

# Engaging professional societies in developing work-ready graduates

**Skye Nettleton**

University of Technology, Sydney, Australia  
[skye.nettleton@uts.edu.au](mailto:skye.nettleton@uts.edu.au)

**Andrew Litchfield**

University of Technology, Sydney, Australia  
[ajl@uts.edu.au](mailto:ajl@uts.edu.au)

**Tracy Taylor**

University of Technology, Sydney, Australia  
[tracy.taylor@uts.edu.au](mailto:tracy.taylor@uts.edu.au)

Since the 1990s universities have faced increasing pressure to better prepare graduates for the workforce. Employers, professional societies and the government are increasingly calling for graduates who are work-ready. In this paper we identify the drivers of the work-ready initiative and present definitions and components of our identified professional work-ready attributes and skills. University graduates are expected to have more than just the discipline-based knowledge and skills that universities traditionally teach. In exploring the tensions, challenges and opportunities that this changing educational environment presents, this paper investigates the key graduate attributes, skills and criteria for successful careers in the professional workplace. Working in consultation with professional societies, our project aims to identify and contextualise work-ready skills to each of the targeted disciplines - Information Technology and Business - to maximise student relevance. We aim to rejuvenate the current curriculum to improve the development of students' work-ready skills by integrating into the curriculum new work-ready subjects and learning activities within existing subjects. Skills identified by professional societies are critical for contemporary university graduates, and are being used to develop effective teaching and learning strategies, tutorials, activities and case-studies.

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## Introduction

Universities are increasingly under pressure to design and implement new strategies to produce graduates who are work-ready. Employers, professional societies, government, higher education funding bodies and students have growing expectations that universities will equip their graduates with not only relevant knowledge specific to their chosen discipline, but also with appropriate work-ready skills (ACNielsen Research Services, 2000; Scoufis, 2000; Luca & Oliver, 2002; Precision Consulting, 2007).

The importance of work-ready skills has been identified, discussed and hotly debated in academic and government literature since the early 1990s (Mayer, 1992; Clanchy & Ballard, 1995; Finn, 1999; Holmes, 2002; Barrie, 2005; Barrie, 2006). Barrie and Prosser (2004, p.244) point out that graduate attributes "have their roots in the contested territory of questions as to the nature of knowledge and the nature of a university." However, the

pressure from the above-mentioned stakeholders has driven universities to re-evaluate their education outcomes (Barrie, 2006).

For example, the Higher Education Council's 1992 report highlighted that, 'higher level generic skills were seen as critically important' and work-ready skills such as communication, problem solving, decision making and application of knowledge were found to be more important to chief executives than theoretical knowledge (Higher Education Council and the National Board of Employment, Education and Training, 1992, p.20).

In 2001, the Department of Science, Education and Training (DEST) and Australian National Training Authority (ANTA) funded a project which surveyed industry on critical generic employability skills in Australian workplaces. Subsequently, in May 2002, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) published findings from the 2001 survey in a report, '*Employability Skills for the Future*', which included a framework developed from research with employers. This report was followed by a 2004 DEST report, '*Development of a Strategy to Support the Universal Recognition and Recording of Employability Skills - A Skills Portfolio Approach*'. The latter report built on the 2002 report's employability skills framework and recommended models to 'recognise, value and utilise employability skills' (DEST, 2004, p. v). More recently in 2007, the Australian Government commissioned the Business, Industry and Higher Education Collaboration Council to examine how universities develop, teach, assess and report on graduate employability skills. The resultant report, '*Graduate Employability Skills*' (Precision Consulting, 2007), recommended that DEST encourage universities to systematically review, map, and develop professional training in employability skills.

To better understand these issues and demands for work-ready graduates in information technology and business, we commenced a teaching and learning curriculum renewal project. The aim of the project was to ascertain the work-ready skills and knowledge required by professional societies associated with the Faculties of IT and Business; and to design and integrate into the curriculum learning activities and new subjects to improve students' work-ready understandings, knowledge, skills and attitudes in collaboration with the professional societies.

The approach taken was to engage with professional societies and conduct interviews to identify skills pertinent for work readiness in context. The information obtained was used to identify key work-ready attributes and frame the material and contexts for the development of teaching and learning material. The key findings of the initial stages of the project, including the key professional work-ready skills identified for each profession, are outlined below.

## **Background**

The project encompassed the domains of two discipline areas, Information Technology (IT) and Business. The recent downturn in the IT industry has shaped current curriculum offerings. While traditionally IT degrees involved a compulsory paid professional industry training year work placement, since 2004 it has been more difficult to include this learning experience in university IT courses due to lack of jobs. This has meant that work-ready skills are not as easily obtained as in the past and thus students need to better develop these skills within the curriculum. This is concerning as an, 'overwhelming majority of employers...indicated that any work experience is better than none' (Precision Consulting 2007, p.34). Moreover, according to Nunan (1999, pp.1-2), 'employers know that they are more likely to terminate

the employment of an employee because of inadequacies in employment-related skills than because of an inadequate knowledge base.’ Therefore, many students now need an explicit course based approach to the development of work-ready skills during their studies and the IT industry and the Australian Computer Society emphasises the necessity for all IT courses to include elements of professional practice.

The second discipline encompassed the set of programs that fall under the broad umbrella of business studies. Professional societies such as the AHRI (Australian Human Resources Institute), CPA (Certified Practising Accountants), ICAA (Institute of Chartered Accountants in Australia), and the ACS (Australian Computer Society) require graduates to meet certain professional standards and be ready to enter the workplace upon graduation. The UTS Faculty of Business needs to deliver on its Mission ‘forward thinking work-ready’ and this is part of its AACSB (Association to Advance Collegiate Schools of Business) accreditation.

Our work-ready project addresses these increasing pressures to develop professional work-ready graduates. The meaning of ‘professional work-ready’ can be deconstructed into its component parts: professional and work-ready and employers expect new graduates to demonstrate, or at least have great potential for both. For the purposes of this project ‘professional work-ready’ refers to ‘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’, which is a definition provided by DEST (2002, p.3) for *employability skills*. Commonly used terms in the literature related to work-ready include: employability skills, graduate attributes, generic skills, key competencies, transferrable skills, life skills and personal skills.

## **Methodology**

After a preliminary literature review, eight professional societies were interviewed to gather primary and secondary data for the project. In the first instance, the accreditation and education managers of the professional accrediting societies were contacted via telephone or email. The accrediting societies contacted included:

- Association to Advance Collegiate Schools of Business (AACSB) International;
- Australian Computer Society (ACS);
- Australian Human Resources Institute (AHRI);
- Chartered Institute of Marketing (CIM);
- Certified Practising Accountants Australia (CPA); and
- Institute of Chartered Accountants in Australia (ICAA).

When there was either no accrediting body for the profession (in the case of management), or the accrediting body was unavailable due to restructuring (in the case of the Australian Securities and Investment Commission) or not readily contactable (in the case of the Chartered Institute of Marketing based in London, UK), associated professional societies were identified, and included:

- Graduate Management Association of Australia (GMAA);
- Australian Marketing Institute (AMI); and
- Chartered Financial Analyst (CFA) Institute, a UTS Program Partner.

When the initial contact at the professional body was not the appropriate party, then the request was forwarded to the relevant contact. The initial discussion focused on an introduction to the project, its aims and methodology, and a request for an interview to

discuss current and future work-ready skills required of new university graduates by the profession. An email confirmation was also sent and an interview time agreed upon. An agenda outlining interview questions was emailed to the interviewees prior to the interview. The literature reviewed on professional work-ready graduates, together with professional body accreditation guidelines provided the basis for developing the interview questions. The interviews were conducted during September to November 2007 and addressed the following points:

- Generic (non-technical) skills essential for a new graduate;
- Generic skills desirable for a new graduate;
- Current weaknesses of new graduates;
- Skills most important in the future for the ir profession;
- Meaning of professionalism in the ir profession;
- Skills that would differentiate a particularly professional graduate;
- Ranking of a number of identified work-ready skills (based on the literature review);
- Suggestions on how universities can improve the work readiness of their students; and
- Recommendations on the best way for universities to help develop students' professional skills.

Interview notes were taken and a summary report of key findings was sent to all interviewees to confirm the intention and meanings of their comments.

## Findings

The interview data were analysed for themes, sub-themes and concepts. The two key themes common to all the interviews were professionalism and work-readiness. These are discussed in turn below.

### Professionalism

The first theme that distinctly emerged centred on notions of professionalism. Three levels of professionalism were identified:

1. Superficial level, which defines appropriate professional appearance;
2. Compliance level, which deals with professional conduct and codes of ethics; and
3. Master level, which encompasses leadership and transcendence.

The first aspect of being professional is dressing to 'look the part', usually meaning to dress well, and this influences the way a person looks impacts the way others perceive him or her. This is a *superficial* level, and a professional is in tune with the environment and is able to discern what is appropriate for the circumstances. It is expected that recent graduates will be meeting with clients, and will therefore be expected to look smart (Accreditation Consultant and Manager – CPA Program, CPA Australia). For example, an accountant might be called into a meeting with a client at the last minute to provide an explanation and if he/she does not look smart, then this potentially reflects poorly on the company and the advice given by the accountant.

Most professional society representatives interviewed defined professionalism as encompassing maturity, respecting others, honesty, integrity, acting ethically and taking responsibility. These elements can be categorised into the second level of professionalism, the *compliance* level. Although this level is regulated somewhat by professions' codes of conduct and ethics, the concept of professionalism also encompasses *how* a person adheres to the codes. This level defines professional conduct, i.e. the way a person carries out his or her

job, interacts with others, and adheres to the code of conduct and code of ethics of the profession. Although not all professions have a defined code of conduct and code of ethics, similar core themes resonate with each professional society.

The accounting profession is acutely aware of ethical dimensions after the financial scandals of WorldCom, Enron, Arthur Andersen auditors, and closer to home, HIH, OneTel, the Australian Wheat Board, and more recently Westpoint, Bridgecorp, Australian Capital Reserve and Fincorp. In the interviews, the professional accounting societies (CPA Australia and ICAA) defined professionalism as delivering a public service in the interest of the client and the public without regard for one's own interest, which allows for clear and uncontaminated judgments about the best option for the client. It also encompasses ensuring one's actions will not harm the public interest, i.e. being committed to ethical, social and moral responsibility; and acting in a manner that will not bring discredit to the profession, i.e. with honesty and integrity (Accreditation Consultant and Manager – CPA Program of CPA Australia and the General Manager, CA Program and Admissions Division of the ICAA).

While acting ethically, taking responsibility, respecting others and continual learning are all essential to being a professional graduate, there is a third level which encompasses leadership and transcendence. This third *master* level is the way a person projects him or herself into the world, above and beyond looking the part (superficial level) and adhering to the requirements of the code of professional conduct (compliance level).

While leadership potential is desirable in a graduate, it is not essential to being a professional. However, the professions often do look for leadership potential in new graduates. In marketing, a professional graduate is one who is a *change* leader, i.e. one who is willing to go above and beyond the requirement and is proactive (Marketing Manager, AMI). A professional graduate suggests new ideas and finds better ways of doing things. The President of the NSW and ACT Chapters of the GMAA warned that 'leadership' is an overused word, and integrity and authenticity are more important. The desire for power and money is the antithesis of a professional graduate, because as discussed above in the compliance level, professionalism is delivering a *public service*, in the interest of the client and the public without regard for one's own interest. However, striving for self-improvement is a key factor in professionalism, because in improving oneself, one also provides a better service to the public.

In addition to leadership, transcendence, 'to go or be above or beyond; surpass or exceed' (Macquarie University, 2004) was another common sub-theme identified during the interviews across many of the professions. Transcendence refers to the way a person engages and projects him or herself into the professional world, above and beyond 'looking the part' and adhering to the minimum requirements of the code of professional conduct. Transcendence encompasses the concepts of aspiring to excellence through continuous self-improvement, being entrepreneurial, seeking greater responsibilities, jumping into difficult assignments, being tenacious, learning from mistakes, driving to exceed expectations, and taking pride in one's work. Like leadership, these elements of transcendence are not necessarily essential to being a professional, but being ambitious and committed to one's chosen field is essential to maximising one's career development. (Nettleton, 2007, p.59)

Employers do not expect as high a level of professionalism in a 22-year old as they would in a 50-year old CEO, for example, because aspects of professionalism come with experience. However, employers are looking for the fundamentals with which they can help new

graduates build on. The large accounting firms noted that whilst technical skills are important, they recruit for generic skills (General Manager, CA Program and Admissions Division ICAA). The firms can train new graduates in technical skills, but often it is “too hard” to train graduates on generic skills (CPA Australia and ICAA, 2007) such as teamwork, leadership, initiative, communication, ability to develop rapport with client, analytical skills, making sound judgments and applying their technical knowledge.

### Work-ready

The second theme was work-ready and a number of work-ready key skills were common across the professions interviewed. The attributes most identified as most important were:

- Application of knowledge;
- Communication skills;
- Critical thinking and creative problem-solving;
- Global perspectives; and
- Teamwork.

Although this list is not exhaustive of the attributes suggested by the professional societies, these attributes tend to be most important across all professions interviewed. The table below outlines each of the key attributes, the attributes’ dimensions and the comments by professional societies on these attributes.

Table 1: Work-Ready Graduate Attributes

Work-Ready Attribute	Dimension	Professional Society	Illustrative Comments regarding a Work-Ready Graduate
Application of knowledge	Translating theory into practice	AACSB	Can take technical knowledge and use it in a practical sense.
		ACS	Recognises when a theory no longer applies and has the ability to adjust it, apply it in a different way, or create a new theory.
		AMI	Can demonstrate how marketing finesse adds to shareholder value, e.g. segmenting the market and identifying new/growth opportunities.
		GMAA	Applies and integrates knowledge of operations, business, marketing, strategy and technology to identify and develop new markets and niches.
Communication skills	Accuracy and clarity	ICAA	Writes clearly to avoid misunderstanding, ambiguities and mistakes and recognises the importance of keeping a ‘paper trail’ (records of all decisions).
	Knowing one’s audience and the ability to	ACS	Explains technical ideas clearly and simply and can understand what a client with a non-technical background wants in a practical sense.

<b>Work-Ready Attribute</b>	<b>Dimension</b>	<b>Professional Society</b>	<b>Illustrative Comments regarding a Work-Ready Graduate</b>
	explain complex technical matters to a non-technical audience	AMI	Can communicate across disciplines, can adapt to different personalities, has strong written communication skills, and can concisely articulate the importance of a written report and persuade the target audience.
		CFA	Can communicate the results of analysis to other professionals and clients who may not understand technical financial terms.
		CPA	Quickly and effectively understands clients' businesses, can present findings to potential clients, asks the right questions, can develop rapports and can hold intelligent conversations.
	Listening, questioning and negotiating	AHRI	Listens, questions and negotiates well, e.g. to mediate management and employees, whose interests may be in conflict.
Critical thinking and creative problem solving	Creativity and imagination	ACS	Is imaginative, e.g. has the ability to create new methods and theories.
	Finding optimal solutions	AMI	Understands the customer, what they are looking for and finds optimal solutions.
	Noticing latent problems or inefficiencies	GMAA	Does not accept the status quo, e.g. probes deeper, diplomatically and constructively, to improve businesses.
	Solving problems in the context of ambiguity	AACSB	Translates knowledge into action and develops capacity and skills to be a better analytical, critical thinker.
		AHRI	Can resolve human conflicts, e.g. deal with issues around lack of clarity and manage differing opinions.
		CFA	Can analyse information, reach conclusions and prepare forecasts.
	Sound judgement	ICAA	Thinks critically about business situations, does not jump to conclusions, and creates innovative solutions with state of the art knowledge.
Global perspectives	A broad understanding and awareness of the world	AACSB	Appreciates other cultures, how others live and think and is comfortable in new, ambiguous and multicultural environments.
		ACS	Has an awareness of the "big picture" and the environment in which a problem arises, and draws on that understanding to find optimal solutions.

Work-Ready Attribute	Dimension	Professional Society	Illustrative Comments regarding a Work-Ready Graduate
		AHRI	Has a 'world view', i.e. understands current affairs and pressures on businesses to attract and retain good staff.
		GMAA	Is aware of the classics and Socratic inquiry which have infused Western thinking and enables reflections on motivation, what can one know and how one should act.
		ICAA	Has a broader vision of the way the world operates and understands the context of problems.
Teamwork	Working efficiently and effectively with other people, regardless of discipline	ACS	Can easily work in highly dynamic teams, i.e. with different people, projects and companies.
		AMI	Is adaptable and flexible in working with different departments and levels of seniority.
		CFA	Usually works in a team of financial analysts and interfaces with other finance professionals.
		CPA	Communicates and works well in teams, solves problems and knows how to reach a consensus.
		GMAA	Works well in teams to deliver tasks on time.

### Identification of Key Attributes

Key professional work-ready attributes are being developed through a framework based on the interviews with both professional societies as well as the DEST framework (ACCI & BCA, 2002). The DEST framework consisted of eight key employability skills: communication, teamwork, planning and organising, technology, problem solving, self-management, life-long learning and initiative and enterprise. Likewise, the professional societies interviewed highlighted the importance of communication, teamwork, critical thinking and creative problem-solving skills. They also stressed the importance of work-ready attributes such as professionalism and ethics, global perspectives and the ability to apply knowledge. In discussion with colleagues, information literacy and management and research ability were also identified as key attributes, and we considered application of knowledge is incorporated in a number of the other key attributes and skills.

In summary, the framework which encapsulates the key work-ready attributes based on our investigation in alphabetical order are as follows:

1. Communication
2. Ethics and Professionalism
3. Global and Local Perspectives
4. Information Literacy and Management
5. Initiative, Enterprise and Creativity
6. Planning and Organising



7. Problem Solving and Critical Thinking
8. Research Ability
9. Self-Management and Life-Long Learning
10. Teamwork
11. Technology Literacy

For each key work-ready attribute we are identifying skill-sets. Relevant new subjects and learning activities developing these skills are being designed to integrate into the existing curriculum. These initially generic work-ready learning activities are then contextualised to each profession in collaboration with the professional societies to maximise student relevance. These will assist students to develop work-ready skills within the curriculum through work-ready subjects, modules, workshops, and an online wiki matrix of work-ready learning activities linked to each of the 12 key attributes. The activities will include role plays and case-studies, from which subject coordinators may choose to integrate into their course to improve their students' work-ready skills.

A wiki was chosen as the central conduit for information dissemination due to its easy accessibility and ability to involve academics. Academic involvement in the process of developing and sharing learning activities and experiences is being actively encouraged, as the importance of academic ownership of teaching and developing work-ready skills has been well recognised (Scoufis, 2000; Sharp & Sparrow, 2002) in the success of such projects. In the UTS experience, stand-alone resources which are not integrated, not contextualised and are developed without the buy-in of academics, tend not to be used.

## **Conclusion**

For professional societies and employers, developing students' professional work-ready skills is of crucial importance and universities are in a position to more systematically develop students' work-ready attributes within the curriculum. While there has been much discourse on developing students' employability skills, less emphasis has been placed on tailoring professional work-ready skills to the specific professions, that is, contextualising the skills. Our systematic approach has identified the key professional work-ready attributes and skills. We are now developing learning activities contextualised to each profession to maximise student relevance. The project aims to increase students' awareness and understanding of the behaviours, attitudes, knowledge and skills expected in their chosen field, with the final goal of improving our graduates' professionalism and work-readiness.

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