Academic standards and challenges for accounting educators

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Introduction

A recent paper on *Transforming Australia’s Higher Education System* identifies a number of significant reforms for the sector including the establishment of a Tertiary Education Quality and Standards Agency (TEQSA). The paper also foreshadows the development of competency based standards for universities for all degree awards in Australia. TEQSA will then be responsible for checking compliance with such standards in a similar fashion to the Association to Advance Collegiate Schools of Business (AACSB) accreditation panel.

An article in *The Australian Financial Review* reported that accounting will be the first discipline to set minimum standards as required by the new Australian Qualifications Framework regime as “Standards set for accounting” Accounting was chosen because we have a very strong level of engagement with both the profession and industry in relation to the discipline.” (Lebihan 2010, p34)

While minimum academic standards for an accounting degree will address appropriate technical skills there is no doubt that given widespread publicity about concerns with communication skills and accounting graduates (Birrell, 2006a, 2006b) the standards will also include non-technical skills. Indeed on February 8, 2010 the federal government announced that it was cancelling the Migration Occupations in Demand List due in part to the inability of migrants to gain employment in the occupation for which they were trained due to poor English skills. Accounting has been on the list since September 2004 and is part of the reason for the explosion in numbers of international students choosing to study accounting in Australia.

The concern with communication and other generic skills of accounting graduates is not new with the Mathews report in 1990 making a series of recommendations covering a broad range of issues for the accounting discipline; the two below relate to courses and teaching:

*In the development and review of three-year undergraduate accounting courses, higher education institutions and course development and accreditation committees should look for evidence of a broad general education and the integration of communication and computing skills into the teaching and learning processes. (Recommendation 4.3, Australia. Review of the Accounting Discipline in Higher Education, 1990: xxiv).*

*All academic organisational units involved in teaching undergraduate accounting programs should integrate the different disciplinary units within the degrees, so that students may gain a co-ordinated understanding of how the disciplines interact in the business environment and the economy” (Recommendation 9.3, Australia. Review of the Accounting Discipline in Higher Education. 1990: xxxi).*
There have also been many other publications since Matthews continuing to report employer concerns with the level of generic skills of business graduates (Jackson et al., 2006, Birrell, 2006a, BIHECC, 2007, Jackson 2009). Jackson et al. (2006) note the concerns of employers regarding the perceived inadequate development in university accounting graduates of the other-than-technical skills that are required for employment in the accounting profession. “In particular and overwhelmingly, English language and professional communication skills are the areas of deficiency most often cited by graduate employers in Melbourne, Hong Kong and Singapore in this study” (Jackson et al., 2006a:18).

In October 2007, the Australian Learning and Teaching Council (ALTC, formerly the Carrick Institute for Learning and Teaching in Higher Education Ltd) approved a grant of approximately $100,000 to a team of accounting academics to conduct a study on Accounting for the future: more than numbers (Hancock et al. 2009). The need for the project was identified in the Australian Business Deans Council (ABDC) scoping study 'Business as usual? A collaborative and inclusive investigation of the existing resources, strengths, gaps and challenges to be addressed for sustainability in teaching and learning in Australian university business faculties' (Freeman et al. 2008). The scoping study identified issues within professional accounting programs that warranted a separate investigation to “build on prior work” (Freeman, 2008: 6).

The concerns included very large classes with a diverse student body drawn from many different countries particularly in the various accounting conversion degrees; staff shortages and the ageing demography of accounting academics; lack of communication skills and the problems associated with the alternative pathways into the accounting profession.

So what has changed since 1990? The difference is that those expectations regarding graduate ‘generic skills’ have evolved to higher order skills, such as analytical and critical analysis, and ability to engage with clients, negotiate, and act strategically. A similar situation has been noted in a recent US report titled Next generation accountant. A new outlook on a timeless profession prepared by Robert Half International Inc.:  

To succeed in tomorrow’s accounting, finance and audit environments, council members said professionals need a wider range of skills than at any time in recent memory. Well-developed financial and technology abilities remain essential, but strong interpersonal and analytical skills are increasingly crucial for success…

It was therefore timely for *Accounting for the future* to review the changing skill requirements for professional accounting graduates and to investigate the growing breadth of non-technical skills, including communication, interpersonal and critical thinking skills that, in the opinion of stakeholders, will be required of students graduating from university professional accounting programs over the next ten years. This paper reviews the main findings of the *Accounting for the future* project and discusses the implications of these findings for the development of academic standards for accounting degrees.

The next section of the paper reviews further literature. Section 3 summarises the main findings of the *Accounting for the future* project. Section 4 discusses the implications of the findings for the development of academic standards for an accounting degree in Australia. Section 5 considers the challenges for accounting educators flowing from academic standards and section 6 provides some concluding comments.

2 **Literature**

In many countries, accounting education reform is a subject of debate in business communities and the profession consequent to the impact on the business environment of high-tech production, economic globalisation and intensified market competition (Lin, 2008). What has also become clear, particularly in the last decade, is that the role of the accountant has expanded beyond narrow disciplinary knowledge (Parker, 2001; Jones & Abrahams, 2007). Flood & Wilson (2008) maintain that consequently, ‘those responsible for educating future accounting graduates must move from their traditional focus of imparting large volumes of technical knowledge and foster among students a personally developed understanding of the principles and concepts which underpin accounting practices’ (Flood & Wilson, 2008: 225).

Recent shifts in education and labour market policy have resulted in universities being placed under increasing pressure from governments to produce employable graduates (particularly in the UK, Australia and Canada) making public funding for universities contingent upon demonstrable graduate outcomes. As a resultant response, universities have begun to focus on developing generic skills in students that might make them appealing to multiple employers across multiple work contexts and disciplines (Bridgstock, 2009). An emphasis has been placed on the production of ‘work-ready’ graduates, competent in their disciplinary field and able to cope in a changing work environment (Bowden et al., 2000; Barrie, 2006). Bridgstock (2009) also suggests that for optimal economic and social outcomes, graduates must be able to proactively navigate the world of work and self-manage the career building process thereby placing the onus on universities to comprehensively and actively engage with the employability agenda, including career building and self management skills, in order to remain competitive in a diverse training market where providers vie for students and funding.
In spite of the push to change the focus in terms of skills development in universities, the development of these skills has remained problematic (Green et al., 2009). Periodic surveys of employers and practitioners’ expectations with regard to the skills and attributes required of accounting graduates entering the workforce continue to reveal gaps (Jackling & Sullivan, 2006; Jones & Abrahams, 2007; Kavanagh & Drennan, 2008). For example, in a report compiled for the CIHE, Archer & Davison (2008) document that despite the fact that 86% of employers consider good communication skills to be important, many are dissatisfied with the ability of graduates to express themselves effectively.

Levenson (2000) suggests that the persistence of these perceived skills gaps is as a result of the imprecision both of concepts such as ‘generic skills’ (non-technical skills) and particular generic skills statements. This is supported by Sin & Reid (2006) who state ‘a key weakness in the literature is the vagueness in the conception of generic skills and the proliferation of terms in the literature’ (Sin & Reid, 2006: 5); a view supported by Whitefield & Kloot who conclude that the nature of the definitions ‘remains inherently fuzzy’ (Whitefield & Kloot, 2006: 24).

Treleavan & Voola (2008) and others have highlighted the various interchangeable terms related to generic skills. These include ‘key skills’; ‘key competencies’; ‘transferable skills’; ‘personal transferable skills’ (Treleaven & Voola, 2008); ‘professional skills’; ‘graduate attributes’; ‘employability skills’ (Curtis & McKenzie, 2002); and ‘soft skills’, inter alia (BIHECC, 2007; Freeman et al., 2008). Generic skills have also been variously known as ‘core skills’, or ‘underpinning skills’ (Mayer, 1992). Bowden et al.’s commonly cited definition of graduate attributes tends to encompass two main types of attributes: those which relate to an individual’s capacity for citizenship and the ability to contribute towards a well-functioning society (Bowden et al., 2000; Rychen & Salganik, 2005); and those which relate to an individual’s capacity to obtain and maintain work (Harvey, 2001; McQuaid & Lindsay, 2005). It is the employability agenda which has gained in profile in recent years with generic skills being defined as ‘those transferable skills which are essential for employability at some level for most’ (Kearns, 2001).

According to Smith et al. (2009), ‘employability is a rather unwieldy multidimensional notion: it can be considered from the subjective perspective of the student or graduate in terms of his or her confidence and preparedness for the world of work (e.g., abilities, interests, skills, knowledge, self-concept, health)’ (Smith et al., 2009: 18). The authors also suggest that it is possible to consider ‘employability’ from ‘an objective perspective of government and policy-makers, employers, and universities, all of which take stock of graduate outcomes’ (Smith et al., 2009: 18). Yorke (2006) defined employability as ‘a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy’ (Yorke, 2006: 8).
Jackson (2009), citing Kim Markham & Cangelosi (2002), noted that ‘employment opportunities are cited as one of the primary reasons for choosing a business degree’ (Kim et al., 2002) and that the ABDC found that higher net earnings, resulting in higher tax revenue, higher company profits and a ‘more innovative, tolerant or stable society’ (ABDC, 2005: 1) were key benefits of Australian undergraduate business education’ (Jackson, 2009: 90). Jackson further argues that while ‘one would ordinarily expect attaining an aligned business degree to improve one’s work prospects, this relationship is yet to be empirically substantiated (Jackson, 2009: 87).’ According to Crebert et al. there is a public perception that Australian universities are still not able to deal adequately with the nexus of education and employment (Crebert, Bates, Bell, Patrick, & Cragnolini, 2004).

There is strong research-based evidence that professional employability requires that graduates develop and demonstrate their achievement of graduate attributes (Hoban et al., 2004; Kember & Leung, 2005; Treleaven & Voola, 2008). Treleavan & Voola noted that ‘[i]n the Australian context, employers have been so dissatisfied with the skills and competencies of graduates that the Australian government considered for a time linking graduate skills testing with federal funding’ (Treleaven & Voola, 2008: 161). As stated in the introduction, the release of the paper *Transforming Australia’s Higher Education System 2009* signals that this is still on the agenda of the current government.

A project conducted by the Australian Chamber of Commerce and Industry (ACCI) and Business Council of Australia (BCA) defined employability skills as ‘skills required not only to gain employment, but also to progress within an enterprise so as to achieve one’s potential and contribute successfully to enterprise strategic directions’ (ACCI & BCA, 2002: 3). This project also found that employers identified ‘personal attributes that contribute to employability’ as a required part of the set of employability skills and that the skills identified as critical to employability are broadly consistent and important across industry sectors, though the specific elements would depend on the industry and workplace context. In a further study in 2006, the BCA stated that university graduates lacked ‘skill regarding creativity, initiative, oral business communication and problem solving’ and that ‘[t]hese core attributes are common across lists of valued generic attributes’. Oliver (2008) observed that ‘... the attributes for success in commencing and advancing in a career and being an effective “global citizen” are communication, teamwork, problem solving, self-management, planning and organising, technology, life-long learning, initiative, enterprise and the raft of skills generally called “emotional intelligence” (Oliver, 2008: 1).’

However careers are no longer adequately depicted by vertical advancement within one organisation, work is no longer characterised by a finite and fixed set of tasks, and competencies or skills acquired for one job may not be sufficient for a long period (McMahon M., Patton, & Tatham, 2003). Bridgstock (2009) suggests that the university graduate will therefore also require higher order ‘meta’ work skills – the abilities required to
continuously recognise and capitalise on employment and training related opportunities and integrate these with other aspects of the individual’s life (Bridgstock, 2009: 34).

The Confederation of British Industry (1998) defined employability as being ‘the possession by the individual of the qualities and competencies required to meet the changing needs of employers and customers’ (Confederation of British Industry, 1998: 1). Empirical evidence (Australian Chamber of Commerce and Industry and the Business Council of Australia, 2002) (ACCI & BCA, 2002) reveals ongoing industry concerns with the lack of skills development deemed as essential for effectively operating in the workplace, in the modern business graduate. From interviews with key academic, professional and industry stakeholders, the ABDC’s Business as Usual report (Freeman et al., 2008) identifies the development of generic skills in higher education as a salient theme. However, ‘there was little agreement about the degree to which generic skills were important ... whose responsibility they were to teach ... or how they should be assessed’ (Freeman et al., 2008: 23). The skills gap was identified as a key challenge in the Review of Australian Higher Education (Department of Education, 2008). This report also highlighted the need for business schools to nurture and develop high calibre graduates and develop the skills required by contemporary businesses. Further in both Australia and the UK, universities are under funding pressure for their graduates (BCA, 2006; BIHECC, 2007) to find permanent, full time employment with the graduates’ first destination employment status a few months after course completion being used as the primary graduate employability performance indicator (Higher Education Funding Council of England, 2002; Department of Education Science and Training, 2005). However, as Jackson (2009) argues ‘[i]t is important however for universities to avoid the ‘tick box’ approach (Howard, Jorgensen-James, & Nouwens, 2003) and recognise the synergistic and interrelated nature of graduate competencies’ (Jackson, 2009: 89).

Relying on Crebert et al. (2004), Jackson (2009) further observes that ‘the suitability of generic skill development in higher education varies according to skill, although students being informed of their importance and available opportunities for practice is essential for successful development’ (Crebert et al., 2004; Jackson, 2009: 94). In the context of the workplace, the preferred qualities in graduates (i.e., their knowledge, skills, abilities and other characteristics) could be deemed to culminate in the required ‘competency’ (Jusoh, Daing, & Zainuddin, 2008). In essence, these qualities or competencies can be accumulated within an individual and include ‘a combination of cognitive skills (technical knowledge, expertise and abilities) and personal or behavioural characteristics (principles, attitudes, values and motives) which are a function of individual personality’ (Hodges & Burchell, 2003b) and represent a capacity to perform at some future point (Boam & Sparrow, 1992; Page, Wilson, & Kolb, 1993). Lin (2008) suggested accountants should possess multiple skills to deal with varied demands for information processing and analysis contextual to a rapidly changing business environment, including good interpersonal
relationships, leadership skills, entrepreneurship, effective resource processing, negotiation and business promotion, project management, and analytical ability.

In terms of the level of skills at recruitment and ongoing, a study in the UK by Martin et al. (2008) revealed employer expectations of skills development and their views on its funding. They found that employers are struggling to recruit school and college leavers equipped with the skills they need for their businesses. Employers expect young people entering the workforce to be good at timekeeping, possess literacy and numeracy skills, and demonstrate enthusiasm and commitment. However, employers were not prepared to fund training to help people develop the skills that they see as a basic employment requirement. After five years of employment, employers expect employees to have developed a more sophisticated set of skills and they are prepared to pay to help people develop these skills.

As to the question of whose role it is to develop the skills, a university education is generally considered the natural development ground for higher order, non-technical skills such as communication, enquiry, creativity, independent judgement and critical self awareness even though these skills can be developed outside an academic environment (Gammie & Kirkham, 2008). Developing the ability to ‘learn to learn’ is advocated as a key skill necessary to adapt to the rapidly changing business environment (The International Federation of Accountants (IFAC), 1994; IFAC, 2003) and is recognised as one of the traditional strengths of universities (Gray et al., 1994; IFAC, 1994). However, university education in a quest to respond to professional accountancy body requirements has been challenged for being overly technical and content driven with an insufficient regard for a broad base of generic skills (Adler & Milne, 1997; Elliott & Jacobson, 1998; Boyce et al., 2001; Gray et al., 2001). Gammie and Kirkham (2008) suggest that different roles are served by a university-based education and an accountancy education delivered solely by a professional accountancy body (Gammie & Kirkham, 2008).

The Accounting for the future study discussed in the next section sought the views of key stakeholders as to the technical and non-technical skills considered important for accounting graduates at present and for the next ten years. Do they see the non-technical skills continuing to be important as revealed in the literature? What are the roles of the university and employers in developing these skills?

3 The research method and findings

Data were collected for this study by conducting interviews of employers from different environments. Interviews were conducted with 47 individuals drawn from employers from Big 4, mid-tier and small accounting firms in both metropolitan and regional areas, in small and large companies, the public sector, professional accounting bodies, current students and graduates. The duration of each of the interviews varied between sixty to ninety minutes, with
each session conducted by a member of the research team. All discussions during interviews were taped and then transcribed (Denzin and Lincoln, 1994). NVIVO was used to analyse the data and comments are quantified in order to allow analysis of the data. The definitions of non-technical skills used in this study are from BIHECC (2007) and are included in Table 1.

Table 1 here

Stakeholders discussed the role of non-technical skills in a range of contexts, in recruitment, training, and in daily work as an accountant. The skills most frequently referred to, in order of frequency, were communication and presentation, teamwork and good interpersonal skills, self management, initiative and enterprise, problem solving, technological competence and planning and organising skills. Beneath these general areas were specific skills in broad skill domains such as, for example, verbal skills such as speaking, listening, negotiation and feedback under communication skills; being a well-rounded mature confident person under self-management; applying theory to practice under problem solving and client relationship; rapport and trust under teamwork and good interpersonal skills; and time and project management skills under planning and organising. The number of times these non-technical skills were mentioned by stakeholders is listed below in Table 2.

Table 2 here

Overall the analysis of interview transcripts gave strong messages about the importance of non-technical skills and were consistent with other studies referred to in the last section. Communication, in all its forms, coupled with teamwork, problem solving and self-management and interpersonal skills were highly sought after in graduates and also made a difference in advancement within the workplace. The following quote from an employer typifies comments from many stakeholders:

The way we do business now means that we have to be able to communicate with clients at all levels.

The non-technical skills were often used as discriminators in recruitment. When employers are faced with a choice between applicants of similar academic ability they chose the applicant who displays strength in the non-technical areas. For example, an employer in a second tier regional company argued:

But after [establishing that university graduates had technical skills]. . . we look for communication, we look for: have they done anything in the communities, I don’t mean socialising, I mean are they involved in any clubs, functions, anything like that, because this job is about liaising with the community as an accountant. And if they have done that and they are good speakers and they are very personable, it would probably put them ahead of others. .
Technical skills, in order of frequency, were basic practical accounting skills, IT and accounting software skills and industry specific skills and awareness. Beneath these general areas were, as with the non-technical, specific skills such as, in order of frequency, tax, debits and credits, auditing and understanding financial reports and preparing financial statements. The frequencies for all technical skills are given below in Table 3.

Table 3 here

The employers seemed generally to have low expectations in the area of technical skills, although this varied depending on the size and location of the employer’s business. For example, an employer in a second tier Metropolitan firm commented:

We don’t have very high expectations of their actual knowledge levels, what we are looking for is their ability to deal with knowledge rather than the actual knowledge. If they are going to work for me I like to see that they have got some exposure to accounting and understand the notion of financial reporting and have had some introduction to the big ticket issues, but I don’t, for example, expect them to know much about financial instruments or lease accounting or anything like that . . . We basically see them as having ability and potential rather than bringing huge skills with them.

They looked for general understanding and competence and willingness and a capacity to learn, but were content to undertake much of the technical training themselves.

4 Implications for the development of academic standards

In the UK the Higher Education Academy (HEA) and the Council for Industry and Higher Education (CIHE) published a paper in 2006 on Student Employability Profiles and the profile for Accountancy students is reproduced in Table 4. The list of skills and competencies may well inform any expert panel charged with the responsibility to develop minimum academic standards for accounting graduates in Australia.

Table 4 here

The list of skills includes those non-technical skills of communication, problem solving, critical analysis, self management, teamwork and ICT identified as important in the Accounting for the future project. They also reinforce the findings of other studies that employers of accounting graduates look for both technical and non-technical skills in graduates. In fact, in larger organisations the level of technical skills must be adequate to secure an interview but often the decision to employ will rest heavily on the communication and interpersonal skills of the graduate. A representative of a large organisation explained his approach as follows:
Grades is our filter so if people have got less in a certain level they probably won’t get through the initial assessment in terms of CVs being short listed, but once the CVs are short listed and then ..., that gets totally forgotten and from that point onwards whether you are an 80 percent average or a 60 percent average, it counts not nothing at all, not a single thing. Thereafter it is all about communication. . . . We run group workshops, group sessions, ice breaking sessions where there is no assessment at all. In fact the feedback comes from people who are one year into the programme. They are the ones who are actually saying, “He is a good guy, we can work with him, we can’t work with him.” So, the grades fall away quickly.

While it is possible to argue as to whether it is the university or employer’s responsibility to develop such skills the reality is that many graduates will not be employed as an accountant without an acceptable, pre-existing level of communication skills. The expectations of many employers interviewed for the study was that the university would contribute to the development of such skills, or as one of these suggested:

*I think it is extremely important that there is some provision within the curriculum that they are taught soft skills and they are taught what’s expected of them and they need to know that they need to build relationships early on in their university life.*

It is almost certain that any list of minimum standards for an accounting degree in Australia will include good communication skills both written and oral.

5 Challenges for accounting educators in relation to communication skills

Preparing students for a career in accounting in recent years has been complicated by increasing numbers of international students coming to Australia to study accounting often in the form of a conversion degree. A conversion degree allows graduates from other disciplines to qualify to join either the ICAA or the CPAA in about half the time compared to the undergraduate degrees in accounting. According to Birrell, universities “cope by lowering the English demands in the courses they teach”, for example, by setting ‘problems which do not require essay writing skills, or by setting group assignments in which the student with better English help out’ (Birrell, 2006b: 62).
The inclusion of communication skills on any list of minimum academic standards will add pressure to accounting departments to either raise the level of English required to be accepted into an accounting program and/or improve the communications skills of students as they progress through the accounting program.

The second stage of the *Accounting for the futures* study reports on 18 strategies used by a number of universities to develop non-technical skills in accounting students as they acquire the technical knowledge. Most of these relate to individual units with the exception of the Language for Professional Communication in Accounting (LPCA) in the Master of Accounting (MAcc) program at Macquarie University. This was a strategic collaboration between Macquarie University accounting subjects specialists and language teachers of the Centre for Macquarie English (CME). The strategy uses team teaching and team marking to embed teaching of non-technical skills in the majority of the disciplines (altogether 13 units) of the MAcc program. Naturally this strategy involved more resources and if other universities are not using a similar approach, then it is probable that these universities can offer a conversion degree that provides entry to the accounting bodies at a lower cost.

The approach adopted at Macquarie University to embed the development of communication skills throughout the Master of Accounting has allowed both domestic and international students to obtain employment as an accountant upon graduation. The graduates from the program have also excelled in the CPA exams achieving top marks in some subjects. If all universities adopted a similar strategy to Macquarie university then one of the reasons the Australian government advanced for the cancellation of the Migration Occupations in Demand list in relation to accounting would be less applicable.

At Monash University the development of communication skills is encouraged in both a compulsory communication and critical thinking unit, in addition to an academic skills program which continues throughout the program.

Since the publication of the *Accounting for the future* report, the University of Western Australia has commenced a Master of Professional Accounting program and is adopting a similar approach to Macquarie University to embed communication skills so graduates are more employable.

Diane Sloan and Elizabeth Porter have developed the CEM [contextualisation, embedding and mapping] program to provide English language support to international business students, concurrent with their subject modules at the Newcastle Business School at the University of Northumbria in the UK. The CEM Model ‘identified contextualisation, embedding and mapping as the foundation for improving’ such support programs (Sloan & Porter 2008:51). *Contextualisation* relates to the context in which the academic skills are presented and communicated to students; *embedding* the positioning within the overall academic program; and *mapping* understanding students’
needs in relation to language learning and timeliness of the English for Academic Purpose delivery (Sloan & Porter, 2009).

Clearly, the embedding approach has resource implications as it requires the use of English language/learning skills specialists working with a content lecturer. However, the benefits for the students who graduate from these programs are the opportunity to gain employment in the accounting profession and this is a very tangible return for the investment by the universities.

6 Concluding comments

The development of a set of minimum standards for all accounting programs across Australia should be based on the evidence of the Accounting for the future and other studies to include some non-technical skills in addition to a minimum level of technical competency. Communication, problem solving, critical analysis, self management and teamwork are all rated as important non-technical skills by the Accounting for the future and many other studies.

This will pose challenges for accounting educators particularly if there is no increase in funding to allow strategies like the embedding of communications skills into programs. A shortage of accounting graduates in recent years coupled with a reduction in funding from the federal government and the funding models adopted by most universities has seen universities recruiting large numbers of international students to enrol in accounting conversion degrees. The expected outcomes are an increase in the supply of accountants for a profession struggling to recruit sufficient staff and extra funding within universities to cope with the reduction of federal funds.

Regrettably the increase in funds to the universities does not often mean significant increases in funds to accounting departments to cope with the increase in numbers and certainly not enough to provide the type of support they should receive according to Peng (2007).

The profession is also not able to meet their requirements for extra staff based on the findings of the Accounting for the future study where employers particularly from large accounting firms reported that many international students did not have adequate communication skills for them to employ.

The universities must work with the professional accounting bodies and employer groups to resolve the challenges confronting accounting education in Australia. Resources of universities can be extended, and the preparedness of graduates for their professional accounting careers enhanced, if partnerships, particularly with employers, can be
fostered and nurtured. The imminent implementation of academic standards, the almost certain inclusion of communication skills and the changes to the Occupations in Demand Migration lists add further pressure for such action.
References


| **Communication** | Listening and understanding, speaking clearly and directly, writing to the need of the audience, negotiating responsively, reading independently, empathising, speaking and writing in languages other than English, using numeracy, understanding the needs of internal and external customers, persuading effectively, establishing and using networks, being assertive, and sharing information |
| **Teamwork** | Working across different ages, and irrespective of gender, race, religion or political persuasion, working as an individual and as a member of a team, knowing how to define a role as part of the team, applying teamwork to a range of situations e.g. futures planning, crisis problem solving, identifying the strengths of the team members, coaching and mentoring skills including giving feedback |
| **Problem solving** | Developing creative, innovative solutions, developing practical solutions, showing independence and initiative in identifying problems and solving them, solving problems in teams, applying a range of strategies to problem solving, using mathematics including budgeting and financial management to solve problems, applying problem solving strategies across a range of areas, testing assumptions taking the context of data and circumstances into account, resolving customer concerns in relation to complex project issues |
| **Self-management** | Having a personal vision and goals, evaluating and monitoring own performance, having knowledge and confidence in own ideas and visions, articulating own ideas and visions, taking responsibility |
| **Planning and organising** | Managing time and priorities –setting timelines co-ordinating tasks for self and with others, being resourceful, taking initiative and making decisions, adapting resource allocations to cope with contingencies, establishing clear project goals and deliverables, allocating people and other resources to tasks, planning the use of resources including time management, participates in continuous improvement and planning processes, developing a vision and a proactive plan to accompany it, predicting – weighing up risk, evaluating alternatives and applying evaluation criteria, collecting, analysing and organising information, understanding basic business systems and their relationships |
| **Technology** | Having a range of basic IT skills, applying IT to organise data, being willing to learn new IT skills, having the OHS knowledge to apply technology, having the physical capacity to apply technology e.g. manual dexterity |
| **Life-long learning** | Managing own learning, contributing to the learning community at the workplace, using a range of media to learn – mentoring, peer support and networking, IT, courses, applying learning to ‘technical’ issues (e.g. learning about products) and ‘people’ issues (e.g. interpersonal and cultural aspects of work), having enthusiasm for ongoing learning, being willing to learn in any setting –on and off the job, being open to new ideas and techniques, being prepared to invest time and effort in learning new skills, acknowledging the need to learn in order to accommodate change |
| **Initiative and enterprise** | Adapting to new situations, developing a strategic, creative, long term vision, being creative, identifying opportunities not obvious to others, translating ideas into action, generating a range of options, initiating innovative solutions. |

Table 1- Definitions of non-technical skills from Business Industry and Higher Education Collaboration Council. (2007) report on *Graduate Employability Skills*. 
<table>
<thead>
<tr>
<th>Non Technical Skills</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication, presentation (total)</td>
<td>45</td>
</tr>
<tr>
<td>* Verbal skills, speaking, listening, negotiation and feedback</td>
<td>27</td>
</tr>
<tr>
<td>* Written communication, reports</td>
<td>18</td>
</tr>
<tr>
<td>Teamwork, good interpersonal skills, fit organisation ethos (total)</td>
<td>45</td>
</tr>
<tr>
<td>* Client relationship, focus, rapport, trust</td>
<td>20</td>
</tr>
<tr>
<td>* Leadership</td>
<td>18</td>
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<tr>
<td>* Managerial skills</td>
<td>21</td>
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<tr>
<td>Self Management (total)</td>
<td>41</td>
</tr>
<tr>
<td>* Ambition</td>
<td>6</td>
</tr>
<tr>
<td>* Community involvement, social responsibility</td>
<td>7</td>
</tr>
<tr>
<td>* Hard working, dedicated</td>
<td>12</td>
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<tr>
<td>* Holistic, flexible, able to deal with complexity, uncertainty, pressure</td>
<td>11</td>
</tr>
<tr>
<td>* Intellectual capacity</td>
<td>2</td>
</tr>
<tr>
<td>* Self presentation, professional presence, behaviour</td>
<td>8</td>
</tr>
<tr>
<td>* Well rounded, mature, confident persons</td>
<td>20</td>
</tr>
<tr>
<td>* Work independently, manage time</td>
<td>13</td>
</tr>
<tr>
<td>Initiative and enterprise (total)</td>
<td>35</td>
</tr>
<tr>
<td>* Business acumen, knowledge, planning, building</td>
<td>21</td>
</tr>
<tr>
<td>* Vision, imagination, seeing the big picture, adding value</td>
<td>4</td>
</tr>
<tr>
<td>* Ethics, discretionary behaviour</td>
<td>6</td>
</tr>
<tr>
<td>Problem solving (total)</td>
<td>27</td>
</tr>
<tr>
<td>* Applying theory into practice</td>
<td>16</td>
</tr>
<tr>
<td>* Critical analysis, thinking skills</td>
<td>16</td>
</tr>
<tr>
<td>Technological Competence (total)</td>
<td>19</td>
</tr>
<tr>
<td>Planning and Organising (total)</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 2: Non-technical skills as listed by stakeholders

<table>
<thead>
<tr>
<th>Skill</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic, practical accounting skills</td>
<td>42</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>3</td>
</tr>
<tr>
<td>Audit</td>
<td>12</td>
</tr>
<tr>
<td>Consolidations</td>
<td>2</td>
</tr>
<tr>
<td>Variance analysis</td>
<td>1</td>
</tr>
<tr>
<td>Entries, debits and credits</td>
<td>11</td>
</tr>
<tr>
<td>R&amp;D incentives</td>
<td>1</td>
</tr>
<tr>
<td>Reconciliations</td>
<td>4</td>
</tr>
<tr>
<td>Retrieving information from the system</td>
<td>2</td>
</tr>
<tr>
<td>Superannuation</td>
<td>5</td>
</tr>
<tr>
<td>Tax</td>
<td>13</td>
</tr>
<tr>
<td>Transactional activity</td>
<td>3</td>
</tr>
<tr>
<td>Trusts and companies</td>
<td>2</td>
</tr>
<tr>
<td>Understanding financial reports, preparing financial statements</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 3: Defining Technical skills
Table 4

A graduate in Accountancy typically will:

- be able to critically evaluate arguments and evidence;
- be able to analyse and draw reasoned conclusions concerning structured and unstructured problems from both given data and data that must be acquired;
- be able to locate, extract and analyse data from multiple sources self-manage their learning;
- be numerate, including being able to manipulate financial and other numerical data and to appreciate statistical concepts;
- be effective in ICT including using spreadsheets, word processing software and online databases;
- be able to present quantitative and qualitative information, together with analysis, argument and commentary, in a form appropriate to the intended audience have effective interpersonal skills, including the ability to work in teams understand the contexts in which accounting operates including the legal and social environment, the accountancy profession, the business entity, the capital markets and the public sector;
- understand the current technical language and practices of accounting (e.g. recognition, measurement and disclosure in financial statements, managerial accounting, auditing, taxation) in a specified field;
- understand some of the alternative technical language and practices of accounting (e.g. alternative recognition rules and valuation bases, accounting rules followed in other socio-economic domains, alternative managerial accounting approaches to control and decision making);
- be skilled in recording and summarising transactions and other economic events, preparing financial statements, analysing the operations of business (e.g. decision analysis, performance measurement and management control), financial analysis and projections (e.g. analysis of financial ratios, discounted cash flow analysis, budgeting, financial risks).