

Identifying the employment expectation-performance gaps of early career accounting graduates

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Abstract

This paper investigates the contribution of accounting graduates' education to the development of employment capabilities including an evaluation of the capabilities important for early professional success. The data for the study were collected via a suite of three online surveys collectively known as the Graduate Employability Indicators (GEI) incorporating the perceptions of three stakeholder groups: graduates, employers and accounting academics. The findings demonstrate that graduates do not perceive that employability skills are well developed within the accounting curriculum. Although employers and academics ranked some capabilities as highly important, they believed that graduates did not demonstrate high levels of skills, for example team skills and oral communication. The study demonstrates that an expectation-performance gap exists despite efforts to articulate the attributes required of accounting graduates. The paper contributes to the ongoing debate about the role of accounting education in developing employment skills that meet the needs of employers. Additionally the findings suggests that enhanced authentic assessment tasks including greater use of group work to enhance team skills has potential to improve graduate employability outcomes.

1. Introduction

The changing nature of the higher education market and the structure of graduate labour markets have placed increased emphasis on employability of accounting graduates. Within the accounting discipline recognition of the increased complexity and rapid change in the professional role of the accountant (e.g. Howieson, 2003) has emphasised the need for graduates with high levels of skills. It has been argued however that students are not being adequately prepared for employment in the modern business environment via their educational experiences. The conventional accounting curriculum has been challenged (e.g. Albrecht and Sack, 2000) as not adequately preparing accounting students for employment.

Employers have also supported a move away from more procedural approaches to teaching accounting and are no longer prepared to accept graduates only able to demonstrate technical competency. Prior research indicates that accounting graduates need to be able to demonstrate an ability to present their views in writing, as well as an ability to articulate and explain their views in a convincing verbal form (e.g. Jackling and de Lange, 2009).

Within universities attempts have been made to clarify the nature of the education offered to students and subsequently the potential contribution of graduates to society (Barnett, 1990). This has been reflected in the articulation of descriptions of the employability skills of graduates (also known as generic skills, graduate capabilities). These employability skills have come to be known as the skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable in a range of contexts acquired as a result of degree completion (HEC, 1992; Bowden et al., 2000). The emphasis on employability skills is clearly articulated in higher education policy. In Australia, universities have introduced requirements that graduates complete a 'generally accepted' set of attributes typically embedded within degree courses across each university. This type of university-wide policy demonstrates the desire of universities to promote the

development of graduate capabilities that encompass lifelong learning, technical training, oral, written and interpersonal skills, as well as exposure to organisational skills and technology generally known as generic skills

This study specifically addresses the employability skills of accounting graduates. The study incorporates feedback from graduates, employers and academics in terms of assessing the effectiveness of curricula in preparing accounting students for professional employment. The findings reported in this paper are part of an ALTC Competitive Grant, '*Building course team capacity to enhance graduate employability*', that involves a suite of three online surveys which gather the perceptions of recent graduates (up to 5 years post study), employers and academics in relation to the teaching, assessment, achievement and importance of employability skills across a range of discipline areas including accounting (Oliver et al., 2010). To date there has been limited research that has addressed the perceptions of all three accounting stakeholder groups in examining the extent of the development of skills and the importance of employability skills in assessing work readiness. The objectives of the current study are to investigate the perceptions of:

- graduates, as to the extent that accounting courses contribute to the development of employment capabilities ;
- employers, as to the extent that new graduates generally demonstrate the achievement of the employment capabilities;
- academics, as to the extent that students develop employment capabilities in accounting studies at university.

The next section reviews the literature on the scope of employment capabilities, their development in the university curriculum and the skills expected of accounting graduates entering the workforce. The following section explains the research collection methods and analysis techniques employed in the study. The fourth section discusses the results of the

analysis and their importance for accounting education. The paper concludes with recommendations for future research in terms of assessing the ability to develop generic skills in the curriculum to meet the demands of employers and outlines initiatives being undertaken to revise curriculum to enable educators to prepare accounting students to meet the needs of a changing global business environment.

2. Literature Review

This section reviews the literature that addresses the perceptions of various stakeholder groups (graduates, employers and academics) re generic skills having first addressed the complexity in identifying commonalities in the definition of employment skills set.

Whilst it is widely accepted that graduates need a broad skill base to become competent practitioners in their field, there is no consensus of opinion on which specific skills should be fostered within the university teaching program. Fallows and Steven (2000) highlighted the lack of a definitive approach to defining employable (generic) skills. Barrie (2006) explored academics' conceptions of what he termed 'generic graduate attributes' and found there was not a common understanding of what constituted the skill base graduates should have on entering the workforce. More recently Bridgstock (2009) has argued that the conventional definition of generic skills is too narrow and educators should be taking into account the need for broader career management skills. The emphasis in this context is on building lifelong learning skills that allow graduates to adapt to the changing requirements of job markets that will occur over their working life. This raises the issue of what is precisely meant by the term 'employable (generic) skills'.

The debate over what constitutes the skill base an accounting graduate should have acquired during study for their qualification is further compounded by the lack of distinction between capabilities and competencies in the literature (Rainsbury et al., 2002).

Competencies derive from a more vocational approach to education. Definitions of what constitutes a competency based approach vary but a common thread is the focus on outcomes in terms of the workplace (Boritz and Carnaghan, 2003). IFAC (2001) defined competence as the ability to perform a work task to a defined standard. Capabilities, on the other hand, relate to knowledge, skills and personal qualities needed to perform specific tasks. The interchange of terms in the literature has blurred the understanding of the nature of skill development (Boritz and Carnaghan, 2003). In this respect knowledge of differing perceptions of skill requirements can provide insights into the outcomes of the shift in educational emphasis to employability.

It is argued that in preparing accounting graduates for employment, the curriculum should incorporate a range of technical and generic skills (Mathews, et al., 1990). Increasingly there has been a recognition that technical skills need to be accompanied by non-accounting skills to enable the professional accountant to make successful use of the knowledge gained through education. The International Education Standard 3 (IES 3, 2005) specifies that candidates for membership of an IFAC member body should have an appropriate mix of skills (intellectual, technical, personal, interpersonal and organizational) to function as a professional accountant (see IAESB, 2005, p. 47). In the context of the accounting curriculum in Australia, the generic skills are expected to be integrated in the core curriculum of accounting programs. The professional accounting bodies have provided a comprehensive list of skills required of accounting graduates. In the 2012 accreditation guidelines for higher education CPA Australia and the Institute of Chartered Accountants in Australia outline components for assessing an accounting degree for accreditation. The Professional Bodies acknowledge the accounting academic standards identified by the Learning and Teaching

Academic Standards Project of the ALTC in December 2010¹. These standards prescribe threshold learning outcomes across five interrelated areas, that all providers of Bachelor and coursework Master degree programs in accounting are expected to meet. These five areas are Judgment, Knowledge, Application skills, Communication and team work and self-management.

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The learning outcomes related to generic skills have typically been developed in accounting courses via case studies, small group discussion, debates, group assignments, problem solving tasks and simulated decision-making in complex and ambiguous situations. For the purposes of this study the term employment capabilities will be used to identify the technical and non-technical skill set required of graduate accountants.

Given the demands of universities and professional accounting bodies, there has been continued criticism that accounting programmes fail to equip graduates with an appropriate set of employable capabilities to meet the demands of a rapidly changing business environment (Jackling and de Lange, 2009; Howieson, 2003). The perceived mismatch between capabilities which employers' expect of new accounting graduates gives rise to what Bui and Porter (2010) have termed the 'expectation-performance gap'. Various reasons have been put forward to explain this gap including differences in views regarding the capabilities which accounting graduates should possess and the appropriateness of accounting programmes to develop these capabilities (e.g. Simons and Higgins, 1993). The following sections of the literature review address the various perceptions of graduates/students, employers and educators of employment capabilities including where possible reference to reasons as to why a gap in expectation-performance may exist.

¹ Australian Learning and Teaching Council (2010), Learning and Teaching Academic Standards Project: Accounting Academic Standards Statement, www.olt.gov.au/system/files/resources/altc_standards_ACCOUNTING_090211.pdf, page 10

2.1 Perceptions of graduates about development of employment capabilities

The debate over the desired type and level of skills expected of accounting graduates has been motivated by the shifting role of accountants as 'knowledge professionals' in the international business environment (Howieson, 2003). A better mixture of skills is seen as necessary to address the diversity of business challenges. For instance, Daff et al., (2012) suggest that Emotional Intelligence (EI) is a desirable quality in accounting graduates as it allows accountants to excel in strategic decision-making, teamwork, leadership and client relations. They contend that in the quest to find the *best* employees, employers have focused on EI whereas accounting faculty has placed less emphasis on EI skill development and a greater emphasis on generic skills

Prior studies have indicated that the successful acquisition of particular skill sets within a tertiary degree is related students' perceptions of the importance of generic skills in the work environment (Usoff and Feldman, 1998; Arnold, Loan-Clark, Harrington and Hart, 1999; Rainsbury, Hodges, Burchell and Lay, 2002). De Lange et al. (2006) found that graduates perceived that there needed to a greater emphasis on interpersonal and communication skills in their undergraduate studies. The perceived skills gap in this study, were also identified by Mathews et al. (1990) as having the highest degree of difference between emphasis given and emphasis that should have been given to the skill. Similarly, Jackling and de Lange, (2009) found that graduates perceived their accounting courses were directed towards attainment of technical skills with less emphasis on generic skills. Of interest to the present study is that the Jackling and de Lange (2009) study indicated that in their accounting studies graduates perceived that in terms of generic skills, the greatest emphasis was given firstly to written communication, followed by team skills interpersonal skills and oral expression (p.376). Stone and Lightbody, (2012) provide further important evidence of the need for accounting students to develop listening skills as part of their skill set. . In an earlier New Zealand study,

Wells et al. (2009) found that the two key areas for improvement based on graduate perceptions were teamwork and application of learning to real world situations.

2.2 Employer perceptions of skill development

Prior research demonstrates that often employers and graduates have different perspectives about the skill set required for an accounting professional (e.g. Kim et al., 1993; Radhakrishna and Bruening, 1994). Various studies have specifically investigated employer perceptions of accounting graduates' employment capabilities. For instance, Bui and Porter (2010) via a series of interviews found that employers considered communication skills to be essential as well as presentation skills. All employers interviewed in Bui and Porter's study considered teamwork skills essential for accounting graduates and emphasised the importance of accounting students engaging in work experience during studies to develop such skills. Bui and Porter did however find some differences between firms of different size in terms of the expectation of accounting graduates. For instance, medium-sized firms appeared to have high expectations of graduate capabilities and expected them to take on senior roles within one year. The 'Big 4' firms were interested in research skills being well developed in accounting graduates. Similarly, employer interviews in Jackling and de Lange's (2009) study showed that team skills were most frequently mentioned as desirable skills in graduates. Other skills emphasized by employers were leadership potential, verbal communication and interpersonal skills. There was evidence from the Jackling and de Lange (2009) study of a clearly identified gap in graduate perceptions of skills acquired in their university studies and employer expectations of the skill set of accounting graduates. Velasco (2012), argues that the perception by graduates that employers values higher grades, when employing students is a misconception since the study indicates that employers value, "more aspects related with personality and other personal qualities of young graduates". The study

further shows that “soft skills” are more important in the selection process and higher grades are valued more in the public sector. Similarly Bouyer (2011) in outlining the expectations of Big 4 firms in terms of graduate recruitment, indicated that employers favour accounting graduates with a global mindset i.e. able to work in diverse teams including being able to interact with people from different cultural backgrounds. In the ALTC *Accounting for the Future* project, the changing graduate skill requirements were investigated (Hancock et al., 2010). Through interviews with 47 employers the broad skill categories more frequently referred to by interviewees were: communication and presentation; teamwork and good interpersonal skills; self-management; initiative and enterprise; problem solving; technological competence and planning and organizing skills. These capabilities emerged as discriminators for professional success and consistent with Velasco (2012) demonstrate that employers put less emphasis on academic success.

The literature on employer expectations suggests that there is an overall expectation-performance gap. Although it may be unrealistic to expect new graduates to immediately meet the requirements of employers, there is evidence that the expectations of employers requires a greater level of attention to be given to the graduate employment capabilities being incorporated and delivered in accounting courses. Employers also appear to focus on what may be termed as higher order personal and interpersonal skills including ability to engage clients, negotiate and act strategically (Hancock et al., 2010).

2.3 Perceptions of academics of development of skills in accounting courses

Various studies have found that the views of academics about the subject-matter taught in universities differ from the views of practitioners (e.g. Armitage, 1991; Morgan, 1997; Francis and Minchington, 1999). For instance, Armitage (1991) found that academics teaching financial accounting believed that they should focus on technical aspects in the

course while practitioners preferred a much wider coverage of topics. Watty (2005) in a study of academics from 30 universities in Australia, found that accounting educators considered accounting education to be compliance-driven and largely prescribed by accreditation requirements of professional accounting bodies.

More recently the study of Bui and Porter (2010) illustrated that accounting educators viewed that the principal role of university education as the development of students' intellectual capabilities, which is reflected in written communication skills and analytical skill as primary learning objectives. Of the six accounting academics interviewed in Bui and Porter's study, three were of the view that universities have a role in educating students to become 'good citizens' by encouraging them to develop holistically. This view was encompassed in a broader view that universities should enable students to think independently and develop skills of adaptability as well as becoming ethically aware. Overall Bui and Porter's study provides evidence of the expectation gap between employers and educators, as there were clearly identified differences in expectations of the skills and capabilities between the two stakeholder groups.

2.4 Triangulation of Stakeholder Perspectives on the development of generic skills

There are a limited number of studies that have examined multiple stakeholder views of development of employment skills that are a feature of graduate employability. For example Kavanagh and Drennan (2008) undertook a study of student and employer perception of skill development, They found that there was some agreement between the two groups in terms of skills required for success in an accounting career (e.g. analytical/problem solving skills, oral and written communication and teamwork). However, there was a difference in terms of how each group ranked the importance of the skills. Written communication skills were very much the focus of university programmes while employers were keen to have graduates with work experience that enabled them to successfully take an immediate role within the business.

Jackling and de Lange (2009) while both employers and graduates acknowledged the importance of technical accounting skills, employers require a broad range of generic skills that graduates indicated were not being adequately taught in their accounting degree programme. Against this backdrop of skills convergence, the greatest areas of skills divergence from the employers' perspective were those of team skills, leadership potential, verbal communication and the interpersonal skills of graduates. In their New Zealand study of employers, educators and graduates Bui and Porter (2010) found that educators and employers had different expectations with regard to accounting graduates 'thinking skills'. Educators were more inclined to view the role of a university education to develop students' intellectual capabilities while employers placed greater emphasis on university education providing a solid base of accounting knowledge. In terms of the development of employability skills students interviewed in the Bui and Porter study felt that overall accounting courses were too theoretical and irrelevant to the demands of the 'real world' of the accounting practitioner. Overall students felt that there was insufficient focus on developing the skills which employers expect accounting graduates to possess.

In considering three stakeholder groups, (graduates, employers and academics) Oliver et al (2011), found that in terms of capabilities perceived as more important to early professional success, there was similar emphasis in most of the 14 capabilities assessed in the accounting discipline. Employers however viewed 'work-related knowledge and skills' as less important for early professional success. In contrast, graduates viewed 'writing and speaking early and effectively' as less important for early professional success. Understanding people of other racial and ethnic backgrounds was viewed by academics (course teams) as more important for professional success. Oliver et al (2011) also compared the three stakeholder groups in terms of capabilities perceived as demonstrated or developed. The results showed there was a

close similarity between employer and course team (academics) perceptions. In contrast, according to graduates the most developed capability perceived as demonstrated or developed was 'learning effectively on your own'.

In summary from the literature review there appears to be a lack of uniformity in the views of the three main stakeholders in terms of the skill set that is required of accounting graduates entering the profession. This study uses four research questions to address the views of graduates, employers and accounting educators in assessing perceptions of the skill set required for success in gaining employment in the accounting profession.

2.5 Research Questions

The reviewed literature reveals a range of attitudes with regard to the importance of graduate capabilities. The differences in views about the importance of these attributes may be attributed to the expectations of the roles of graduates in the workplace. However, given the changing nature of the accounting profession and an increasingly global business environment, it is important to analyse the expectations of various stakeholder groups with the aim of aligning skill development of graduates to the challenges of the global work environment. Therefore the present research seeks to answer the following research questions:

RQ1. From a graduate's perspective to what extent do experiences during an accounting degree programme contribute to the development of graduate employment capabilities and how important are these capabilities for early professional success?

RQ2. From an employer perspective to what extent do new graduates demonstrate the identified graduate employment capabilities and how important are these capabilities for early professional success?

RQ3. From an accounting academic perspective to what extent do graduates develop the identified graduate employment capabilities and how important are these capabilities for success?

RQ4 To what extent are there similarities in the perceptions of the three stakeholders (graduates, employers and academics) of the extent to which graduates develop the identified graduate employment capabilities?

3. Research Method

3.1. Research design and data collection

The data were collected via a suite of three online surveys collectively known as Graduate Employability Indicators (GEI). The surveys gathered the perceptions of graduates, employers and course teaching teams in relation to the teaching, assessment, achievement and importance of employability skills in specific courses. The surveys were targeted at of the following categories of respondents:

- Graduates of up to five years. Respondents in this group were contacted by email, using email addresses stored in the alumni database of the university. The respondents were asked to define the extent to which their course experience contributed to their achievement of the capabilities and overall work-readiness, and the importance of the capabilities to professional success;
- Employers who were contacted using email addresses provided by members of the course teaching team, careers centres, external relations and the ALTC project team. Respondents in this group were asked about their perception of the extent to which graduates demonstrate the capabilities and their overall work-readiness, and the importance of the capabilities to graduates' professional success;

The course teaching team were invited to participate via invitations issued by the Head of School of Accounting. This group of respondents were asked to define their perception of the extent to which graduates demonstrate the capabilities and their overall work-readiness, and the importance of the capabilities to graduates' professional success. Additionally, academics views on their own confidence in teaching and assessing graduate capabilities were canvassed although not incorporated in the results reported in this study. The questionnaires collected background information about respondents, including gender, details of employment, etc. However, the main part of the questionnaires were devoted to collecting information about respondents' perception of graduates' capabilities, i.e. graduates' achievement of specific work-related skills, attributes and personal qualities, and the importance of each to new graduates' success. The GEI uses fourteen capabilities, which were drawn from Item 12 in the Australian University Survey of Student Engagement (AUSSE) (Coates, 2009). The AUSSE was derived from item 11 in the National Survey of Student Engagement (NSSE) widely used in the United States (Kuh, 2001). The fourteen capabilities used in this study are shown in Table 1.

Insert Table 1 here

Response categories for all items matched the AUSSE and the NSSE which consisted of multiple rating scales that shared the same direction (all positive – going from low to high): 'Very little; some; Quite a bit; Very much'. Respondents from all three groups were asked to assess the existing level of development of graduate employment capabilities. The GEI asked graduates "To what extent did your experience during this degree contribute to your development in the following areas? and it asked employers and course teams "To what extent do new graduates generally demonstrate each of the following [attributes]?" In addition, the GEI also asked the stakeholder groups to assess their perceptions about

importance of the graduate employment capabilities (Scott, 2005): “How important do you think each of the following is to the employment success of new graduates of this degree?”. As not all ratings were equally likely to be used, percentage agreement with each response category was used to assess inter-rater reliability (Svensson, 1993; Gwet, 2008).

Additionally, respondents had the opportunity to provide written comment on graduate capabilities. For example, open ended questions asked employers to comment on what they considered to be most useful attributes of graduates as well as qualities/attributes they would prioritise for improvement in new graduates entering the workforce. The open ended responses are incorporated in this study as a form of triangulation of the quantitative findings.

3.2. Descriptive statistics

3.2.1. Graduates

In total, 923 graduates were contacted by email using the alumni database and 57 responded to the survey. At a minimum this represents a response rate of 6.2% (although it is not possible to calculate a definitive response rate because the number of ‘live’ email addresses in the various alumni databases is unknown, and anecdotal evidence suggests many may no longer be in use)². The respondent group was predominantly female (59.6%), aged under 35 (25 or younger: 49.1%; 26-35: 38.6%), in their first three years since graduation (79%), enrolled on campus (98.2%) and in Australia (73.7%). About two thirds stated they were international students (66.7%). At the time they responded to the survey, 47 indicated they were employed with 80.8% in an area specifically linked to their degree, and 61% of those were working fulltime. Of those employed, many were working in the Australasian region

² Because this is such a low response rate, the results should be interpreted with caution.

(59.6%: Australia/NZ, 36.2%: Asia)). Graduate demographic information is provided in Table 2.

Insert Table 2 here

3.2.2. Employers

In total, 71 employers responded. Members of one of the three professional accounting bodies were invited to participate in the study. The respondent group was predominantly male (78.9%), holding the position of manager (57.8%) and working in a small to medium enterprise (60.6%) in Australia or New Zealand (88.7%). Employers indicated that they were from a variety of sectors including “Finance and Insurance” (19.7%), “Property and Business Services” (16.9%), “Personal and Other Services” (14.1%) and “Manufacturing” (12.7%).

Insert Table 3 here

3.2.3. Course Teaching Team

In total, 15 members of the course teaching team of one University participating in the ALTC project responded to survey. In total, according to the school’s website, there are 33 lecturers, senior lecturers and professors employed in the School of Accounting thus a response rate of 45.5% was achieved. The respondent group was made up of slightly more males than females (53.3%); most were employed on a full-time, continuing basis (86.7%), and nearly two thirds had more than 7 years university teaching experience (60%). About half had more extensive (53.3%) but less recent (53.3%) industry experience. Course team demographic information is provided in Table 4.

Insert Table 4 here

4. Results

4.1 Comparison of the quantitative data

4.1.1. Graduates

Graduates were given a list of capabilities and asked to rate the *importance* of each capability to their employability. As table 5 below demonstrates, the capabilities graduates deemed most important were³: critical thinking (mean = 3.60), followed by speaking clearly and effectively (3.52), work-related knowledge and skills (3.52), writing clearly and effectively (3.50), working effectively with others - or team work - (3.44), the ability to solve complex real-world problems (3.44) and using computing and information technology (3.36).

Graduates were also asked the *extent* to which their degree contributed to the development of the listed capabilities. The following capabilities: independent learning; speaking clearly and effectively; critical thinking; writing clearly and effectively; and team work were ranked highest. In addition, this question enabled this study to identify potential gaps that might exist in graduate perceptions by comparing ‘what’s important’ and ‘the extent’ to which the course experience contributed to graduate capability development.

Based on the most important graduate capabilities (cited above), the largest gaps occur with ability to solve complex real-world problems (mean difference = -0.99), work-related knowledge and skills (-0.82), critical thinking (-0.71), using computing and information technology (-0.68), writing clearly and effectively (-0.64), speaking clearly and effectively (-0.62), and team work (-0.58).

Insert Table 5 here

³ For the purposes of this study, the graduate capabilities deemed most important were items that attained a mean score of 3.30 and above for the statement regarding the *importance* of generic skills to employment success of new graduates of this degree.

A Pearson correlation test was undertaken to establish these potential gaps.⁴ As table 5 illustrates the Pearson correlation ranges from 0.250 to 0.532, which implies that the two questions have little to a weak association. This lack of correlation further supports the argument of a gap existing between the importance and extent of graduate capabilities currently obtained by the accounting degree. Hence, the results demonstrate that more emphasis needs to be given to the capabilities deemed the most important.

With regard to the qualitative items, graduates were invited to provide free text responses to two items:

- What were the best aspects of this degree in developing your skills for employment?
- How could the degree be changed to improve your skills for employment?

For convenience, these are referred to as ‘best aspects’ and ‘needs improvement’ in this section. 42 of 57 graduates provided a response to one or both of the open-ended questions, representing 74% of the total respondents. With respect to best aspects, the following themes emerged:

- Knowledge, analytical skills, thinking skills
- Presentation skills, positive attitude
- Problem-solving
- Communication skills
- Team work

With respect to work-related knowledge and skills, typical comments were:

⁴ As a general rule of thumb, correlations between 0 and 0.3 possess little or no association, correlations between 0.3 and 0.7 displays a weak positive association while correlations from 0.7 to 1.0 are viewed as being strongly positively correlated (Hair et al., 2006).

Course development reflected what was required in business today so what was studied was appropriate even though we did not think it was necessary at the time

I believe the core accounting modules give us an in depth knowledge of this and made me more efficient in preparing financial models and scenario analysis.

Regarding team work, students felt that this aspect of the degree was beneficial:

I also believe working in teams for assignments also helped in team building skill and ability to deliver individually towards a final project.

In addition, critical thinking and problem solving skills were also highlighted:

I am employed as a graduate internal auditor and the, critical thinking skills and ... developed during Uni have helped me heaps in my current work place.

The degree involves a lot of problem solving and scenario like analysis, which helps students to critically assess the situation and formulate a response to the scenario.

The following themes emerged from graduates re aspects of the accounting degree that needed improvement:

- More practical assignments and training
- More opportunities to develop communication skills

- More hands-on experience, making the work experience compulsory

Typical comments in this area were a need for:

More real-life situations introduced to undergraduates. Application of theory to reality.

More aspects of how to communicate and present would be better

In addressing Research Question 1 the findings from this study indicate that graduates believed that the greatest gaps in capabilities perceived as important for early professional success and capabilities developed in their studies were related to thinking, problem-solving and knowledge of accounting. The qualitative responses demonstrated that graduates believed that there was a greater need to have ‘real-world’ examples that would assist their preparation for employment. The gaps identified in the graduate capabilities above identify the extent to which graduates believe shortcomings from their accounting course still exist (objective 1). This outcome needs to be considered in conjunction with the employer and course team perceptions for potential changes to the curriculum.

4.1.2. Employers

In answering the second research question, the study addresses responses from employers in terms of the same list of graduate capabilities and their rating of the *importance* of each to the employment success of new graduates of the accounting degree. As table 6 below demonstrates, the capabilities deemed most important were: speaking clearly and effectively (mean = 3.47), team work (3.42), values and ethics (3.41), critical thinking (3.36), and writing clearly and effectively (3.29).

Insert Table 6 here

Employers were also asked the *extent* to which the degree contributed to the development of the listed items, and interestingly, only one item had a mean of above three: using computing and information technology (mean = 3.18). This suggests that employers are of the opinion that graduate capabilities are *not* effectively passed on to graduates as they enter the workforce.

Based on the most important capabilities cited by employers, the largest gaps occur with: critical thinking (mean difference = -1.22), speaking clearly and effectively (-1.17), writing clearly and effectively (-1.14), team work (-1.07), and values and ethics (-1.04). The employer mean difference scores are much greater than the graduate results and reflect employer disquiet regarding graduate workforce preparation.

Once again, a Pearson correlation was run to further confirm the gaps. The results show that the aforementioned most important items had correlations ranging from 0.011 to 0.265, which shows that the ‘importance’ of the capabilities and the ‘extent to which they are obtained from the accounting degree’ have little to no association. This is an important finding as it comes from a group (employers) that are at arm’s length from the curriculum and have an intimate knowledge of what is required to succeed in the workplace.

With regard to the qualitative items, employers were invited to provide free text responses to two items. Not surprisingly, a number of the comments focussed on those aspects requiring improvement. Typical comments arising from this category included:

*Most university courses are good at developing graduates that have great skills,
but often overlook the perhaps more challenging opportunity of bringing out the*

best in their graduates via attention to personal attributes and personal qualities that matter to employers

Over the past two years I have advertised for graduate accountants to work in our Accounting & Taxation Practice. Each time I have received over 200 resumes. Each time only about 10% of the applicants has a good command of English speaking skills and good written skills.

The large mean difference values obtained from the employers regarding the graduate capabilities, as well as the qualitative comments above, reinforce the notion that employers continue to witness a lack of demonstration of key graduate capabilities such as communication and interpersonal skills required for work (objective 2).

4.1.3. Course team

The course team were given a list of graduate capabilities and asked to rate the *importance* of each to the employment success of new graduates of this degree. As table 7 below demonstrates, the graduate capabilities the course team deemed most important were: team work (mean = 3.64), speaking clearly and effectively (3.49), critical thinking (mean = 3.33), and the ability to solve complex real-world problems (3.33).

Insert Table 7 here

The course team were also asked the *extent* to which new graduates generally demonstrated their capacity for each of the listed items. The highest rated item was using computing and information technology (mean = 2.99) followed by team work (2.52). Despite acknowledging

the importance of graduate capabilities, these rather low values show that teaching staff do not think that these skills are being passed on to graduates when they finish their degree.

Focusing only on the graduate capabilities perceived as the most important, the largest gaps occur with ability to solve complex real-world problems (mean difference = -1.33), speaking clearly and effectively (-1.27), team work (-1.14), and critical thinking (-1.09). The size of the mean differences is in line with those obtained from the employers, with both demonstrably higher than the mean differences obtained for graduates. This shows that graduates are somewhat unaware of the extent of the gap in skills they require to be successful.

As table 7 illustrates, the Pearson correlation for the most important identified items range from 0.158 to 0.746. The relatively higher correlation figures (three of the four items over 0.560) are not surprising given that it is the course team who develop and administer the curriculum and mark the student assessments. Despite these higher values, only one item (team work) possessed a strong positive association (0.746). This implies that this is the only item of the four that requires less emphasis. Generally though, the little to weak associations demonstrate that greater weight in the curriculum needs to be given to the capabilities deemed the most important.

Overall, in terms of answering Research Question 3, table 7 shows that the course team (academics) had nine items where the mean difference between the importance of a graduate capability and the extent to which graduates learnt it were over 1 as measured on a four point Likert scale. This suggests that academics notice a number of gaps in graduate capabilities arising from the curriculum. .

4.1.4 Triangulation of stakeholder perceptions

Capabilities stakeholders consider to be very important

Figure 1 presents a triangulation of the perspectives of the three stakeholder groups of the **importance** of the capabilities (percentage agreement 'very important'). The figure shows differences in perceptions about “developing a personal code of values and ethics” (employers and members of the course teaching team consider these capabilities more important than do graduates) and “writing clearly and effectively”, “speaking clearly and effectively” and “solving complex, real world problems” (graduates and course team consider this capability more important than do employers).

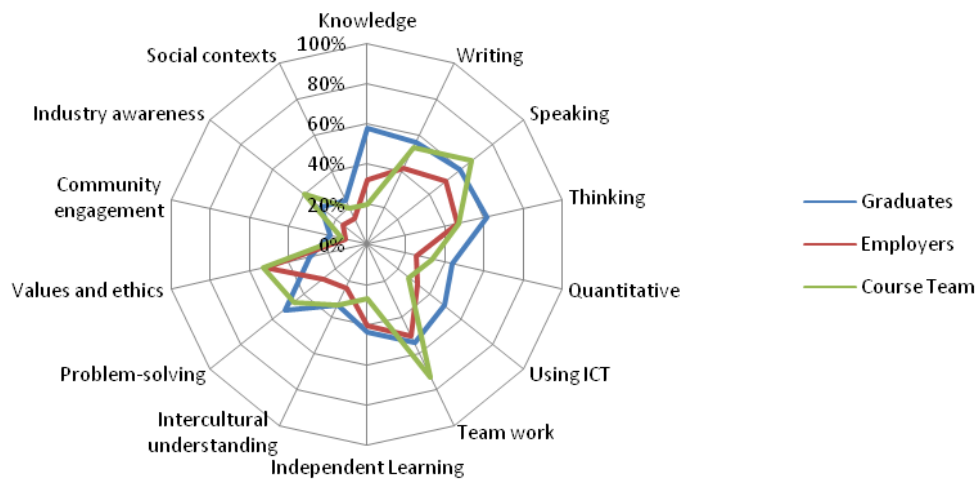


Figure 1: A comparison of graduate, employer and course team perceptions of capabilities perceived as 'very important' to early professional success (percentage agreement 'very important')

The results suggest that graduates have a more positive perception about the importance of interpersonal skills than that perceived by employers and course team (academic) members. Relative to employers in particular, graduates perceived that their speaking and writing skills were less important to early professional success.

Capabilities stakeholders consider as demonstrated or developed to a greater extent

Figure 2 shows a triangulation of the perspectives of the stakeholder groups about the **extent** that new graduates demonstrate the capabilities (employers and course teaching team) or the extent graduates perceive they are developed in their course (percentage agreement = ‘very

much’). All groups perceived that “using computing and information technology” skills were well developed or demonstrated by graduates. Graduates would appear overall to perceive that they demonstrate a higher level of interpersonal and personal skills (e.g. writing and speaking) than that perceived by employers and course team members.

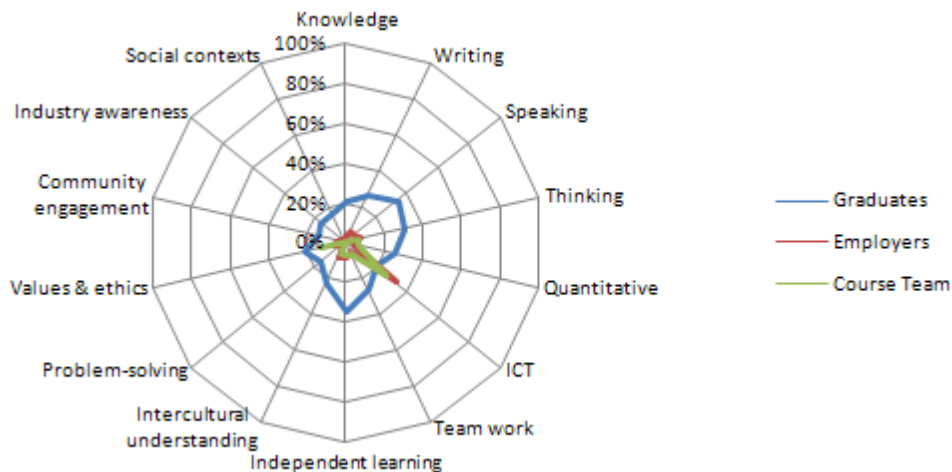


Figure 2: A comparison of graduate, employer and course team perceptions of capabilities perceived as demonstrated or developed “very much”

Capabilities stakeholders consider as demonstrated or developed to a lesser extent

Figure 3 shows a triangulation of the perspectives of the stakeholder groups about the **extent** that new graduates demonstrate the capabilities (employers and course teaching team) or the extent graduates perceive they are developed in their course (percentage agreement = ‘very little’ or ‘to some extent’). More than 60% of employers and members of the course teaching team perceived that “work related knowledge and skills”, “contributing to the welfare of your community” and “developing general industry awareness” were demonstrated to a lesser extent than graduates.

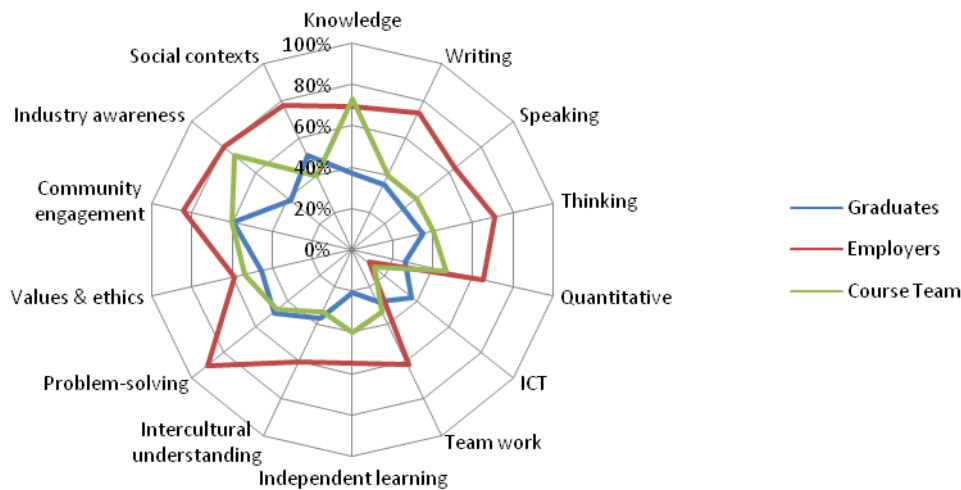


Figure 3: A comparison of graduate, employer and course team perceptions of capabilities perceived as demonstrated or developed “very little” or “to some extent”.

Figure 3 demonstrates that on a comparative basis employers perceived that the capabilities were generally less well developed than course team members and even less than graduates. The results again demonstrate that graduates have a more positive perception of their skill set relative to the two other stakeholders. Therefore in answering Research Question 4 the results displayed in Figures 1, 2 and 3 demonstrate that there are differences in the three stakeholders in perceptions of the extent and importance of capabilities as well as importance for early career success. The results for this university are not dissimilar to the findings of Oliver et al., (2011) in that capabilities considered ‘more important’ to early career success related to ‘work-related knowledge and skills’, ‘writing and speaking clearly’ ‘working effectively with others’ and ‘developing a personal code of values and ethics.

5. Conclusion

This study on the GEI of accounting graduates provides insights of perceptions of graduates, employers and course team staff of the ‘capabilities that count’ for early professional success, the extent to which this course contributes to their development (from the graduates’ perspective), as well as the extent to which new graduates generally demonstrate achievement

of the capabilities. The study also provided evidence about accounting academics assessment of the development of capabilities.

The study has focused on graduates, employers and course teams' perceptions of the GEI and whether these capabilities were demonstrated in the workplace. The findings showed where the greatest disparities occurred via comparisons between the importance of graduate capabilities and the extent to which graduates acquired them.

Graduates felt that capabilities were not developed well enough even though they had not placed sufficient importance on them. Employers and course teams felt that even though some capabilities were of high importance, graduates demonstrated these to a lesser extent.

As with all surveys of this nature, the GEI results reported here have limitations. For instance the responses were limited to graduates and employers able to be contacted via active email addresses. Additionally, there is a lag in graduate and employer perceptions on course experiences of up to five years preceding the study. In many instances changes had been made to courses in the time between completion of units of study and graduates feedback via this study.

In spite of these limitations, the results reported here are somewhat disconcerting. For many years now, there has been extensive literature in accounting education regarding the need to address graduate capabilities. Further, many resources have been spent with the aim of addressing this gap. However, this gap still exists. All this suggests a need to re-assess the curriculum and its capacity to effectively integrate these graduate capabilities.

Consequently, future research could further investigate this issue using other research methods such as focus groups and stakeholder interviews to explore the efficacy of various teaching and learning innovations to bridge gaps in the development of important graduate

capabilities. In addition, future research may want to focus on the number of firms by size to achieve a more holistic result and thus extend the findings of Bui and Porter (2010) that indicated that the demands of employers for graduate employment capabilities varies with firm size.

From the perspective of the authors of this paper, the results together with the broader ALTC study outcomes have provided a spring board for the development of curriculum changes to address the major areas of expectation gap. In particular the research team members have commenced the realignment of the curriculum focussing on adapting assessment tasks in four accounting units in the undergraduate accounting degree course, to advance the development of team skills. This employment capability was chosen because it was identified as an area consistently showing a high expectation-performance gap across the three stakeholder groups. This has resulted in the development of four different yet interrelated assignment tasks designed to improve team work and thus improve employment capabilities of students. Team skills will be examined in various structures, using peer assessment, self-reflection of team skill development and personal portfolio approach to assessing development of team skills over the duration of an accounting degree course. The widening range of assessment tasks focussed on development of team work will be monitored via pre and post evaluations of the group tasks by students and staff, together with the engagement of industry personnel to enhance feedback about the learning outcomes that reflect the needs of industry.

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Table 1 The fourteen capabilities in the graduate employability indicators

Abbreviated title	Full text in survey
1. Knowledge	Work related knowledge and skills
2. Writing	Writing clearly and effectively
3. Speaking	Speaking clearly and effectively
4. Thinking	Thinking critically and analytically
5. Quantitative	Analysing quantitative problems
6. Using ICT	Using computing and information technology
7. Teamwork	Working effectively with others
8. Independent Learning	Learning effectively on your own
9. Intercultural Understanding	Understanding people of other racial and ethnic backgrounds
10. Problem-solving	Solving complex, real-world problems
11. Values & Ethics	Developing a personal code of values and ethics
12. Community Engagement	Contributing to the welfare of your community
13. Industry awareness	Developing general industry awareness
14. Social contexts	Understanding different social contexts

Table 2 Graduate respondent demographic details

Question	Possible Responses	n	%
Gender	Male	23	40.4%
	Female	34	59.6%
Age	25 or younger	28	49.1%
	26-35	22	38.6%
	36-45	5	8.8%
	45 or older	2	3.5%
Years since graduation	1	12	21.1%
	2	17	29.8%
	3	16	28.1%
	4	4	7.0%
	5	8	14.0%
Enrolled mainly as	Australian domestic student	19	33.3%
	International student	38	66.7%
Enrolled mainly to study	On campus	56	98.2%
	By Distance Education or online	1	1.8%
Enrolled mainly through	Campus in Australia	42	73.7%
	Campus/institution outside Australia	15	26.3%
Employment	Full-time	35	61.4%
	Part-time	10	17.5%
	Not employed	10	17.5%
	No answer	2	3.5%
If employed, employment is related to this degree (percentage relates only to number who indicated they were employed in previous question)	Yes	38	80.8%
	No	9	19.1%
	No answer	10	NA
If employed, where? (percentage relates only to number who indicated they were employed in previous question)	Australia or New Zealand	28	59.6%
	Asia	17	36.2%
	No answer	12	NA
If not employed, ever worked in an area related to this degree? (percentage relates only to number who indicated they were not employed in previous question)	Yes	0	0.0%
	No	12	100%
	No answer	45	NA
Total Respondents		57	

Table 3 Employer demographic details

Question	Possible responses	N	%
Position in organisation	Executive Manager	23	32.4%
	Middle Manager	18	25.4%
	Owner of a small-medium enterprise	18	25.4%
	Human Resources Officer	3	4.2%
	Other	8	11.3%
	No answer	1	1.4%
Type of organisation	Small-medium enterprise	43	60.6%
	Public sector	14	19.7%
	Large private sector enterprise	14	19.7%
Organisation located in	Australia or New Zealand	63	88.7%
	Asia	7	9.9%
	No answer	1	1.4%
Sector	Agriculture, Forestry and Fishing	1	1.4%
	Manufacturing	9	12.7%
	Electricity, Gas and Water supply	2	2.8%
	Construction	2	2.8%
	Wholesale Trade	3	4.2%
	Retail Trade	2	2.8%
	Transport and Storage	2	2.8%
	Finance and Insurance	14	19.7%
	Property and Business Services	12	16.9%
	Government Administration and Defence	7	9.9%
	Education	4	5.6%
	Health and Community Services	2	2.8%
	Personal and Other Services	10	14.1%
Gender	Male	56	78.9%
	Female	15	21.1%
Total Respondents		71	

Table 4 Course team demographic details

Question	Possible responses	N	%
Type of contract	Full-time continuing contract	13	86.7%
	Part-time continuing contract	0	0.0%
	Full-time fixed contract	1	6.7%
	Part-time fixed contract	0	0.0%
	Sessional/casual contract	0	0.0%
	No answer	1	6.7%
Years teaching at university	3 years or less	4	26.7%
	Between 4 and 7	1	6.7%
	More than 7	9	60.0%
	No answer	1	6.7%
Extent of industry experience	More extensive	8	53.3%
	Moderately extensive	4	26.7%
	Less extensive	2	13.3%
	No answer	1	6.7%
Recency of industry experience	More recently	2	13.3%
	Moderately recently	4	26.7%
	Less recently	8	53.3%
	No answer	1	6.7%
Gender	Male	8	53.3%
	Female	6	40.0%
	No answer	1	6.7%
Total Respondents		15	

Table 5 Graduate perceptions of the extent and importance of the degree in building generic capabilities

	Abbreviated capabilities (in order of the 'importance' mean)	Extent mean (s.d)	Importance mean (s.d)	Mean difference	Pearson correlation
4	Thinking	2.89 (0.94)	3.60 (0.72)	-0.71	0.513
3	Speaking	2.90 (0.97)	3.52 (0.76)	-0.62	0.364
1	Knowledge	2.70 (0.90)	3.52 (0.74)	-0.82	0.375
2	Writing	2.86 (0.91)	3.50 (0.74)	-0.64	0.532
7	Team work	2.86 (0.87)	3.44 (0.78)	-0.58	0.405
10	Problem-solving	2.45 (0.94)	3.44 (0.77)	-0.99	0.250
6	Using ICT	2.68 (0.92)	3.36 (0.80)	-0.68	0.466
5	Quantitative	2.88 (0.87)	3.29 (0.82)	-0.41	0.382
15	Work-readiness	2.68 (0.91)	3.27 (0.79)	-0.59	0.255
8	Independent learning	3.09 (0.86)	3.27 (0.93)	-0.18	0.492
11	Values & ethics	2.66 (0.85)	3.15 (0.75)	-0.49	0.397
13	Industry awareness	2.62 (0.88)	3.05 (0.82)	-0.43	0.467
9	Intercultural understanding	2.67 (0.96)	2.96 (0.93)	-0.29	0.492
14	Social contexts	2.41 (0.93)	2.87 (0.88)	-0.46	0.571
12	Community engagement	2.22 (0.99)	2.67 (0.89)	-0.45	0.518

Table 6 Employer perceptions of the extent and importance of the degree in building generic capabilities

	Abbreviated capabilities (in order of the 'importance' mean)	Extent mean (s.d)	Importance mean (s.d)	Mean difference	Pearson correlation
3	Speaking	2.30 (0.76)	3.47 (0.63)	-1.17	0.011
7	Team work	2.35 (0.71)	3.42 (0.69)	-1.07	0.138
11	Values & ethics	2.37 (0.77)	3.41 (0.73)	-1.04	0.265
4	Thinking	2.14 (0.84)	3.36 (0.72)	-1.22	0.220
2	Writing	2.15 (0.77)	3.30 (0.72)	-1.14	0.121
6	Using ICT	3.18 (0.69)	3.24 (0.65)	-0.06	0.319*
8	Independent learning	2.29 (0.90)	3.21 (0.82)	-0.92	0.120
1	Knowledge	2.05 (0.83)	3.09 (0.77)	-1.04	0.208
5	Quantitative	2.21 (0.74)	3.06 (0.70)	-0.85	0.137
15	Work-readiness	2.08 (0.78)	3.05 (0.79)	-0.97	0.083
10	Problem-solving	1.75 (0.71)	2.91(0.88)	-1.16	0.280
9	Intercultural understanding	2.33 (0.84)	2.81 (0.90)	-0.48	0.220
13	Industry awareness	1.88 (0.75)	2.75 (0.79)	-0.87	0.258
14	Social contexts	1.97 (0.73)	2.59 (0.86)	-0.62	0.251
12	Community engagement	1.88 (0.72)	2.50 (0.83)	-0.62	0.283

Table 7 Course team perceptions of the extent and importance of the degree in building generic capabilities

	Abbreviated capabilities (in order of the 'importance' mean)	Extent mean (s.d)	Importance mean (s.d)	Mean difference	Pearson correlation
7	Team work	2.52 (0.81)	3.64 (0.95)	-1.14	0.746
3	Speaking	2.22 (0.83)	3.49 (0.99)	-1.27	0.656
4	Thinking	2.24 (0.97)	3.33 (0.95)	-1.09	0.562
10	Problem-solving	2.00 (0.89)	3.33 (0.92)	-1.33	0.158
5	Quantitative	2.16 (0.95)	3.24 (0.93)	-1.08	0.111
2	Writing	2.22 (0.83)	3.23 (0.99)	-1.01	0.602
11	Values & ethics	2.16 (0.99)	3.21 (1.06)	-1.05	0.229
9	Intercultural understanding	2.39 (0.93)	3.17 (0.94)	-0.78	0.259
15	Work-readiness	2.14 (0.80)	3.11 (0.97)	-0.97	0.466
13	Industry awareness	1.74 (0.63)	3.04 (1.00)	-1.30	0.620
8	Independent learning	2.38 (0.86)	3.03 (0.94)	-0.65	0.465
6	Using ICT	2.99 (0.93)	3.02 (0.96)	-0.03	0.644
1	Knowledge	1.81 (0.60)	2.94 (0.83)	-1.13	0.359
14	Social contexts	2.29 (0.72)	2.62 (0.83)	-0.33	0.393
12	Community engagement	1.88 (0.69)	2.60 (0.98)	-0.72	0.163