. *Accounting Education: An International Journal*, (18), 7-31.
- Strauss, A., Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedure and techniques*. Sage, Newbury Park, London.
- Tam, T. (2011). The relevant information technology knowledge and skills for accounting graduates in New Zealand. DBA thesis, Southern Cross University, Lismore, NSW.
- Tatikonda, LU. (2004). Naked truths about accounting curricula. *Management Accounting Quarterly*, (5)/4, 62-73.
- Tempone, I., Kavanagh, M., Segal, N., Hancock, P., Howieson, B., & Kent, J. (2012). Desirable generic attributes for accounting graduates into the twenty-first century. *Accounting Research Journal*, (25)/1, 41-55.
- The Pathways Commission. (2012). *The pathways commission on higher education: Charting a national strategy for the next generation of accountants*. The American Accounting Association and the American Institute of Certified Public Accountants. Available at: <http://www.pathwayscommission.org>.
- Trigwell, K., & Watts, O. (2000). *Generic capabilities of ATN University graduates*. Canberra: Australian Government Department of Education, Training and Youth Affairs.

- Weaver, P., & Kulesza, M. (2013). Are new accounting hires equipped to meet employers' expectations? Connecticut CPA, (54)/6, 12-14.
- Wells, P., Gerbic, P., Kranenburg, I., Bygrave, J. (2009). Professional skills and capabilities of accounting graduates: The New Zealand expectation gap? Accounting Education, (18), 403-420.
- Zikmund, W. G. (2000). Business Research Methods (6th edition). USA: Harcourt.