

An Evaluation of the Competence Requirements of South African Accountants Practising in the SME Environment

Danie Schutte* and Bianca Lovecchio

*School of Accounting Sciences, Faculty of Economic and Management Sciences,
North-West University, Potchefstroom, 2520, South Africa*

KEYWORDS Competency Framework. International Accounting Education Standards Board. International Education Standards. International Federation of Accountants. Organisation for Economic Co-operation and Development

ABSTRACT This research paper reports on the competency requirements of aspiring accountants in the SME environment. The paper employed a survey to evaluate the relevance of IES 2 – Initial Professional Development Technical Competence in South Africa in order to establish a suitable approach to narrow the knowledge-skills gap among graduates. The findings of the study revealed valuable insights into accounting practitioners’ perceptions and expectations of the essential technical and soft skills required of accounting graduates entering the SME market. In addition, recommendations were made by practitioners regarding how to improve professional accounting education programs to ensure the employability of accounting graduates in the SME environment.

INTRODUCTION

Globalisation has accelerated the pace of the interdependence and integration of world economies (Treller 2014). Economic decisions are no longer confined within national borders, but have taken on a decidedly global orientation. Analysts observe that globalisation has blurred the economic distinctions between countries and created a “borderless world” in which economic decisions are made without any reference to national boundaries (Ceglowski 1998). The traditional workplace is no longer based on autonomous national economies. Instead, organisations are becoming more spatially and organisationally distributed (Ouye 2011; Robertson 1992). Work is less concentrated in individuals and driven by the outsourcing of functions to service providers, as well as a reduction in companies’ own employees. Consequently, the world is witnessing the rise of an insecure workforce and the disappearance of standard forms of employment (Heery and Salmon 2000).

Organisations perceive the impact of globalisation in many different ways. Global markets prompted organisations to adopt strategies

aligned to the international supply and demand of products and services. The globalisation trend will continue to influence the economic, social, political and cultural processes of firms, and as a result, has important implications for labour markets and employment. In this regard, organisations are often challenged to harmonise employee relations policies with global trends. Zahra (1999) asserts that a significant number of organisational actions are shaped by global practices, and, in order to compete in a global marketplace, business will continue to demand greater productivity and creativity from employees. Consequently, the demands imposed by globalisation and the rapid change in today’s professional world revealed a pressing need to identify the professional skills and personal attributes needed to be employable in the modern world.

The increase in international trade and the emergence of international competitive forces have also transformed the accounting world. Observers asked for a common accounting language to facilitate the communication of business results to international market participants (Das et al. 2009; Judge et al. 2010). In response, the International Accounting Standards Board (IASB) commenced with a process to convert different accounting practices from many different countries and, in 2004, issued a uniform set of accounting standards titled International Fi-

*Address for correspondence:
13 Otto Street, Potchefstroom,
2531, South Africa
Phone: +2718 299 1436
E-mail: danie.schutte@nwu.ac.za

nancial Reporting Standards (IFRS), which are currently used in 125 countries (Ataman et al. 2016; Tsunogaya et al. 2015). Within these countries, IFRS material and guidelines were made available to practising accountants as well as being introduced at university level (Allen et al. 2012) to ensure that future accountants can apply their trade in the global village.

During 2004, the IASB also commenced to develop an accounting standard for small and medium-sized entities (IASB 2004). The project was completed five years later when the IASB published the International Financial Reporting Standard for small and medium-sized entities (Pacter 2009). This project was, however, criticised as being too expensive and too complex for certain types of SMEs (Kiliç and Uyar 2017). Deaconu et al. (2009) suggested that the unique information needs of SMEs were not taken into account, while Rahman et al. (2017) observed that SMEs do not have an international focus. Furthermore, Linjee et al. (2017) submitted that the educational requirements of small business accountants are different compared to large enterprises. In light of the aforementioned, it is not certain to what extent the skills and attributes of future accountants will address the unique nature of SMEs.

Objectives

The first research objective of this paper is to describe the specific competencies required of accountants practising in an SME environment. In addition, the researchers consider the relevance of the competency framework to practising accountants in South Africa, and specifically in the SME environment.

Structure of the Paper

The remainder of the paper is structured as follows. The next section provides a theoretical background about the knowledge, skills and attributes required to be successful in an organisation, with specific reference to competencies in an accounting environment. Then the research method adopted for this paper is described. The 'Results' and 'Discussion' sections present and discuss the research findings. Final remarks and implications drawn for policymakers and practitioners are provided in the 'Con-

clusion' section, followed by 'Recommendations' in the closing section.

Theoretical Background

Organisations operate in a climate characterised by considerable change, with increasing demands from their stakeholders and capital markets. They are exposed to global demands and are constantly influenced by international trends. According to Kazi (2011), it has also resulted in uncertainty in the workplace, a pervading threat of termination, job losses and a lower degree of job security. Klein (2000) asserts that modern organisations operate in an environment in which profits are placed before people in a consistent and unapologetic manner. Therefore, more than ever before, there is a need for professionals at work to make an effective contribution and to continuously improve their performance at work (ACCA 2009).

Employee Skills and Attributes

In recent years, there has been a growing awareness of the skills, knowledge and personal attributes needed to secure a successful career. Employees are required to not only demonstrate appropriate behaviour, but also technical abilities in order to perform effectively at work. In this regard, individual competencies such as problem-solving and people management skills are considered to be essential elements of effective and sustained performance in the working environment.

The literature suggests that there is a growing demand for employees who are ready and able to take up their responsibilities within organisations in the global world. Knight and Yorke (2004) advocate that the ability to take up employment is defined as possessing a set of skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations. Harvey (2001) divides the concept of employability into two main categories. Firstly, employability is the ability to get, retain and be developed in a job after graduation. Secondly, employability is related to the specific attributes required of employees, namely skills, knowledge, attitudes and abilities. According to Wilson-Medhurst (2005), employability relates to not only technical or subject knowledge, but also to

the 'soft' skills valued by employers. Ensuring employability can therefore be seen as having the qualities needed to maintain employment and progress in the working environment.

In order to ensure employability, education providers are required to produce graduates who are capable of performing their duties in the workplace. In order to assist academic institutions to achieve this goal, the Organisation for Economic Co-operation and Development (OECD) developed a conceptual framework of key competencies required of graduates entering the market (OECD 2003). The purpose of the conceptual framework was, firstly, to identify the competencies required for finding and holding a job and, secondly, to establish the adaptive qualities required to cope with changing environments. The project commenced in 1997 and the specific challenges that were encountered included technological changes, the fact that societies are becoming more diverse and compartmentalised, and the fact that globalisation has created a new form of interdependence. Despite these challenges, the project was finalised in 2003 and the OECD identified a set of key competencies.

This conceptual framework identifies key competencies as a set of specific skills bound together in an integrated approach. The key competencies are classified into three broad categories. Firstly, individuals must be able to use a variety of tools to interact efficiently with their environment. Secondly, it is important that individuals are able to engage with others in diverse groups and, finally, individuals need to be able to act autonomously. These interconnected categories illustrate the starting point for identifying and mapping the key competencies as set out in the conceptual framework.

The key competencies were specifically identified to contribute to societies' and individual's valued outcomes, to help individuals meet essential demands within differing contexts and to be important for both specialists and individuals. Most importantly, these key competencies were identified with the purpose of clarifying and improving collective goals and bringing about lifelong learning.

According to the OECD, competencies are more than just a set of narrowly defined skills and knowledge; they involve the careful consideration of values, attitudes and motivations, as well as the ability to reflect. Competencies are

also determined by the nature of both the individual's and the society's goals. Individuals' competencies and societies' challenges have become more complex due to the interrelated world's challenging demands. Therefore, in order for individuals to be successful and function well in society, they have no choice but to operate and think in a more integrated way.

The OECD's conceptual framework provides a single frame of reference, because it applies equally to the scholar and the professional adult. Because competencies and demands develop and change throughout an individual's lifespan, and their ability to reflect grows with maturity, initial education cannot provide all the competencies that are relevant to lifelong learning. In other words, a universal assessment strategy cannot be designed without any limitations. Nevertheless, the OECD's framework constitutes a useful example of the fundamental competencies required in the business environment in an international setting.

Professional Accountants

According to Bolt-Lee and Foster (2003), a number of frameworks and reports have been developed by professional accounting organisations and academics in order to address the needs of the changing accounting profession. They noted that existing educational programs in the US were not sufficient to prepare Accounting students to enter the profession, because there was a discontinuity between the body of knowledge and changing demands. Howcroft (2017) explored the accounting education expectation performance gap in the United Kingdom and Ireland and established that educators, practitioner employers and the accounting profession do not agree on the assessed level of competencies of graduates. He found that employers were not satisfied with the technical training that universities provided due to educators' focus on knowledge transfer and the production of specialists instead of promoting critical thinking, problem-solving and technical skills. Research by Kestel (2017) found that accounting students across two campuses in Australia and Singapore lacked an understanding of the diverse nature of the workplace. She found that accounting students did not feel confident and ready to practise after graduation. Parvaiz et al. (2017) reported on a skills acquisition shortfall

of accounting students based on their evaluation of employers' expectations. Linjee et al. (2017) as well as Aucock and Merino (2017) stressed the importance of intellectual, interpersonal and communication skills for accounting students, whereas Habidin et al. (2017) indicated that soft skills would enhance accounting graduates' marketability in the job market. Moreover, Ugiagbe-Green (2017) stressed the prominent role of technology in the assessment of accounting education.

A specific set of employability skills would assist accounting graduates to understand the nature of the workplace and meet the demands of the labour market (Cigar 2017; Chantanasiri et al. 2017). Al-Esmail et al. (2017) argued that the identification and validation of core graduate skills and attributes would assist universities with a clear understanding of the level and competencies a graduate should possess to be employment-ready. Ibrahim et al. (2017) contended that employers' perceptions are important for students in preparing themselves for both the university and industry, since undergraduates with internship placement experience are regarded to be better prepared and more marketable to employers. In short, the literature suggests that higher education providers need to partner up with the industry (Kestel 2017) to ensure that the required set of skills are incorporated in education programs in order to prepare successful entry-level accountants (Al-Esmail et al. 2017; Parvaiz et al. 2017).

International Education Standards

The International Accounting Education Standards Board (IAESB) was established to strengthen the global accountancy profession through the development and enhancement of high quality accounting education standards, which are implemented and applied worldwide (IFAC 2014b). The IAESB developed the International Education Standards (IES) and the heart of their mission is to develop professional attitudes, ethics, values, skills and knowledge. In addition, the IAESB develops and publicises support material and toolkits on pre-qualification education, on how to train a professional accountant and how to continue to gain a professional education, as well as on how to be a successful member of the accountancy profession. According to the IAESB, the development

and implementation of high quality educational standards will enable professional accountants to achieve and maintain an adequate level of competence.

The technical competencies required of an aspiring professional accountant are specified and demonstrated in IES 2 – Initial Professional Development Technical Competence (IFAC 2014a). IES 2 prescribes the content of knowledge required of an IFAC member body's professional accounting education program for a candidate to qualify as a professional accountant (IFAC 2012). The IAESB adopted a learning outcomes approach by specifying 11 competence areas: (i) *financial accounting and reporting*; (ii) *management accounting*; (iii) *finance and financial management*; (iv) *taxation*; (v) *audit and assurance*; (vi) *governance, risk management and internal control*; (vii) *business laws and regulations*; (viii) *information technology*; (ix) *business and organisational environment*; (x) *economics* and (xi) *business management*. The IAESB consulted with a wide range of stakeholders, including accounting firms, academics, regulators and other accounting organisations in identifying the aforementioned competence areas and established that the skill attributes (excluding economics) should be on an intermediate level.

Learning outcomes at the intermediate level are characterised by moderate levels of ambiguity and complexity. Competencies pertaining to economics are required on a foundational level, characterised by low levels of complexity and uncertainty, while none of the competencies are required to be on an advanced level. These learning outcomes lend support to IFAC member bodies to plan and design their professional accounting education programs.

The practical validity of these competence areas will be the subject of the empirical research in the next section. The comprehensive set of learning outcomes will be evaluated in order to determine whether this standard is relevant to practising accountants in an SME environment.

METHODOLOGY

Research Instrument

Following on the discussion in the previous section, the researchers developed a questionnaire to determine the relevance of the content

of IES 2 in the SME environment. The questionnaire consisted of demographic questions in Section A. Section B of the questionnaire included the 11 competence areas (constructs) according to IES 2 described in the previous paragraph. Forty-six closed-ended questions (learning outcomes related to these competence areas) were included in this section of the questionnaire. The participants had to classify the learning outcomes related to each competence area from his or her practical background using a three-point Likert scale (1= Foundation; 2 = Intermediate; 3= Advanced). The last section of the questionnaire required the participants to make recommendations regarding the required skills of first-year trainees entering an accounting practice.

In order to ensure the content validity of the survey instrument for this study, the questionnaire was pre-tested at small- and medium-sized accounting firms. A pilot questionnaire was sent to small- and medium-sized accounting firms to assess the validity of the questionnaire and useful feedback was obtained to refine the questionnaire.

Population and Sample

According to IFAC (2016), the majority of accountancy practices across the globe are small and medium practices, which employ the majority of professional accountants in practice. IFAC (2016) reports that more than ninety-five percent of enterprises across the world are SMEs and that they account for approximately sixty percent of private sector employment. SMEs are the fastest-growing business sector in South Africa, comprising 91 percent of the formal business entities, and are the engines of growth and innovation (Daniels 2015). Furthermore, SMEs play a critically important role in the wellbeing, stability and sustainability of both developing and developed economies (IFAC 2016).

The South African Institute of Professional Accountants (SAIPA) plays a very important role in ensuring that its members are equipped to service the SME sector (SAIPA 2016). SAIPA practitioners are required to have a defined set of specialised skills and knowledge in order to meet the needs of a wide range of SMEs. As employers' perceptions, real-life scenarios and implementing best practice are important elements of the accounting curriculum (Ibrahim et

al. 2017; Chaffer and Webb 2017), the feedback from the targeted population was considered relevant and appropriate to ascertain the skills requirements of aspiring accountants in the SME environment.

The final questionnaire was distributed to SAIPA firms at a regional practitioners' forum. The key purpose of the questionnaire was to gather an in-depth understanding of the participants' point of view. The total number of participants in this study comprised 68 practitioners. The study was qualitative in nature and an inductive approach was adopted in order to provide insights into the skill requirements in the SME environment. Furthermore, the wide range of clients and employees that the SAIPA practitioners represent was considered to be sufficient to explore this phenomenon and to provide valuable feedback about the SME sector. Since a number of items were formulated to measure a certain construct for this study, the Cronbach's alpha coefficient was used to determine the internal reliability of the questionnaire and revealed scores between 0.880 and 0.979 for each of the 11 competence areas included in the questionnaire. The results suggested that the reliability of the questionnaire was high and acceptable.

RESULTS

Demographic Information of Participants

Section A of the questionnaire consisted of demographic information. The respondents were asked to provide information regarding their gender, highest qualification, years of experience in practice, the names of the provinces in which they worked and the size of the sector in which the majority of their clients operated.

The male-female ratio of the respondents who participated in the survey was 42.2 percent male and 57.8 percent female. The highest academic qualifications achieved of the participants comprised diplomas (4.4%), bachelor degrees (28.9%), honours degrees (28.9%) and master's degrees (13.3%), while 24.4 percent of the participants indicated other qualifications.

Participants were also asked to specify the number of years they had experienced in practice. The majority of the respondents had 10 years' or more experience in practice (55.6%), 26.7 percent of the participants had six to 10

years' experience in practice, while only 17.8 percent of the participants had less than five years' experience in practice. Regardless of the respondents' qualifications or any other factors, they had to be able to provide good feedback based on years' experience in practice, bearing in mind the theorists' argument that knowledge is gained by combining theory and practice.

Lastly, the participants were asked to classify their clients into small-, medium- or large-sized entities. The majority of the participants' clients fell into either small-sized entities (60%) or medium-sized entities (33.3%). The participants with clients that fell into these two categories accounted for 93.3 percent of the total responses. Only 6.7 percent of participants' current clients were from large-sized entities. These participants, however, confirmed that they had previous experience with clients from the small or medium sector and for this reason their response was also included in the results.

Descriptive Statistics of the Learning Outcomes for Technical Competence

To facilitate the statistical analysis, a Likert scale was used to determine the proficiency levels of the learning outcomes related to the 11

competence areas from the participants' point of view. The respondents had the option to rate each statement at a foundational (number 1), intermediate (number 2) or advanced (number 3) level of proficiency. Tables 1 to 11 present descriptive statistics for the learning outcomes included in Section B of the questionnaire.

Means were found to vary between a high of 2.36 (*i*) and a low of 1.87 (*vi*). The participants felt that it was essential for professional accountants to be able to apply accounting principles to transactions and other events (mean = 2.36). Although the interpretation of financial statements and related disclosure was considered to be important (mean = 2.16), the ability to interpret non-financial data (mean = 1.87), such as sustainable reports, was not considered to be that important. The preparation, application of accounting standards and the evaluation of accounting policies revealed mean answers (between 2.02 and 2.09) marginally higher than moderate, as prescribed in IES 2.

The participants were of the opinion that it is important for professional accountants to be able to analyse financial and non-financial data (mean = 2.11). Management reporting and techniques for decision-making purposes (mean = 2.00 and 1.96, respectively) revealed an answer

Table 1: Financial accounting and reporting

	<i>Mean</i>	<i>Std.dev</i>
i. Apply accounting principles to transactions and other events.	2.36	.570
ii. Apply International Financial Reporting Standards (IFRSs) or other relevant standards to transactions and other events.	2.09	.557
iii. Evaluate the appropriateness of accounting policies used to prepare financial statements.	2.04	.562
iv. Prepare financial statements, including consolidated financial statements, in accordance with IFRSs or other relevant standards.	2.02	.583
v. Interpret financial statements and related disclosures.	2.16	.638
vi. Interpret reports that include non-financial data, for example sustainability reports and integrated reports.	1.87	.661

Table 2: Management accounting

	<i>Mean</i>	<i>Std.dev</i>
i. Apply techniques to support management decision-making, including product costing, variance analysis, inventory management, and budgeting and forecasting.	1.96	.638
ii. Apply appropriate quantitative techniques to analyse cost behaviour and the drivers of costs.	1.87	.588
iii. Analyse financial and non-financial data to provide relevant information for management decision-making.	2.11	.682
iv. Prepare reports to support management decision-making, including reports that focus on planning and budgeting, cost management, quality control, performance measurement, and benchmarking.	2.00	.674
v. Evaluate the performance of products and business segments.	1.93	.618

Table 3: Finance and financial management

	<i>Mean</i>	<i>Std.dev</i>
i. Compare the various sources of financing available to an organisation, including bank financing, financial instruments, and bond, equity and treasury markets.	2.09	.668
ii. Analyse an organisation's cashflow and working capital requirements.	2.22	.704
iii. Analyse the current and future financial position of an organisation, using techniques including ratio analysis, trend analysis, and cashflow analysis.	1.98	.657
iv. Evaluate the appropriateness of the components used to calculate an organisation's cost of capital.	1.98	.621
v. Apply capital budgeting techniques in the evaluation of capital investment decisions.	1.87	.694
vi. Explain income, asset-based, and market valuation approaches used for investment decisions, business planning, and long-term financial management.	1.93	.688

Table 4: Taxation

	<i>Mean</i>	<i>Std.dev</i>
i. Explain national taxation compliance and filing requirements.	2.47	.625
ii. Prepare direct and indirect tax calculations for individuals and organisations.	2.44	.586
iii. Analyse the taxation issues associated with non-complex international transactions.	2.09	.668
iv. Explain the differences between tax planning, tax avoidance, and tax evasion.	2.42	.657

Table 5: Audit and assurance

	<i>Mean</i>	<i>Std.dev</i>
i. Describe the objectives and stages involved in performing an audit of financial statements.	1.71	.727
ii. Apply relevant auditing standards (for example, International Standards on Auditing), and applicable laws and regulations to an audit of financial statements.	1.67	.603
iii. Assess the risks of material misstatement in the financial statements and consider the impact on the audit strategy.	1.71	.695
iv. Apply quantitative methods that are used in audit engagements.	1.56	.586
v. Explain the key elements of assurance engagements and applicable standards that are relevant to such engagements.	1.60	.618

Table 6: Governance, risk management and internal control

	<i>Mean</i>	<i>Std.dev</i>
i. Explain the principles of good governance, including the rights and responsibilities of owners, investors, and those charged with governance; and explain the role of stakeholders in governance, disclosure, and transparency requirements.	1.87	.625
ii. Analyse the components of an organisation's governance framework.	1.84	.638
iii. Analyse an organisation's risks and opportunities using a risk management framework.	1.84	.706
iv. Analyse the components of internal control related to financial reporting.	1.98	.690

Table 7: Business laws and regulations

	<i>Mean</i>	<i>Std.dev</i>
i. Explain the laws and regulations that govern the different forms of legal entities.	2.20	.726
ii. Explain the laws and regulations applicable to the environment in which professional accountants operate.	2.24	.743

Table 8: Information technology

	<i>Mean</i>	<i>Std.dev</i>
i. Analyse the adequacy of general information technology controls and relevant application controls.	1.93	.654
ii. Explain how information technology contributes to data analysis and decision-making.	1.91	.668
iii. Use information technology to support decision-making through business analytics.	2.00	.674

Table 9: Business and organisational environment

		<i>Mean</i>	<i>Std.dev</i>
i.	Describe the environment in which an organisation operates, including the main economic, legal, political, social, technical, international, and cultural forces.	1.89	.745
ii.	Analyse aspects of the global environment that affect international trade and finance.	1.62	.650
iii.	Identify the features of globalisation, including the role of multinationals, e-commerce, and emerging markets.	1.53	.625

Table 10: Economics

		<i>Mean</i>	<i>Std.dev</i>
i.	Describe the fundamental principles of micro-economics and macro-economics.	1.73	.751
ii.	Describe the effect of changes in macro-economic indicators on business activity.	1.73	.720
iii.	Explain the different types of market structures, including perfect competition, monopolistic competition, monopoly and oligopoly.	1.58	.690

Table 11: Business strategy and management

		<i>Mean</i>	<i>Std.dev</i>
i.	Explain the various ways that organisations can be designed and structured.	1.98	.690
ii.	Explain the purpose and importance of different types of functional and operational areas within organisations.	1.82	.684
iii.	Analyse the external and internal factors that could influence the strategy of an organisation.	1.84	.673
iv.	Explain the processes that may be used to implement the strategy of an organisation.	1.71	.549
v.	Explain how theories of organisational behaviour might be used to enhance the performance of the individual, teams and the organisation.	1.69	.557

in line with the competency requirements of IES 2, whereas the evaluation of performance of products and business segments (mean = 1.93) and the application of techniques to analyse cost behaviour (1.87) were regarded to be less important.

Following on the low evaluation of techniques to analyse cost behaviour in the previous paragraph, the participants felt that it was not of great importance for professional accountants to be able to apply capital budgeting techniques in the evaluation of capital investment decisions (mean = 1.87). Techniques relating to investment decisions also revealed a lower preference by the participants (mean = 1.93). The ability to analyse the financial position of a business (mean = 1.98) and to calculate an organisation's cost of capital (mean = 1.98) were more on par with the proficiency levels of IES 2. Skills pertaining to the comparison of various sources of finance (mean = 2.09) and the analysis of an organisation's cashflow and working capital requirements (mean = 2.22) exceeded the proposed requirements of IES 2.

Professional accountants practising in the small- and medium-sized sector regarded all tax-

related skills to be more important than the competency levels proposed by IES 2. The calculation of direct and indirect taxes (mean = 2.44), tax compliance and filing requirements (mean = 2.47) and tax planning (mean = 2.42) revealed the highest skill requirements across all 11 competency areas. The analysis of taxation issues associated with non-complex international transactions (mean = 2.09) was, however, considered less important than the aforementioned competencies.

In contrast to *taxation* in the previous table, skills pertaining to *audit and assurance* revealed the lowest mean scores. The participants considered the assessment of material misstatement risks in the financial statements, the impact of these risks on the audit strategy (mean = 1.71) and the application of auditing standards, relevant laws and regulations to the audit process (mean = 1.67) to be more important. The practitioners assessed the ability to explain key elements of an audit (mean = 1.60) and quantitative methods in audit engagements (mean = 1.56) to be less important.

Similar to the relatively low ranking of *audit and assurance* in the previous table, the results

suggest a lower preference for skills related to *governance, risk management and internal control*. The highest mean score of 1.98 indicated that participants felt it was more important for professional accountants to be able to analyse the components of internal control related to financial reporting. The lowest mean scores revealed that the participants were of the opinion that it was not that important for professional accountants to explain the principles of good governance (mean = 1.87), be able to analyse components of an organisation's governance framework (mean = 1.84) and to analyse risks and opportunities of an organisation (mean = 1.84).

Competencies related to *business laws and regulations* were considered more important than *audit and assurance* as well as *governance, risk management and internal control* in the previous two tables. The results suggest that it is essential for professional accountants to be able to explain laws and regulations applicable to the environment in which they operate (mean = 2.24) and important to describe the laws and regulations that govern the different forms of legal entities (mean = 2.20).

With a mean of 2.00, it was regarded more important for professional accountants to be able to use *information technology* to make decisions through business analytics compared to the analysis of information technology controls (mean = 1.93) and the ability to explain how information technology contributes to data analysis and decision-making (mean = 1.91).

The results indicate that it is more important for South African professional accountants to have the ability to describe the environment, and the aspects thereof, in which the organisation operates (mean = 1.89) than to be able to identify the features of globalisation (mean = 1.53) and the aspect that affects international trade and finance (mean = 1.62). Similar to *auditing* in Table 5, all three the competency areas pertaining to the *business and organisational environment* were evaluated by the practitioners to be marginally less important than moderate levels.

Table 10 also revealed relatively low mean scores. The respondents indicated that it is marginally more important for professional accountants to be able to describe the fundamental principles of micro- and macro-economics and the effect of macro-economic indicators on business

activity (mean = 1.73) than the ability to explain different types of market structures (mean = 1.58).

In addition to *auditing* in Table 5, the *business and organisational environment* in Table 9 and *economics* in Table 10, the mean scores related to business strategy and management were below moderate levels (mean = 2). The most important skills were identified as the ability to explain the design and structure of organisations (mean = 1.98), the external and internal factors influencing the strategy of an organisation as well as the different functions and operations within an organisation (mean = 1.82). Processes related to the implementation of strategy for an organisation and theories of organisational behaviour were considered the least important by the participants.

DISCUSSION

Following on the analysis of the subsections of each competence area, the average mean scores were calculated for the 11 main competence areas. The competence areas' mean was 1.94, which varied between a high of 2.36 (*taxation*) and a low of 1.65 (*audit and assurance*). The mean values of the 11 competence areas are presented and compared to the competence levels of IES 2 in Table 12.

Four of the 11 competence areas evaluated, namely *taxation* (mean = 2.36), *business laws and regulations* (mean = 2.22), *financial accounting and reporting* (mean = 2.09) and *finance and financial management* (mean = 2.02) each had a mean score above moderate levels, as described in IES 2. Although the mean score for *economics* (mean = 1.68) is low in comparison to the other competency areas, the results exceeded foundational knowledge in IES 2.

The remaining six competence areas revealed results below moderate levels. These competence areas include *management accounting* (mean = 1.97), *information technology* (mean = 1.95), *governance, risk management and internal control* (mean = 1.88), *business strategy and management* (mean = 1.81), *business and organisational environment* (mean = 1.68) and *audit and assurance* (mean = 1.65).

Most accounting degrees focus on Accounting, Auditing, Taxation and Financial Management (SAICA 2017). Educational institutions normally include the aforementioned as main subjects, while the remaining competencies from

Table 12: Population mean answer compared to IES 2 competency levels

		IES 2 Comp. level*	Mean	Std. dev
<i>Competency Expectations Exceeding IES 2 Competency Levels</i>	Taxation	2.00	2.36	.560
	Business laws and regulations	2.00	2.22	.730
	Financial accounting and reporting	2.00	2.09	.470
	Finance and financial management	2.00	2.02	.550
<i>Competency Expectations Below IES 2 Competency Levels</i>	Economics	1.00	1.68	.670
	Management accounting	2.00	1.97	.530
	Information technology	2.00	1.95	.620
	Governance, risk management and internal control	2.00	1.88	.600
	Business strategy and management	2.00	1.81	.570
	Business and organisational environment	2.00	1.68	.620
	Audit and assurance	2.00	1.65	.570

* Intermediate level = 2; Foundation level = 1

IES 2 are included as supportive subjects in the curriculum. The research revealed that three of the aforementioned main subject areas were considered important by practitioners from the SME environment, namely *taxation* (mean = 2.36), *financial accounting and reporting* (mean = 2.09) and *finance and financial management* (mean = 2.02). In contrast, the practitioners regarded *audit and assurance* as the least important skill with the lowest mean score of 1.65.

The results also suggest that certain supportive subject areas were considered essential for an accounting career in the SME environment, namely *business laws and regulations* (mean = 2.22) and *information technology* (mean = 1.95). The practitioners' expectations pertaining to the legal and operational environment supported the findings of Kestel (2017) that accounting students should be able to understand the diverse nature of the workplace. Moreover, the ability of aspiring accountants to apply information technology for decision-making purposes confirmed the prominent role of technology in the accounting curriculum (Ugiagbe-Green 2017).

Furthermore, the research reaffirmed the notion that SMEs do not have an international focus (Rahman et al. 2017). Although *taxation* was considered to be the most important skill of accounting students entering the SME market, the taxation of international transactions was considered less important by the practitioners. In addition, the influence of the global environment on international trade, the features of globalisation and the role of multinationals received the lowest ranking in the *business and organisational environment*.

CONCLUSION

The research identified the learning outcomes and competence areas that an aspiring professional accountant should demonstrate when embarking on a career as a professional accountant. It is clear from the literature that the proposed learning outcomes and competence areas of IES 2 had been adopted by international stakeholders. The evaluation considered the relevance of the competency framework to practising accountants in South Africa, and specifically in the SME environment. The results obtained from the survey indicated that, in general, practitioners agreed with the proficiency levels that had been assigned to each competence area by the IAESB. The results did, however, indicate the more essential and less important skills required of an aspiring accountant entering the SME environment.

The learning outcomes and competence areas that were considered less important did not indicate that they were not relevant to practising accountants in the South African environment. These results should rather be considered as a useful guideline to tertiary institutions when determining whether the focus and content of the subjects of their professional education programs have been updated in a relevant manner.

The questionnaire also highlighted the skills shortages that exist among trainee accountants when they enter an accounting practice, as well as practitioners' recommendations on how to overcome this problem. These results suggest that first-year accounting trainees lacked certain skills and practical experience and were in need of some form of on-the-job training.

RECOMMENDATIONS

Section C of the questionnaire required the respondents to make recommendations that they felt would be of assistance in terms of overcoming the skills shortages of first-year accounting trainees when entering a practice. This question was purposefully designed to support the findings of Section B. In this regard, the participant provided recommendations on how entry-level trainees' skills could be improved. In addition to their recommendations, they briefly motivated why they had made these suggestions, which enabled us to identify a few skills shortages in entry-level SAIPA trainees from their point of view.

The practitioners' main concern was that first-year trainees lacked practical experience and were unable to apply theory to practice. Therefore, they suggested that practical experience should be incorporated into the professional accounting education program during the students' undergraduate studies. Furthermore, the practitioners identified the following skills shortages among first-year trainees who first entered a practice: (i) professional skills; (ii) writing skills; (iii) communication skills; (iv) basic accounting principles; and (v) computer literacy skills. In addition, the practitioners listed the inability to complete income tax, employees' tax and VAT returns as an area of concern. In general, the results suggested that first-year trainees lacked soft skills and practical experience, and not necessarily subject-specific matters.

REFERENCES

- Al-Esmail R, Hindi N, Osmani M, Weerakkody V 2017. Examining Graduate Skills in Accounting and Finance: The Perception of Middle Eastern Students. From <<http://journals.sagepub.com/doi/abs/10.1177/0950422217721759>> (Retrieved on 16 August 2017).
- Allen J, Mastilak MC, Randolph D, Weickgenannt A 2012. IFRS exercises through the curriculum: Helping Students put US GAAP and IFRS in context. In: D Feldmann, TJ Rupert (Eds.): *Advances in Accounting Education: Teaching and Curriculum Innovations*. Bingley, United Kingdom: Emerald Group Publishing Limited, pp. 315-347.
- Association of Chartered Certified Accountants (ACCA) 2009. The Role of Competency Frameworks in Improving Performance at Work. From <http://upload.news.esnai.com/2013/0328/13644_51854209.pdf> (Retrieved on 10 July 2014).
- Ataman B, Kiliç M, Uyar A 2016. Preparedness of the entities for the IFRS for SMEs: An emerging country case. *Journal of Accounting in Emerging Economies*, 6(2): 156-178.
- Aucock M, Merino A 2017. Evaluation of an intervention aimed at developing the personal attributes of prospective entrants into the accounting profession. *South African Journal of Accounting Research*, 31(1): 1-18.
- Bolt-Lee C, Foster SD 2003. The core competency framework: A new element in the continuing call for accounting education change in the United States. *Accounting Education*, 12(1): 33-47.
- Ceglowski J 1998. Has Globalization Created a Borderless World? From <http://people.tamu.edu/~aglass/econ452/Ceglowski_BorderlessWorld.pdf> (Retrieved on 10 July 2014).
- Chaffer C, Webb J 2017. An evaluation of competency development in accounting trainees. *Accounting Education*, 26(1): 1-28.
- Chantanasiri S, Linjee C, Siripis N 2017. A comparison of professional skills of accountants at the certified accounting practice in Thailand. *International Journal of the Computer, the Internet and Management*, 25(1): 132-135.
- Cigar DN 2017. Employability skills required by accounting graduates for careers in accounting. *Journal of Science, Technology & Education*, 5(2): 27-36.
- Daniels S 2015. Using Software to Broaden your Accounting Practice's Offering. From <<https://www.ifac.org/global-knowledge-gateway/performance-financial-management/discussion/using-software-broaden-your>> (Retrieved on 19 September 2016).
- Das B, Shil NC, Pramanik AK 2009. Convergence of accounting standards: Internationalization of accounting. *International Journal of Business and Management*, 4(1): 78-84.
- Deaconu A, Popa I, Buiga A, Fulp M 2009. Conceptual and technical study regarding future accounting regulation for SMEs in Europe. *Theoretical & Applied Economics*, 16(1): 19-32.
- Habidin NF, Hussin MYM, Mohamad SIS, Muhammad F 2017. College students' perceptions of the embedded soft skills elements program in accounting courses. *Saudi Journal of Humanities and Social Sciences*, 2(1): 106-110.
- Harvey L 2001. Defining and measuring employability. *Quality in Higher Education*, 7(2): 97-109.
- Heery E, Salmon J 2000. *The Insecure Workforce*. London: Routledge.
- Howcroft D 2017. Graduates' Vocational Skills for the Management Accountancy Profession: Exploring the Accounting Education Expectation-Performance Gap. From <<http://www.tandfonline.com/doi/full/10.1080/09639284.2017.1361846>> (Retrieved on 16 August 2017).
- IASB 2004. IASB Publishes Discussion Paper on Accounting Standards for SMEs. From <<https://www.iasplus.com/en/news/2004/June/news1470>> (Retrieved on 13 February 2016).
- Ibrahim MA, Mohaidin NJ, Sidik MHJ, Supar M 2017. Employers' Perception on Internship Program. From <https://www.shs-conferences.org/articles/shsconf/abs/2017/04/shsconf_icga2017_00010/shsconf_icga2017_00010.html> (Retrieved on 16 August 2017).

- International Federation of Accountants (IFAC) 2012. Proposed International Education Standard (IES) 2: Initial Professional Development- Technical Competence (Revised). From <http://www.ifac.org/system/files/publications/files/IES%202%20Exposure%20Draft%20and%20Memo_VDRAFT-Formatted%20283%29_0.pdf> (Retrieved on 15 July 2013).
- International Federation of Accountants (IFAC) 2014a. International Education Standard (IES) 2: Initial Professional Development – Technical Competence (Revised). From <http://www.ifac.org/system/files/publications/files/IAESB-IES-2-%28Revised%29_0.pdf> (Retrieved on 24 May 2015).
- International Federation of Accountants (IFAC) 2014b. International Accounting Education Standards Board Fact Sheet. From <<http://www.ifac.org/system/files/uploads/IAESB/IAESB-Fact-Sheet-2015-2.pdf>> (Retrieved on 24 May 2015).
- International Federation of Accountants (IFAC) 2016. Small and Medium Practices. From <<https://www.ifac.org/about-ifac/small-and-medium-practices>> (Retrieved on 19 September 2016).
- Judge W, Li S, Pinsker R 2010. National adoption of international accounting standards: An institutional perspective. *Corporate Governance: An International Review*, 18(3): 161-174.
- Kazi TB 2011. Effects of globalization on work and organizations: Exploring post-industrialism, post-Fordism, work and management in the global era. *Student Pulse*, 3(12): 1-2.
- Kestel J 2017. I'm Not Ready: Student Perspectives of their Preparedness for Professional Accounting Work. From <<http://clt.curtin.edu.au/events/conferences/tlf/tlf2017/refereed/kestel.pdf>> (Retrieved on 16 August 2017).
- Kiliç M, Uyar A 2017. Adoption process of IFRS for SMEs in Turkey: Insights from academics and accountants. *Accounting and Management Information Systems*, 16(2): 313-339.
- Klein N 2000. *No Logo*. London: Harper Perennial.
- Knight PT, Yorke M 2004. *Learning, Curriculum and Employability in Higher Education*. London: Routledge Falmer.
- Linjee C, Chantanasiri S, Siripis N 2017. A comparison of professional skills of accountants at the certified accounting practice in Thailand. *International Journal of the Computer, the Internet and Management*, 25(1): 132-135.
- Organisation for Economic Co-Operation and Development (OECD) 2003. The definition and selection of key competencies. From <<http://www.oecd.org/pisa/35070367.pdf>> (Retrieved on 30 April 2013).
- Ouye JA 2011. Five Trends that Are Dramatically Changing Work and the Workplace. From <http://rdi-sf.com/wp-content/uploads/2012/04/WP_FiveTrends.pdf> (Retrieved on 26 January 2016).
- Pacter P 2009. IFRS for Most Private Companies Goes Live. From <<http://go.galegroup.com/ps>> (Retrieved on 13 February 2016).
- Parvaiz GS, Mufti O, Wahab M 2017. Skills acquisition shortfall: A study of professional accounting education. *Business and Economic Review*, 9(2): 135-164.
- Rahman M, Uddin M, Lodorfos G 2017. Barriers to enter in foreign markets: Evidence from SMEs in emerging market. *International Marketing Review*, 34(1): 68-86.
- Robertson R 1992. *Globalization: Social Theory and Global Culture*. London: Sage.
- South African Institute of Chartered Accountants (SAICA) 2017. Becoming a Chartered Accountant CA (SA) is your Gateway to a Challenging and Exciting Career, Global Mobility, Flexibility, and Good Earning Potential in the Business Field of Your Choice. From <<https://www.saica.co.za/Training/Becoming-a-CA/tabid/157/language/en-ZA/Default.aspx>> (Retrieved on 15 September 2017).
- South African Institute of Professional Accountants (SAIPA) 2016. South African Institute of Professional Accountants (SAIPA). From <http://www.fasset.org.za/downloads/learnerships/saipa_professional_accountant_practice_learnership.pdf> (Retrieved on 13 October 2016).
- Treller GE 2014. Building Community Prosperity through Local Economic Development - An Introduction to LED Principles and Practices. From <<https://www.fcm.ca/>> (Retrieved on 13 February 2016).
- Tsunogaya N, Hellmann A, Scagnelli SD 2015. Adoption of IFRS in Japan: Challenges and consequences. *Pacific Accounting Review*, 27(1): 3-27.
- Ugiagbe-Green I 2017. *Exploring the Construction of Verifiable Evidence in a Technology-mediated Competency Assessment Environment According to the Experiences of Accounting Professionals*. PhD Thesis, Unpublished. Leeds: University of Leeds.
- Wilson-Medhurst S 2005. Using assessment to support employability awareness and development. *Investigations in University Teaching and Learning*, 3(1): 71-78.
- Zahra SA 1999. The changing rules of global competitiveness in the 21st century. *Academy of Management Executive*, 13(1): 36-42.

Paper received for publication on June 2017
Paper accepted for publication on December 2017