

# Employability Skills Required of Accountants

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**Abstract.** Employability skills have become increasingly important in a competitive job market in a globalised world of advanced technology. Our study examines employability skills of accountants as indicated in job advertisements in Australia and New Zealand, as they provide a window into the skills that are most valued by employers. The results show that of the 31 identified skills, 13 were most cited. Importantly, the most sought after skills included the ability to collaborate with colleagues, present, discuss and defend views, and having a positive attitude. Overall, a team player with a positive attitude and good communication skills appeared to be the most valued behavioural skill as perceived by employers. This probably reflects a change in the work of accountants, from being ‘backroom number crunchers’ to engaged business professionals.

## 1 Introduction

The environment in which accountants work is rapidly changing particularly with advances in information technology and globalisation of economies. To meet the challenges brought about by these changes, it is essential that University accounting programmes provide graduates with strong technical knowledge and the essential skills to gain employment and make an immediate contribution to a business [1]. The increasing importance of skills development is reflected in the International Accounting Education Standards Board (IAESB)’s 2015 release of *International Education Standard (IES) 3 Initial Professional Development – Professional Skills*. This educational standard indicates the level of professional skills needed to perform the role of a professional accountant and classifies the skills under four competency areas: intellectual, interpersonal and communication, personal, and organisational.

There is an extensive literature on the generic employability skills expected of accounting graduates. The majority of these studies were carried out in the last three decades and focused on the importance of various skills as viewed by academics, employers, students or graduates and professional accounting bodies. These studies suggest that accounting programmes are failing to meet the expectations and needs of employers or are not in harmony with the requirements of the real world [3]. An important implication is that a number of vital skills need to be developed within the accounting curriculum [12].

Although there is consensus among accounting academics that employability skills need to be developed in the accounting curriculum, it is a challenge to decipher what and how to incorporate the development and assessment of a wide range of employability skills. One of

the main constraints as identified in the literature is that there is insufficient time to help students develop a wide range of employability skills as the accounting curriculum is already crowded with required technical content [11]. Apart from the time factor, other possible constraints include the lack of expertise and resources in assisting students with skills development. Further, there are suggestions that some of the generic skills are best developed and applied in the workforce rather than taught in a university. As it is not practical to cover all the required skills expected of employers, accounting educators perhaps need to prioritise certain skills that are deemed most important in the workplace. However, as the global economy evolves, it is essential to continuously ascertain and articulate employers' opinions on what makes a graduate employable so that accounting educators are kept abreast of the skills and attributes that are most valued in the workplace. This study contributes to the literature on the employability skills required of accounting graduates by examining the essential skills listed in job advertisements for accountants in Australasia.

## **2 Literature Review**

There are various definitions of employability skills. They are commonly termed as generic skills, non-technical skills, capabilities, key competencies, personal transferable skills, soft skills and attributes, and are considered relevant to both entry-level and established employees [12]. Since the mid-1980s, the literature on employability skills has grown in Australia, NZ and other countries indicating that the issue is not unique to a particular country but is an area of growing concern worldwide and in all disciplines including accounting. The accounting curriculum has long been criticised for being too narrow and outdated, and failing to prepare students adequately for employment in the modern business environment [1]. The 20<sup>th</sup> century witnessed the accounting profession in numerous countries calling for further development of generic skills in the accounting curriculum to enhance a capacity for lifelong learning. In the US, The American Education Change Commission (AECC, 1990) set out a number of desired capabilities which accounting courses should develop in students, including: intellectual skills, interpersonal skills, communication skills, personal capacities and attitudes. The Australian and NZ accounting bodies have supported similar views regarding the importance of these various skills. To gain a better understanding of what skills are required of accounting graduates, numerous studies have been conducted in various countries, raising the question: "What are the important employability skills required of accounting graduates

Studies on graduate employability skills in general have identified a number of skills as important; however, personal, interpersonal, and intellectual capabilities usually rank highly [4]. Studies conducted in the accounting disciplines showed that graduates need more than technical skills to be employable. Communication skills and interpersonal skills are generally rated by employers as the most important characteristics [7]. Knowledge of software packages such as spreadsheet software, Microsoft Excel, Windows and word processing software are also in high demand [7]. However, the importance of individual skills varied for different groups of graduates/students, and educators and employers [8]. For example, working independently is rated highly by employers whereas academics rated teamwork and communication skills as more important. Stoner and Milner [8] show a gap exists between the skill expectations of academics and graduates/students. The study on graduates by de Lange et al. [4] found significant expectation gaps particularly in interpersonal skills, oral expression and computing/information technology skills. Regarding technological skills, Rackliffe and Ragland [10] pointed out that there is a possible disconnect between Excel skills needed in practice and those developed in accounting education. Bui and Porter's [3] study shows that there are differences in

educators and employers' perceptions of the knowledge, skills and competencies required of graduates. Employers in particular expressed their disappointment that the new graduates they have employed lack numerous essential skills or do not match their expectations [5]. Wells et al.'s [13] study indicates a gap exists between expectations of graduates and what university course programmes are providing in NZ universities. The greatest gap identified by graduates, employers and academics was the development of team skills [4].

The issue of employability skills has been debated in the literature for over three decades. Although most universities have adopted a variety of ways to develop various skills, there is little evidence that accounting education has changed much to meet the demands of key stakeholders like employers and professional accounting bodies [4]. There is also little evidence from employers of accounting graduates that the level of generic skills development has improved over the past two decades. Although there is consensus that generic skills are needed to be developed in the accounting curriculum, the extent to which each skill should be developed at tertiary institutions remains debatable. Therefore, it is not surprising that the skills expectation gap continues to be an area of concern in the 21<sup>st</sup> century.

### **3 Objectives of Our Study**

Employers are key stakeholders in accounting education and they play an important role identifying the skills that are most relevant for accounting graduates [12]. To examine the current employer demands for workplace skills, we developed the following research questions:

- What are the current skill requirements for accountants as indicated in job advertisements?
- Are there any differences in the skills demanded by employers in jobs advertised for more experienced versus less experienced accounting positions?

In the early 1990s, Birkett developed a set of competency based standards for professional accountants in Australia and NZ, which were ultimately adopted by the major accounting bodies in Australia and NZ (CPA Australia, ICAA and ICANZ). Birkett's [2] taxonomy of skills is classified into two main groups: cognitive and behavioural. He identifies three dimensions of cognitive skills: technical, analytic/constructive and appreciative, and three dimensions of behavioural skills: personal, interpersonal and organisational. According to Birkett [2], "professional work requires action, supported by decision processes; it involves the exercise of instrumental skills, supported by intellectual skills." He suggests that both cognitive and behavioural skills are likely to parallel typical patterns of career progression – with technical and personal skills drawn on initially, then analytic/constructive and interpersonal skills, and appreciative and organisational skills coming to the fore at more advanced career stages.

The IAESB of IFAC recently revised its standard on skills to meet the challenges of the changing environment in which professional accountants work. The IES 3 *Initial Professional Skills* came into effect on 1 July 2015. It identifies four skills: the intellectual, interpersonal and communication, personal and organizational skills which a professional accountant integrates with technical competence, and professional values, ethics and attitudes to demonstrate professional competence. In summary, most skills framework have some common elements that concern basic/fundamental skills, people related skills, conceptual/thinking skills, personal skills and attributes and skills related to the business world and community. For this study, we draw on the framework developed by Birkett [2] and IES 3 as both have identified a comprehensive list of skills required of accounting graduates. Figure 1 shows the employability skills framework used in this study. Based on

Birkett's framework [2], skills are considered under two broad categories: cognitive and behavioural.

## 4 Research Method

We examined job advertisements in the accounting area in Australia and NZ as there is a high degree of labour mobility between the two countries. There are no restrictions for New Zealanders and Australians to live and work in the other country. We used a major online job site, [www.seek.co.nz](http://www.seek.co.nz) (jobs in NZ and Australia), which is one of the most popular job sites used in Australasia. From this website, we selected accounting as the main job classification and screened the job subcategories shown. Then we selected 16 out of 24 job sub classifications we considered were more suitable for applicants with at least an undergraduate accounting qualification. We captured and examined the job advertisements for the six-month period, from July 2015 to December 2015, and only focused the content analysis on employability skills required for the job. Over this period there were 18,439 and 3,282 accounting advertisements in Australia and NZ, respectively, after removing any repeated advertisements. We used a content analysis software package, Wordstat, 2004) to generate the frequencies of specific categories of skills included in the advertisements. Drawing from the literature, we initially built a categorisation dictionary of employability skills that fall under each of the five categories. We started with a list of well-known words or phrases commonly used in the literature to denote skills for each of the five main categories and their respective subcategories. The initial categorisation dictionary was then applied to the database of job advertisements to identify the frequency with which specific categories were listed in the advertisements. We then examined the most frequently stated words and phrases in the advertisements which were not in our initial dictionary. Words or phrases that we considered relevant were subsequently included in our subcategories after having considered their context in the entire advertisement's text.

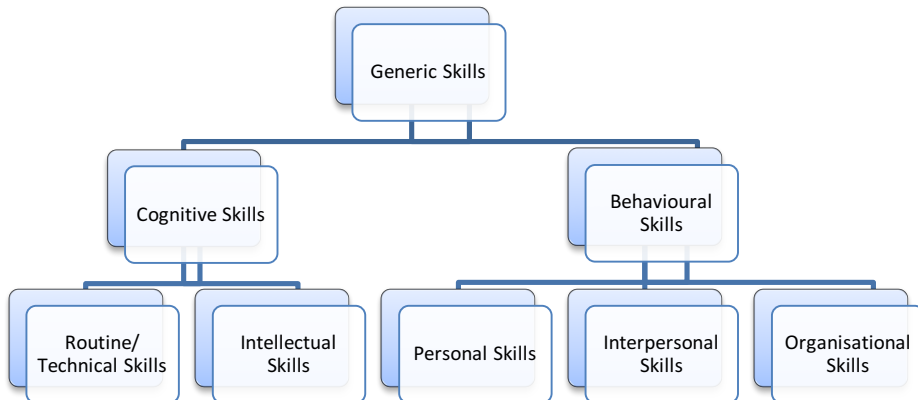


Fig. 1. Employability skills framework

## 5 Findings

The most frequently sought after job categories were in business services and corporate advisors, financial accounting and reporting, taxation, management accounting and budgeting, analysis and reporting, financial managers and controllers, and assistant accountants. However, there was a much higher proportion (13%) of taxation jobs in Australia as compared to NZ (2.9%). This is likely to reflect the much simpler tax system in NZ as compared to the more complex tax system in Australia. Behavioural skills

dominated the top requirement as the number of words or phrases cited that fall into this category represented about 77% of all word/phrases used in the advertisements for jobs in Australia and New Zealand. Table 1 shows the frequency of each of the skills in the five broad categories that were mentioned in the advertisements. Interpersonal skills were the most frequently mentioned set of skills in the job advertisements. The second most frequently cited set of skills in the advertisements were personal skills. These results suggest that interpersonal and personal skills were in high demand by employers in Australia and NZ. The frequencies of citations of intellectual, routine/ functional, and organisational categories in both countries were very similar. These findings are generally consistent with the broad categories of professional skills identified in IES 3.

**Table 1.** Broad Categories of Skills and the Extent of Citation in Advertisements

	Australia		New Zealand	
	No	%	No	%
Interpersonal	16,750	91%	2,888	88%
Personal	11,516	62%	2,243	68%
Intellectual	8,180	44%	1,424	43%
Routine/functional	7,964	43%	1,409	43%
Organisational	7,740	42%	1,303	40%

To gain further insights into the occurrence of specific skills cited in the advertisements, we examined the percentage of advertisements that have words/phrases shown in the dictionary. The results show that 13 out of the 31 specific skills in the dictionary were cited in more than 10% of the total advertisements. Table 2 shows the skills ranked by the percentage of citations in job advertisements. The top 13 skills mentioned in the advertisements for jobs in Australia and NZ were found to be similar except for some slight differences in the ranking of some of skills within the top most cited 13 skills. The top four skills were ranked in the same order for Australia and NZ. Collaborating with colleagues was the most cited interpersonal skill and was mentioned in more than 70% of the job advertisements. This finding suggests that employers value team work and prefer a candidate that is a team player and can collaborate with colleagues. This aspect of interpersonal skills has become more and more important as it is critical to an organisation's productivity and profitability. The second ranked skill which is also an interpersonal skill, i.e., the ability to present, discuss and defend views, encompasses communication, presentation and speaking skills. One aspect of personal skill that is positive attitude was ranked third with employers expressing a desire for employees who are committed, passionate, dynamic, energetic, vibrant, and self-driven. The fourth ranked skill is the use of information technology. Not surprisingly, although use of information technology is a routine skill, it is an important skill in today's global, technology-demanding economy. Further, it indicates that information technology is a core competency for accountants.

The next three frequently cited skills were: leadership skills, understand group dynamics, and meeting deadlines. Understanding group dynamics is about people skills and relationships and is an important aspect of interpersonal skill which is highly valued in the accounting work environment. The ability to lead and meet datelines indicates the importance of good organisational skills which is vital for accountants in managing their work. The three skills ranked 8<sup>th</sup> to 10<sup>th</sup> were observant and awareness, act strategically, and think and act independently. Acting strategically refers to the employers' preference for a person who is proactive, has the quality of acumen and good work ethics, and one

who is commercially and intellectually astute. Employers also desire a recruit who has the skill of being able to think and act independently, i.e., one who is able to apply professional scepticism, is self-motivated and inquisitive, and is a practical person. Both of these skills are important personal skills. Another highly desired intellectual skill by employers is being observant or aware, i.e., a person who pays attention to details and is accurate. This is an essential skill as accountants are expected to be detail oriented so as to be able to detect errors, discrepancies or inconsistencies.

**Table 2.** Top 13 Skills Ranked by Percentage of Job Advertisements

		Australia	New Zealand
<i>Interpersonal:</i>	Collaborate with colleagues	1 (77.3%)	1 (72.5%)
<i>Interpersonal:</i>	Present discuss defend views	2 (58.1%)	2 (46.7%)
<i>Personal:</i>	Positive attitude values	3 (39.6%)	3 (45.4%)
<i>Routine:</i>	Use of information technology	4 (31.8%)	4 (35%)
<i>Organisational:</i>	Apply leadership skills	5 (23%)	7 (19.1%)
<i>Organisational:</i>	Meet deadlines	6 (21.7%)	5 (22.9%)
<i>Interpersonal:</i>	Understand group dynamics	7 (20.6%)	6 (22.5%)
<i>Intellectual:</i>	Observant and aware	8 (17.5%)	10 (16.1%)
<i>Personal:</i>	Act strategically	9 (16.2%)	9 (17.4%)
<i>Personal:</i>	Think and act independently	10 (16.4%)	8 (18.9%)
<i>Intellectual:</i>	Analyse, reason and conceptualise issue	11 (15.1)	13 (13.3%)
<i>Personal:</i>	Be flexible	12 (13.8)	11 (15.7%)
<i>Intellectual:</i>	Solve problems and construct arguments	13 (12.7)	12 (13.8%)

The last three skills are: analyse, reason and conceptualise issues, be flexible and solve problems, and construct arguments. Analyse, reason and conceptualise issues refers to analytical skills and logical reasoning skills. These are intellectual skills expected of accountants who frequently have to deal with issues concerning costs, revenues, investments and profit. Solve problems and argument is another highly cited intellectual skill. Employers seek to employ people who are forward thinking, lateral thinking, and who can think “outside the box”; accountants are expected to contribute to add value to their work. Being flexible is a personal attribute which refers to someone who is able to adapt to circumstances. With the accounting industry being highly dynamic and the rapid advancement of technology, the ability to adapt quickly to changes is an important skill cited in many advertisements.

We also examined whether the skill requirements cited in the job advertisements differ by experience. We used those advertisements that cited the requirement of Chartered Accountant (CA) or Certified Public Accountant Australia (CPA) to proxy for more experienced recruits. The mean number of times skills are cited in the advertisements for each one of the five broad categories. A t-test was used to compare differences between means of the two groups (CA/CPA and non-CA/CPA). The results show that there were significant differences in the frequency of interpersonal and intellectual skills cited in advertisements that required a qualified CA/CPA and those that did not require such qualifications in Australia and NZ. Interpersonal skills were cited more frequently for jobs requiring a CA/CPA than those that did not require such professional qualifications. This

result suggests that interpersonal skills are considered as very important for jobs that require more experienced accountants. It is very likely that those advertisements that specified the CA/CPA requirement are for top level positions. On the other hand, intellectual skills were cited more frequently for jobs that did not require a CA/CPA qualification, indicating that employers emphasised intellectual skills as very important for less experienced recruits which includes entry level accountants. This may also suggest that employers assume that CA/CPAs have those skills and therefore there would be no need to emphasise such skills in the advertisements. Two other differences were found in the Australian advertisements only. Personal skill and routine skill appeared more times in the advertisements for less experienced accountants than for experienced accountants. Again, this result perhaps suggests that employers are more particular that a less experienced recruit is skilled in routine task and possesses good personal attributes.

## **6 Conclusions**

In a globalised business and employment world and with advances in technology, the issue of employability skills has become increasingly important over the years. To identify the most in demand skills required of accountants, our study examines the employability skills indicated in job advertisements for accountants in Australia and NZ as they provide an objective indication of the important skills required in the work place.

Our analysis of the job advertisements shows that a mix of skills is required of accountants in Australia and New Zealand. The top 13 skills most cited out of the 31 we identified in the dictionary were: collaborate with colleagues, present, discuss, and defend views, positive attitude values, using information technology, meet datelines, understand group dynamics, apply leadership skills, think and act independently, act strategically, observant and aware, analyse, reason and conceptualize issues, be flexible, and solve problems and construct arguments, suggesting they were the most in demand by employers. Although some of the rankings of skills were slightly different between the Australian and New Zealand advertisements, the top 13 skills were the same. Employers, therefore, seek a multitude of skills but placed more emphasis on interpersonal and personal skills. Most importantly, they valued a recruit who can collaborate with colleagues, present, discuss, defend views and have a positive attitude. Overall, a team player with a positive attitude and good communication skills appeared as most desired by employers. This probably reflects a change in the work of accountants from being the “backroom number cruncher” to an engaged business professional.

The results further show that in both the New Zealand and Australian advertisements, good interpersonal skills were more often cited for an experienced accountant than a less experienced accountant. In contrast, intellectual skills were cited much more frequently for less experienced or entry level accountants than jobs requiring CA/CPAs. Furthermore, the occurrence of two other skills only in the job advertisements in Australia suggests that employers emphasised personal and routine skills for less experienced Australian accountants than for CA/CPAs.

What implications do our results have for accounting academics and accounting education? Some academics believe that universities should not be fully responsible for helping students develop all the employability skills expected by employers. Employers generally tend to expect a work-ready graduate whereas academics tend to have a stronger focus on the development of intellectual capability and ability [3]. Unequivocally, it is not possible for tertiary institutions to teach all the skills that are demanded by employers. Academics play a key role in delivering the initial professional development whereas an employer’s role is to help in nurturing the professional development of accounting graduates. Accounting qualifications are important in providing a broad introduction to a

potential career in business or management. IES-3 expects that IFAC member bodies design their professional accounting education programmes so that graduates achieve an intermediate level of proficiency in four professional skills: intellectual, interpersonal and communication, personal and organization.

This study shows that interpersonal skills are very important for accountants. The literature indicates that this is the skill with the greatest gap as identified by graduates, employers and academics. Academics certainly need to focus on the development of this skill. Employability skills are also interconnected in some way. So by helping students develop teamwork skills, it will also help them develop people and communication skills. Employers also want people with good personal attributes such as an energetic, dynamic, passionate and adaptable personality. This is an important skill as it is very often cited for less experienced accountants which would include entry level accountants. Some of these attributes are harder to help develop as they are more personality traits influenced by genetics or culture, but perhaps could be indirectly influenced during the development of other employability skills. In contrast, attributes like good work ethics, professional scepticism are easier to integrate into the curriculum. Routine skills like the use of information technology must also not be underestimated as they are particularly important for entry level accountants and academics should continuously support students' development of these skills. Information technology competence is an important criteria and employers desire those who are proficient in using various accounting tools such as Excel, MYOB, Xero and other database systems. The next group of skills which accounting academics need to help students develop is organisational skills which include leadership and meeting deadlines. Intellectual skills are also required by employers and most academics should have already integrated the development of analytical and problem solving skills, as well as the need to pay attention to detail, into the accounting programme. Many universities' accounting curricula have already incorporated a number of employability skills in their programmes although they may vary in the emphasis of certain skills over others and the way that these skills are integrated into academic programmes. This study provides some insights to academics into the important employability skills that should be integrated into accounting programmes. Depending on how they are developed and delivered, the study's findings may assist in narrowing the gap between the competencies and skills developed at university and the skills required of accounting graduates by prospective employers.

## **7 Limitations**

A limitation of the study is that the job advertisement is taken as a valid representation of the requirements of employers. It is possible that some skills that are required of a potential employee might not be specifically mentioned in job advertisements. Their non-occurrence does not mean that they are not required. However, job advertisements certainly tell us those skills that are most desired or valued by employers as generally employers seek to minimise recruitment costs by appealing only to potential applicants who have the required skills. Perhaps what is more intriguing is the level of competence actually required by employers which is hardly mentioned in the job advertisements. Furthermore, Hancock et al. [5] interviewed employers and found that they had modest expectations for new graduates' technical skills but viewed non-technical skills as very important. Future research could explore job advertisements and interview the respective employers to tease out their perspectives on the level of competence in employability skills they seek from new accounting recruits. After all, employers also play a crucial role in developing and enhancing the employability skills of their staff.



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