

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/279218548>

# A decade of study on employer feedback on the quality of university graduates

Article in *Quality Assurance in Education* · July 2015

DOI: 10.1108/QAE-04-2014-0018

CITATIONS

24

READS

3,691

3 authors, including:



**Mahsood Shah**

Swinburne University of Technology

131 PUBLICATIONS 1,306 CITATIONS

[SEE PROFILE](#)



**Sid Nair**

Tertiary Education Commission, Mauritius

91 PUBLICATIONS 1,233 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Lighting the Path(way): Articulating curriculum design principles for open access enabling programs. [View project](#)



Engineering Education [View project](#)



## Quality Assurance in Education

A decade of study on employer feedback on the quality of university graduates

Mahsood Shah Leonid Grebennikov Chenicheri Sid Nair

### Article information:

To cite this document:

Mahsood Shah Leonid Grebennikov Chenicheri Sid Nair , (2015),"A decade of study on employer feedback on the quality of university graduates", Quality Assurance in Education, Vol. 23 Iss 3 pp. 262 - 278

Permanent link to this document:

<http://dx.doi.org/10.1108/QAE-04-2014-0018>

Downloaded on: 10 June 2015, At: 17:49 (PT)

References: this document contains references to 54 other documents.

To copy this document: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

The fulltext of this document has been downloaded 29 times since 2015\*

### Users who downloaded this article also downloaded:

Chenicheri Sid Nair, Jinrui Li, Li Kun Cai, (2015),"Academics' feedback on the quality of appraisal evidence", Quality Assurance in Education, Vol. 23 Iss 3 pp. 279-294 <http://dx.doi.org/10.1108/QAE-05-2014-0023>

Noha Elassy, (2015),"The concepts of quality, quality assurance and quality enhancement", Quality Assurance in Education, Vol. 23 Iss 3 pp. 250-261 <http://dx.doi.org/10.1108/QAE-11-2012-0046>

Daniel W. Lang, (2015),"Self-regulation with rules: Lessons learned from a new quality assurance process for Ontario", Quality Assurance in Education, Vol. 23 Iss 3 pp. 216-232 <http://dx.doi.org/10.1108/QAE-09-2014-0046>

Access to this document was granted through an Emerald subscription provided by

Token:JournalAuthor:EF6FCC10-1DD4-4C8A-835B-555E8A48FF02:

### For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit [www.emeraldinsight.com/authors](http://www.emeraldinsight.com/authors) for more information.

### About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com)

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# A decade of study on employer feedback on the quality of university graduates

Mahsood Shah

*The University of Newcastle, Callaghan, Australia*

Leonid Grebennikov

*The University of Western Sydney, Sydney, Australia, and*

Chenicheri Sid Nair

*The University of Western Australia, Perth, Australia*

## Abstract

**Purpose** – The purpose of this paper is to outline four separate studies undertaken in two Australian universities between 2003 and 2012 on employer feedback on the quality of university graduates. Higher education has expanded significantly in the past decade. The expansion has been in student enrolments with a focus on increasing the participation of disadvantaged students; the emergence of new kinds of providers other than universities; new modes of education delivery; and the internationalisation of higher education. The diversity of higher education institutions and quality issues require the assessment of graduate quality based on feedback from employers. The lack of such assessment on graduate quality based on employer voice risks the production of graduates with focus on success (quantity) rather than excellence (quality). It also disconnects the engagement between higher education institutions and employers to assess trends and changes in various industries and professions that require employer input in course development and renewal to meet the changing needs of the industries.

**Design/methodology/approach** – A quantitative method using online survey to gather feedback from employers of university graduates was used. The survey tool has been previously used in other studies.

**Findings** – A decade of study using quantitative and qualitative methods with different employers in two different geographic locations clearly shows that employer views on the quality of university graduates in a range of capabilities have remained consistent. The study also outlines the challenges in gathering feedback from employers and how data are used in curriculum reviews and enhancements.

**Research limitations/implications** – The study has a number of limitations, including gathering up-to-date employer data, and engagement of employers in the survey.

**Practical implications** – Practical implications could include the use of survey data in new course developments, review of courses and further enhancement to ensure course relevance.

**Originality/value** – This is the first longitudinal study undertaken using the same survey instrument in two universities. The study engaged 485 employers.

**Keywords** Quality assurance, Feedback, Employers, Employer survey, Employer perception of university graduates, Graduate quality, Employer satisfaction

**Paper type** Research paper



## Introduction

Higher education has experienced massive expansion in terms of student enrolments and the emergence of new kinds of providers (Shah and Jarzabkowski, 2013). The increased flexibility, new kinds of providers and new modes of education delivery all

underline the need to assess the quality of graduates based on feedback from employers and industry bodies representing different professions. There are concerns worldwide that existing undergraduate programmes are not producing graduates with the kinds of lifelong learning skills and professional skills which they need to be successful in their professions (AAGE, 2011; AGR, 1995; BHERT, 2002; Candy and Crebert, 1991; Candy *et al.*, 1994; Harvey, 1993; Harvey and Green, 1994; ICAA, 1994; NBEET, 1992; Nair and Patil, 2011). Articles in the media (for example, *The Australian*) have also highlighted the views of various professional accrediting bodies in relation to the gap between employability skills attained by graduates and what employers want in professions including accounting, finance and economics. Also, the most recent study undertaken in Australia by the prominent business industry group (Australian Industry Group, 2009) suggests that employers recognise employability skills, a positive attitude and work experience as the most important factors when recruiting graduates. The same study also showed employer dissatisfaction in some specific areas which included teamwork skills, business and customer awareness and the lack of relevant work experience. A large-scale study funded by the Commonwealth Government with 1,105 graduate employers in Australia found that employers rated five skills as most important: creativity and flair; enthusiasm; capacity for independent and critical thinking; and flexibility and adaptability (Department of Education, Training and Youth Affairs, 2000). Most recent study in Australia with graduates and their supervisors found the following strengths in graduates: specific knowledge and skills suitable for the field; teamwork and interpersonal skills; written and oral communication skills; research skills; autonomy, self-organisation and flexibility; and critical thinking and analytical skills (Workplace Research Centre, University of Sydney, 2014, p. 72).

Previous studies in various contexts suggest concerns raised by employers and industries about the quality of university graduates. De la Harpe *et al.* (2000) in Australia suggested that undergraduate programmes are failing to provide graduates with the necessary skills for their careers. Shah and Nair's (2011) research with 400 graduate employers from different industries in Australia found the following graduate capabilities rated by employers as high on importance and low on satisfaction:

- being able to communicate effectively;
- ability to organise work and manage time effectively;
- being willing to face and learn from errors and listen openly to feedback;
- ability to set and justify priorities;
- being flexible and adaptable; and
- a willingness to listen to different points of views before coming to a decision.

Scott *et al.*'s (2010) study in two public hospitals in Australia reported ten skills rated as most important by graduate nurses:

- (1) clinical practice;
- (2) ability to organise work and manage time effectively;
- (3) understanding personal strengths and limitations;
- (4) ability to set and justify priorities;
- (5) wanting to produce as good a job as possible;

- (6) being able to develop and use networks of colleagues to help solve key workplace problems;
- (7) the ability to remain calm under pressure or when things go wrong;
- (8) the ability to use previous experience to figure out what is going on when a current situation takes an unexpected turn;
- (9) the ability to empathise with and work productively with people from a wide range of backgrounds; and
- (10) being able to work with senior staff without being intimidated.

Other attributes were highlighted in an employer survey undertaken at the University of South Australia that found the following skills and attributes rated high on importance and low on performance – written skills and oral communications; ability to apply knowledge; and solve problems (UniSA, 2009). Similar studies undertaken in Australia by Graduate Careers Australia between 2009-2012 found that interpersonal and communication skills (written/oral); passion/knowledge of industry/drive/commitment/attitude; critical reasoning and analytical skills/problem solving/technical skills; lateral thinking; calibre of academic results; and cultural alignment/values fit as the top six criteria used in graduate recruitment in Australia (Graduate Career Australia, 2012).

Similar findings are reported in a number of international studies. For example, studies in the UK by Hesketh (2000) with 372 employers suggest the five most important skills used by employers to recruit graduates were verbal communication, ongoing learning, written communication, problem solving and teamwork. The study also reported clear evidence that employers are well aware of the quality of graduates from various universities based on previous recruitment experience and target recruitment from universities with a reputation of producing high-quality graduates. Murray and Robinson (2001) added there is strong evidence that large-scale graduate recruiters in UK target a limited number of universities primarily because of the quality of graduates.

Harvey's (1993) earlier studies in the UK found that apart from communication skills, employers sought graduates who had interpersonal skills, intelligence and personality. The Dearing Report (National Committee of Inquiry into Higher Education (NCIHE, 1997) in the UK recommended the development of communication, numeracy, information technology and learning how to learn at a higher level within all subjects. Cranmer (2006) concluded in her study in the UK that there was a "mismatch" with some graduates between the skills acquired at university and the skills they are required to use in employment. A study in the UK with the country's biggest businesses found three in four bosses believe graduate skills are poor with the research, suggesting that thousands of young people arrive at interviews without the "vital employability skills" required by employers such as having a suitable grasp of English (The Telegraph, 2011).

In the European context, a large-scale survey on employers' perception of graduate employability in 27 European countries with 7,036 graduate employers found that graduate recruiters were most likely to highlight the importance of teamwork, sector-specific skills, written and oral communication skills, computer literacy, the ability to adapt to new situations and analytical and problem-solving skills as important attributes when recruiting (European Commission, 2010). A study in Spain with 872 employers found willingness to work; ability to learn; ability to work as part of a team;

oral communication skills; and time management as key skills required by employers (Hernández-March *et al.*, 2009).

A study by PricewaterhouseCoopers (2011) with 1,201 chief executive officers from 69 countries supported the notion that there is a skills mismatch between graduate skills and the skills required in large organisations. Studies undertaken around the world show similarities in the findings. In Vietnam, the study also found graduates lacking the necessary skills required by the contemporary workplace (Tran, 2012; Nguyen, 2009a; 2009b). Studies in Romania suggest that employers recognise professional knowledge; foreign languages; knowledge of technology; written and oral communication skills; and problem-solving skills as most important in early career graduates (Nicolescu and Pfäcaronjun, 2009). A recent study in China found that employers regard the following qualities as most important when recruiting:

- positive attitudes and behaviours and being responsible, adaptable and working safely;
- a commitment to learning and growing continuously;
- an ability to think creatively and solve problems; and
- the ability to work cooperatively with others (Velde, 2009).

The assessment of employer feedback on university graduates is important for a number of reasons. They include:

- to ensure that university courses and curriculum are relevant to the changing needs of employers and industry;
- to assess the trends and changes in the external operating environment, which may impact the labour market;
- to identify the extent to which graduates in university and non-university providers (e.g. private providers) have the skills and attributes which employers identify as high importance and low satisfaction in early career graduates; and
- to enhance the engagement between employers and the education providers.

The literature suggests that studies across the world with employers have found a number of generic skills seen as important with early career graduates. They include written and oral communication, teamwork, critical thinking and problem solving, sector-specific skills, flexibility and adaptability and the ability to apply knowledge at work.

### Drivers for ongoing assessment

A number of key drivers require ongoing assessment of graduate quality. First, the emergence of new kinds of non-university education providers offering fast track courses in online mode requires the assessment of graduate quality from such providers. Second, in countries such as Australia, UK, New Zealand, South Africa and USA, governments have introduced policies to increase the participation of diverse groups of students. Thus, studies on graduate quality are important in an environment of higher education expansion. Third, in the past few years, higher education has witnessed diversity in education delivery such as online, partnership and offshore. Fourth, the dynamic of education delivery is unpredictable with the emergence of massive open

online course where courses of study are undertaken by millions of students with different providers with credits offered. Fifth, governments in countries such as Australia are planning to introduce employer surveys at the national level to assess the quality of graduates as part of quality assurance and, finally, the disconnection between employers and education providers in course development and ongoing renewal. Another important driver for ongoing assessment is increased mobility of graduates and their ability to work in international context.

The increased internationalisation of higher education with graduate mobility requires institutions to develop international courses which enable portability of degrees and its recognition in other countries. [Harvey and Bowers-Brown \(2004\)](#); [Arnold \*et al.\* \(2005\)](#); and [Baruch \(2004\)](#) have pointed out that with increased mobility across national borders, there is a growing need for a model of generic skills that is recognised internationally. Such trend is evident in Europe with the introduction of the Bologna declaration (Bologna declaration, 1999). The expansion of higher education in terms of student population, different providers and modes of education delivery will no doubt require the assessment of graduate quality from employers in a systematic manner. Such assessment will be demanded by the government and employer groups with the aim to ensure that higher education is meeting the social, economic and environmental needs of the broader society ([Little, 2003](#)), and higher education is contributing to the productivity ([Curtis and McKenzie, 2001](#); [Foray and Lundvall, 1996](#)).

In Australia, for example, the engagement of employers and the university on course or curriculum development is via the course development process where most universities include employer representatives in course advisory committees. The new national regulator in Australia – Tertiary Education Quality and Standards Agency requires evidence of industry engagement in course development ([TEQSA, 2012](#), p. 22). While the quality assurance process in course development requires employer engagement, the process has a number of flaws. Anecdotal evidence suggests that in some universities, the employer representatives in course advisory committees are close allies of individual academics, which limits rigour in course development and external input. There is a view in some universities which suggests that new courses approved by various committees are without a proper academic and business case, costing, risk analysis and market needs and intelligence with evidence of courses approved without any student demand. Some scholars have argued the need to ensure that academic programmes are relevant, high quality and financially viable ([Massy, 2003](#); [Nelson and Hevert, 1992](#); and [Swift, 2012](#)) before approval. Australian universities have for many years embedded graduates attributes into the curriculum ([Bridgstock, 2005](#); [Hager \*et al.\*, 2002](#); [Precision Consultancy, 2007](#)). However, limited attempts have been made to find out if graduates are actually attaining those attributes using employer feedback.

An area of limited research is employer feedback on the quality of graduates from private providers. Earlier studies by [Edwards \*et al.\* \(2010\)](#) suggest that private provider graduates are more satisfied compared to university graduates on the course experience questionnaire in two scales and the overall satisfaction item. [Shah and Brown \(2009\)](#) found that graduate employment in private higher education is higher than the national average in universities.

The 2003 Lambert Review in the UK observed: “work experience was universally regarded as an important way of developing employability skills and business awareness”. A review of student internship programmes as part of an undergraduate



degree in the UK showed over 82 per cent of the interns surveyed felt more confident about their future employability as a result of the internship experience. The top five areas which the interns reported that they have developed work-related skills included: time management; communication skills; problem solving; teamwork; and IT skills (Oakleigh Consulting Limited, 2011).

### Methodology

Both qualitative and quantitative methodologies were used to collect employer feedback on university graduates. In one university (named as University A), the survey was conducted in 2003, 2007 and in 2012 with large- and medium size organisations that recruit graduates on an annual basis in various disciplines. In the second university located in another state (named as University B), the same survey instrument was administered in 2011 with different employers. The diversity of employers in two geographic locations provides the depth in terms of employer representativeness, and enables comparative analysis of employer importance and satisfaction on a range of graduate capabilities.

Online survey methodology was used in Universities A and B. Employer details were collected from a range of sources including:

- graduate destination surveys;
- university careers and employment database;
- individual contacts in schools and faculties;
- a list maintained by schools where students undertake work-placements;
- list of employers working closely with the university's engagement office; and
- a list maintained by individual units/departments providing short courses to employers.

A total of 950 employers were contacted in both universities. The 950 employers represented various disciplinary areas of course offering in both universities.

The methodology employed is modified, though similar to those reported by Nair and Mertova (2009). Employers were first contacted via phone to find out the appropriate person in the best position to assess graduate quality. In most cases, they include graduate recruitment managers, or immediate supervisors of graduates in various disciplinary areas. The phone contact enabled the collection of the contact name, email address and an assessment of a willingness to participate in the survey. A cover email with the link to the online survey was immediately sent to the contact. A follow up was also undertaken three weeks after the initial email with non-respondents. A total of 485 (51 per cent) employers participated in the study in two universities. The response sample was representative of various disciplinary areas of course offering in both universities.

Both universities offer courses in a wide range of discipline areas including business, education, arts, humanities, health and nursing, sciences, pharmacy, various areas in engineering, construction, etc. Employers from all disciplinary areas were part of the sample.

### Survey instrument

The employer survey questionnaire used in Universities A and B has been used since 2003. The survey uses both importance and performance rating using a five-point Likert

scale. The survey items are based on extensive research on graduate capabilities highlighted as important by employers in early careers in various professions in Australia.

Findings

The employer survey asked graduate employers to rate the skills and capabilities they see as most important in early career graduates. The findings suggest that the importance ratings have remained consistent in four separate studies, between 2003 and 2012, in University A and University B with different employers in two geographic locations. The top ten graduate capabilities seen as most important in the four separate studies in Universities A and B in rank order are listed in Table I.

The only two items outside the top ten in University B study include, a willingness to pitch in and undertake menial tasks when needed and the ability to remain calm under pressure or when things go wrong. While these two items were outside the top ten in the study at University B, they were within the top 20 in University A studies. Full details of the ratings on both importance and performance on each capability in four separate studies for Universities A and B are presented in Table II. The data presented in Table II are based on the mean for each item on importance and performance, and they were ranked from high to low. The item with highest mean received a rank of 1 and the lowest ranked item received the rank of 44.

The employer survey enabled respondents to rate both importance and performance, for each graduate capability. The use of both ratings allows the identification of:

- high importance, and high performance areas which universities need to build on in curriculum reviews;
- high importance, and low performance areas which require immediate attention;
- low importance, and high performance; and
- low importance, and low performance.

The graduate capabilities where employers rated high on importance with mean > 4.00 and high on performance > 3.50 in all four studies include the following.

High importance and high performance

Three areas received consistent high importance and high performance ratings in four separate studies in two different universities. These three items were:

Table I.

Top ten skills and attributes rated by employers as most important in university A and B in four separate studies

Rank	Universities A and B
1	Being able to communicate effectively
2	A commitment to ethical practice
3	Being flexible and adaptable
4	Being able to organise work and manage time effectively
5	Being willing to face and learn from errors and listen openly to feedback
6	Wanting to produce as good a job as possible
7	The ability to empathise with and work productively with people from a wide range of backgrounds
8	A willingness to listen to different point of views before coming to a decision
9	Being able to set and justify priorities
10	Being able to develop and contribute positively to team-based projects

University A 2003		Importance rank University A 2007		University B 2011		University A 2012		Performance rank University A 2007		University B 2011		University A 2012	
Employer survey items		Item no.											
<i>The personal abilities of graduates</i>													
5	4	1	2	1	Being willing to face and learn from errors and listen openly to feedback	2	9	11	12				
19	16	15	12	2	Understanding personal strengths and limitations	21	21	38	26				
39	42	36	36	3	Being confident to take calculated risks and take on new projects	20	29	23	28				
11	12	9	14	4	Being able to remain calm under pressure or when things go wrong	19	27	24	23				
29	22	21	21	5	Having the ability to defer judgement and not to jump in too quickly to resolve a problem	18	28	31	19				
21	14	16	11	6	A willingness to persevere when things are not working out as anticipated	17	18	28	22				
6	6	3	5	7	Wanting to produce as good a job as possible	16	3	7	3				
14	13	17	15	8	Being willing to take responsibility for projects, including how they turn out	15	12	20	13				
42	41	40	37	9	Having an ability to make a hard decision	14	39	41	41				
15	18	8	9	10	A willingness to pitch in and undertake menial tasks when needed	13	14	25	14				
12	17	22	19	11	Having a sense of humour and being able to keep work in perspective	1	4	3	5				
1	3	4	1	12	A commitment to ethical practice	11	1	1	2				
17	15	23	17	13	A commitment to sustainable practice	22	8	8	6				
3	2	5	3	14	Being flexible and adaptable	9	5	4	9				
<i>The interpersonal abilities of graduates</i>													
7	7	13	7	15	The ability to empathise with and work productively with people from a wide range of backgrounds	8	7	5	4				
8	8	10	6	16	A willingness to listen to different points of views before coming to a decision	7	11	14	11				
16	11	11	13	17	Being able to develop and use networks of colleagues to help solve key workplace problems	6	15	17	15				
<i>(continued)</i>													

(continued)

**Table II.**  
Importance and performance ranking on graduate capabilities in four separate studies in two Australian universities

[illegible]

University A 2003	Importance rank			Item no.	Employer survey items	Performance rank			
	University A 2007	University B 2011	University A 2012			University A 2003	University A 2007	University B 2011	University A 2012
34	28	28	25	30	Being able to see how apparently unconnected activities are linked and make up an overall picture	37	37	32	30
9	10	7	10	31	Being able to set and justify priorities	36	23	21	25
37	35	26	35	32	An ability to recognise patterns in a complex situation	35	26	26	35
20	23	19	30	33	Being an independent thinker	23	20	11	17
26	29	-	32	34	Being creative and enterprising	33	19	-	18
<i>Generic and specific skills &amp; knowledge of graduates</i>									
31	34	34	34	35	Having a high level of current technical expertise relevant to current work requirements	44	25	15	20
32	37	38	41	36	Understanding the role of risk management and litigation in current professional work	31	44	42	44
36	36	41	40	37	Understanding how organisations operate	30	40	40	43
18	20	14	16	38	Being able to use IT effectively to communicate and perform key work functions	29	2	2	1
24	26	27	24	39	Being able to manage ongoing professional learning and development	28	17	11	8
43	43	42	43	40	An ability to chair and participate constructively in meetings	27	43	43	42
2	1	2	4	41	Being able to communicate effectively	26	10	10	10
30	39	36	39	42	Knowing how to manage projects into successful implementation	25	38	35	36
41	38	35	42	43	An ability to help others learn in the workplace	24	30	16	27
4	5	6	8	44	Being able to organise work and manage time effectively	34	13	18	16
<b>Note:</b> (-) Denotes item not included in the university B employer survey									

Table II.

- (1) a commitment to ethical practice (> 4.60 mean on importance and > 3.75 mean on performance);
- (2) wanting to produce as good a job as possible (> 4.50 mean on importance and > 3.63 mean on performance); and
- (3) a willingness to listen to different points of view before coming to a decision (> 4.37 mean on importance and > 3.54 mean on performance).

The key areas of concern in the employer survey findings are ratings with high importance and low performance graduate capabilities. These items are defined in this paper as those attributes with > 4.00 mean on importance, and < 3.50 mean on performance. High importance and low performance areas require discussion on ways such capabilities could be embedded in curriculum content, and assessments.

*High importance and low performance*

- being able to communicate effectively (> 4.56 mean on importance and < 3.38 mean on performance);
- being able to organise work and manage time effectively (> 4.35 mean on importance and < 3.43 mean on performance);
- being willing to face and learn from errors and listen openly to feedback (> 4.50 mean on importance and < 3.46 on performance);
- the ability to empathise with and work productively with people from a wide range of backgrounds (> 4.42 mean on importance and < 3.48 mean on performance);
- being flexible and adaptable (> 4.59 mean on importance and < 3.37 mean on performance); and
- being able to set and justify priorities (> 4.29 mean on importance and < 3.14 mean on performance).

**Consistently up on importance and down on performance**

The employer survey in University A, in 2003, 2007, 2012 showed patterns on graduate capabilities which employers consistently rated of high importance; these had downward trends in performance. Three areas rated with a downward trend in performance were:

- (1) being able to organise work and manage time effectively (performance mean 3.35 in 2003, 3.28 in 2007, 3.23 in 2012);
- (2) being willing to face and learn from errors and listen openly to feedback (performance mean 3.46 in 2003, 3.38 in 2007, 3.30 in 2012); and
- (3) a willingness to listen to different points of views before coming to a decision (performance mean 3.54 in 2003, 3.37 in 2007, 3.31 in 2012).

**Qualitative findings**

The employer surveys in two institutions enabled respondents to write open-ended comments on most important skills and attributes needed by graduates based on the trends and changes in the relevant industry. Almost every respondent wrote comments on skills and attributes needed in graduates. Some of the recurring issues raised by employers align with the quantitative findings. Employers from all industries identified

*oral and written communication* as one of the most important attributes needed in early career graduates. *Being flexible and adaptable* to different work environment was another recurring theme that was found in the open-ended comments. Respondents outlined the ongoing changes in organisations and the need for new graduates to be flexible and adaptable to such changes which are driven by external operating environments. *Teamwork* and the ability to work with different personalities and people from diverse backgrounds were seen as an important attribute. Some respondents stated the need for new graduates to recognise workplace diversity and acknowledge cultural values and beliefs. This attribute was strongly expressed in the health and engineering professions. *Relationship management* skills were also identified as an important attribute in all professions. Respondents wrote extensively about the need to gain and retain customers, and having a good working relationship with diverse stakeholders. In the engineering profession, respondents outlined the need for new graduates to be *innovators and cultivators* of ideas which could gain new market opportunities. Knowledge and skills in *using technology* was outlined in all professions and industries. An area where respondents in business and health professions wrote extensively was related to *setting priorities and monitoring outcomes*. Respondents suggested that new graduates lacked skills in planning and monitoring outcomes. *Problem-solving* skills were mentioned in all professions with strong emphasis in health professions.

The time series study through this employer survey of university graduates in two different universities clearly suggests that the finding has been consistent despite studies undertaken in different universities, with different employers at various locations. The study confirms that the top ten graduate capabilities rated as most important by employers has remained the same over the past 10 years, and they are similar to the earlier studies in Australia and in the UK. The study also confirms that a decade of employer feedback on the quality of university graduates has remained consistent with high importance and high performance; and high importance and low performance areas in all separate studies.

## Discussions and implications

The graduate capabilities that have consistently shown high importance and low performance in all four studies is consistent with the earlier studies (Australian Industry Group, 2009; CBI, 2011; Department of Education, Training and Youth Affairs, 2000; European Commission, 2010; Graduate Career Australia, 2012; Harvey, 1993; Hesketh, 2000; Nicolescu and P[acaron]un, 2009; PricewaterhouseCoopers, 2011; Scott *et al.*, 2010; Shah and Nair, 2011; UniSA, 2009).

The finding of this study aligns with the research undertaken by the Council for Industry and Higher Education (CIHE) in the UK which found that the five most important skills and capabilities considered important when recruiting graduate include: communication; teamwork; integrity; intellectual ability; and confidence. The same study found the skills and capabilities employers have outlined as high importance and low performance including: commercial awareness; analysis and decision-making; communication; literacy (good writing skills); passion; and relevant work experience (CIHE, 2008). A recent study by CIHE with focus on global graduates found the following global competencies as most important based on employer feedback in the UK. The five areas include:

- (1) an ability to work collaboratively with teams of people from a range of backgrounds and countries;
- (2) excellent communication skills: both speaking and listening;
- (3) a high degree of drive and resilience;
- (4) an ability to embrace multiple perspectives and challenge thinking; and
- (5) capacity to develop new skills and behaviours according to role requirements (CIHE, 2012).

This study has a distinct advantage over other studies. That is the use of a single instrument over a 10-year timeframe in two different geographic locations. This advantage is reflected when the results suggest that employers have increased their importance ratings on a number of graduate capabilities with their perception that graduates are graduating with weaker capabilities (low performance rating). What is interesting with the trend data is that though universities in general have used strategies to embed employability skills into the curriculum, the perception from employers suggest that graduates lack basic skills such as communication, time management, willingness to face and learn from errors and listen openly to feedback, ability to work in teams with people from different backgrounds and flexibility and adaptability. These gaps question the quality of curriculum design, industry input in course reviews and the extent to which universities assess students have achieved learning outcomes.

Systematic use of employer surveys as part of quality assurance of academic courses is important in ensuring that the courses are relevant to the changing needs of the industry and professions. The engagement of graduate employers and relevant organisations that represent various professions including professional accrediting bodies is important in ensuring the quality and relevance of courses. The financial viability, relevance and quality of academic programmes can only be achieved, if there is genuine engagement between universities and employers or industry. The UK higher education sector has undertaken numerous studies on a cyclical basis to engage employers in providing feedback on graduate quality. Some Australian universities have undertaken employer surveys as part of quality assurance framework; however, the experience of the authors who have undertaken such studies in three universities suggests that limited attempts have been made to use the results of the survey in curriculum renewal. In most cases, institutional-based employer surveys are only used to ensure compliance with the internal quality framework which requires undertaking such surveys. As the Australian Government moves to implement a national employer survey, it is worth debating the purpose of such a survey, and how the results will be used to renew the curriculum. The introduction of such surveys places a number of challenges on institutions:

- *First*, very few universities have well-maintained databases of employers who employ their graduates with up-to-date contact details of key people responsible for graduate recruitment. Such databases are maintained in many parts of the university with different information for different purposes.
- *Second*, it requires a lot of effort and resourcing to create such databases with ongoing maintenance.



- *Third*, graduate recruitment managers are not necessarily the right people to be able to assess the quality of graduates in various disciplinary areas.
- *Fourth*, employers do not keep the details of how many graduates are from x and y university. They are in a better position to rate the of quality graduates in general rather than each university.
- *Fifth*, any effort to assess graduate quality must also engage industry bodies representing employers and professional accrediting bodies who accredit practitioners and courses.
- *Sixth*, almost all studies across the world have only focussed on assessing university graduate quality – no attempt has been made to assess the quality of graduates from private higher education providers.
- *Seventh*, conducting such surveys requires cost-benefit analysis to find out how the findings will assist the university in enhancing its curriculum.
- *Eight*, requiring such surveys to be undertaken by each university is neither feasible nor sustainable. A large-scale national study funded by the government every three to five years is more relevant. The outcome of such a national study could lead to the identification of national priorities funded by the government to renew curricula with a focus on embedding the findings of employer feedback in curriculum development, and renewal.

In a highly competitive higher education environment where student's choice to study with universities is based on reputation and ranking, the employer feedback on the quality of university graduates is important. Such feedback is useful in course reviews and enhancement, and developing sustained relationships with industry and the professions. The results of this study show consistent findings on the skills that employers see as most important in early career graduates. It could be argued that such surveys are not required on a regular basis. However, research on the quality of graduates in various professions is important on a cycle of five years to revisit curriculum content based on the trends and changes in industry which may impact course viability and relevance.

## References

- Arnold, J., Silvester, J., Patterson, F., Cooper, C.L., Robertson, I. and Burnes, B. (2005), *Work Psychology: Understanding Human Behaviour in the Workplace*, 4th ed., Prentice Hall, Harlow, New York, NY.
- Association of Graduate Recruiters (AGR) (1995), *Skills for Graduates in the 21st Century*, AGR, Cambridge.
- Australian Association of Graduate Employers (AAGE) (2011), "The AAGE employer survey 2011, Australia", available at: [www.aage.com.au/images/documents/research/2011%20AAGE%20Employer%20Survey%20Exec%20Summary.pdf](http://www.aage.com.au/images/documents/research/2011%20AAGE%20Employer%20Survey%20Exec%20Summary.pdf)
- Australian Industry Group (2009), "Skilling business in tough times", Australian Industry Group, available at: [www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE\\_CONTENT/Publications/Reports/2009/7956\\_Skilling\\_business\\_in\\_tough\\_times\\_FINAL.pdf](http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Publications/Reports/2009/7956_Skilling_business_in_tough_times_FINAL.pdf)
- Baruch, Y. (2004), *Managing Careers: Theory and Practice*, Prentice Hall, Harlow.

- Bridgstock, R. (2005), "The graduate attributes we've overlooked: enhancing graduate employability through career management skills", *Higher Education Research & Development*, Vol. 28 No. 1, pp. 31-44.
- Business/Higher Education Round Table (BHERT) (2002), "Enhancing the learning and employability of graduates: the role of generic skills", available at: [www.bhert.com/publications/position-papers/B-HERTPositionPaper09.pdf](http://www.bhert.com/publications/position-papers/B-HERTPositionPaper09.pdf)
- Candy, P. and Crebert, G. (1991), "Ivory tower to concrete jungle", *Journal of Higher Education*, Vol. 62 No. 5, pp. 570-592.
- Candy, P., Crebert, G. and O'Leary, J. (1994), "Developing lifelong learners through undergraduate education", Report to the NBEET, Australian Government Publishing Service, Canberra.
- CBI (2011), "Building for growth: business priorities for education and skills – education and skills survey 2011", available at: [www.cbi.org.uk/media/1051530/cbi\\_\\_edi\\_education\\_\\_skills\\_survey\\_2011.pdf](http://www.cbi.org.uk/media/1051530/cbi__edi_education__skills_survey_2011.pdf)
- CIHE (2008), "Graduate employability: what do employers think and want? The council for industry and higher education", available at: [www.cihe.co.uk/category/themes/key/skills/](http://www.cihe.co.uk/category/themes/key/skills/)
- CIHE (2012), "Global graduates into global leaders, the council for industry and higher education", available at: [www.cihe.co.uk/category/themes/key/skills/](http://www.cihe.co.uk/category/themes/key/skills/)
- Cranmer, S. (2006), "Enhancing graduate employability: best intentions and mixed outcomes", *Studies in Higher Education*, Vol. 31 No. 2, pp. 169-184.
- Curtis, D. and McKenzie, P. (2001), *Employability Skills for Australian Industry: Literature Review and Framework Development*, Australian Council for Education Research, Melbourne.
- De la Harpe, B., Radloff, A. and Wyber, J. (2000), "Quality and generic (professional) skills", *Quality in Higher Education*, Vol. 6 No. 3, pp. 231-243.
- Department of Education, Training and Youth Affairs (2000), "Employer satisfaction with graduate skills- research report", available at: <http://tls.vu.edu.au/portal/site/design/resources/DETYAFullReport.pdf>
- Edwards, D., Coates, H. and Radloff, A. (2010), "Delivering quality higher education: understanding the standards processes and practices used by private providers", Australian Council for Educational Research, available at: [www.acpet.edu.au/uploads/files/Reports\\_Submissions/2010/Delivering\\_Quality\\_H\\_Ed-standards\\_processes\\_practices\\_used\\_by\\_private\\_providers-Apr\\_2010.pdf](http://www.acpet.edu.au/uploads/files/Reports_Submissions/2010/Delivering_Quality_H_Ed-standards_processes_practices_used_by_private_providers-Apr_2010.pdf)
- European Commission (2010), "Employers' perception of graduate employability: analytical report", available at: [http://ec.europa.eu/public\\_opinion/flash/fl\\_304\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_304_en.pdf)
- Foray, D. and Lundvall, B. (1996), "The knowledge-based economy: from the economics of knowledge to the learning economy", *Employment and Growth in the Knowledge-Based Economy*, Organisation for Economic Co-operation and Development, Paris.
- Graduate Career Australia (2012), "Graduate outlook, the report of the graduate outlook survey: employers' perspectives on graduate recruitment", A summary of the graduate outlook survey, available at: [www.graduatecareers.com.au/wp-content/uploads/2011/12/GOS12\\_Report\\_FINAL2.pdf](http://www.graduatecareers.com.au/wp-content/uploads/2011/12/GOS12_Report_FINAL2.pdf)
- Hager, P., Holland, S. and Beckett, D. (2002), "Enhancing the learning and employability of graduates: the role of generic skills", available at: [www.bhert.com/Position%20Paper%20No%209.pdf](http://www.bhert.com/Position%20Paper%20No%209.pdf)
- Harvey, L. (1993), "Quality assessment in higher education: collection papers", Quality in Higher Education Project, Innovation in Higher Education Unit, University of Central England/University of Lancaster, Lancaster.

- Harvey, L. and Green, D. (1994), *Employer Satisfaction*, University of Central England, Birmingham.
- Harvey, L. and Bowers-Brown, T. (2004), "Employability cross-country comparisons, graduate market trends, Winter 2004/2005", available at: [www.prospects.ac.uk/cms/Show-Page/Home\\_page/plmplpid](http://www.prospects.ac.uk/cms/Show-Page/Home_page/plmplpid)
- Hernández-March, J., Martín del Peso, M. and Leguey, S. (2009), "Graduates' skills and higher education: the employers' perspective", *Tertiary Education and Management*, Vol. 15 No. 1, pp. 1-16.
- Hesketh, J.A. (2000), "Recruiting an Elite? Employers' perceptions of graduate education and training", *Journal of Education and Work*, Vol. 13 No. 3, pp. 245-271.
- Institute of Chartered Accountants in Australia (ICAA) (1994), *Chartered Accountants in the 21st Century*, ICAA, Sydney.
- Little, B. (2003), *International Perspectives on Employability*, Briefing Paper, The Higher Education Academy, New York, NY, available at: [www.heacademy.ac.uk/](http://www.heacademy.ac.uk/)
- Massy, W.F. (2003), "Balancing cost and quality", in Massy, W.F. (Ed.), *Honoring the Trust: Quality and Cost Containment in Higher Education*, Jossey-Bass, San Francisco.
- Murray, S. and Robinson, H. (2001), "Graduate into sales – employer, student and university perspectives", *Emerald Education and Training*, Vol. 43 No. 3, pp. 139-144.
- Nair, C.S. and Mertova, P. (2009), "Conducting a graduate employer survey: a Monash university experience", *Quality Assurance in Education*, Vol. 17 No. 2, pp. 191-203.
- The National Committee of Inquiry into Higher Education (1997), *The Dearing Report*, available at: [www.leeds.ac.uk/educol/ncihe/](http://www.leeds.ac.uk/educol/ncihe/)
- Nelson, R. and Hevert, K.T. (1992), "Effect of class size on economies of scale and marginal costs in higher education", *Applied Economics*, Vol. 24 No. 1, pp. 473-482.
- Nguyen, T.A. (2009a), "The internationalization of higher education in Vietnam: national policies and institutional implementation at Vietnam National University, Hanoi", *Waseda University Global COE Program*, Global Institute for Asian Regional Integration (GIARI), Tokyo, p. 37.
- Nguyen, V.L. (2009b), "Solutions for diminishing the non-market driven factors in Vietnamese economy", *Journal of Economic Management*, Vol. 28 Nos 9/10, pp. 13-20.
- Nicolescu, L. and P[acaron]un, C. (2009), "Relating higher education with the labour market: graduates' expectations and employers' requirements", *Tertiary Education and Management*, Vol. 15 No. 1, pp. 17-33.
- Oakleigh Consulting Limited (2011), "Increasing opportunities for high quality higher education work experience – report to HEFCE by Oakleigh Consulting Ltd and CRAC", available at: [www.hefce.ac.uk/pubs/rereports/year/2011/highqualheworkexp/](http://www.hefce.ac.uk/pubs/rereports/year/2011/highqualheworkexp/)
- Precision Consultancy (2007), *Graduate Employability Skills, Business*, Industry and Higher Education Collaboration Council, Melbourne.
- PricewaterhouseCoopers (2011), "Growth reimagined: prospects in emerging markets drive CEO confidence", available at: [www.pwc.com/gx/en/ceo-survey/pdf/14th-annual-global-ceo-survey.pdf](http://www.pwc.com/gx/en/ceo-survey/pdf/14th-annual-global-ceo-survey.pdf)
- Scott, G., Chang, E. and Grebennikov, L. (2010), "Using successful graduates to improve the quality of undergraduate nursing programs", *Journal of Teaching and Learning for Graduate Employability*, Vol. 1 No. 1, pp. 26-44.
- Shah, M. and Brown, G. (2009), "The rise of private higher education in Australia: maintaining quality outcomes and future challenges", *Proceedings of the Australian Universities*

*Quality Forum (AUQF)*, 1-3 July, Australian Universities Quality Agency, Alice Springs, pp. 138-143.

- Shah, M. and Jarzabkowski, L. (2013), "The Australian higher education quality assurance framework: from improvement-led to compliance-driven", *Perspectives: Policy and Practice in Higher Education*, Vol. 17 No. 3, pp. 96-106.
- Shah, M. and Nair, C.S. (2011), "Employer satisfaction of university graduates: key capabilities in early career graduates", *Proceedings of the 20th Annual Teaching Learning Forum*, 1-2 February, Edith Cowan University, Perth, available at: <http://otl.curtin.edu.au/tlf/tlf2011/refereed/shah.html>
- Swift, L. (2012), "Assessing the financial viability of academic programmes", *Journal of Higher Education Policy and Management*, Vol. 34 No. 3, pp. 259-272.
- Tertiary Education Quality and Standards Agency (2012), "Application guide: application for accreditation of a higher education course of study (AQF qualification)", available at: [www.teqsa.gov.au/sites/default/files/GuideCourseAccreditationUpdatedDec2012.pdf](http://www.teqsa.gov.au/sites/default/files/GuideCourseAccreditationUpdatedDec2012.pdf)
- The Telegraph (2011), "British graduates not fit to start work, say majority of bosses", available at: [www.telegraph.co.uk/education/educationnews/8819425/British-graduates-not-fit-to-start-work-say-majority-of-bosses.html](http://www.telegraph.co.uk/education/educationnews/8819425/British-graduates-not-fit-to-start-work-say-majority-of-bosses.html)
- Tran, T.T. (2012), "Graduate employability: interpretation vs expectation", in Brown, N., Jones, S.M. and Adam, A. (Eds), *Research and Development in Higher Education: Connections in Higher Education*, Hobart, 2-5 July, Vol. 35, pp. 317-325.
- University of South Australia (2009), "UniSA employer feedback survey external report", available at: <http://w3.unisa.edu.au/gradquals/employerreport.pdf>
- Velde, C. (2009), "Employers' perceptions of graduate competencies and future trends in higher vocational education in China", *Journal of Vocational Education & Training*, Vol. 61 No. 1, pp. 35-51.
- Workplace Research Centre, University of Sydney (2014), "Employer satisfaction survey: report for the department of education", available at: <http://education.gov.au/employer-satisfaction-survey>

### Further reading

- Department for Education and Employment (DfEE) (1997), *Advancing by Degrees: A Study of Graduate Recruitment and Skills Utilisation*, DfEE, London.
- HM Treasury (2003), "Lambert review of business-university collaboration", available at: [www.hm-treasury.gov.uk/d/lambert\\_review\\_final\\_450.pdf](http://www.hm-treasury.gov.uk/d/lambert_review_final_450.pdf)
- National Board of Employment, Education and Training (NBEET) (1992), "Skills required for graduates: one test of quality in Australian higher education", *Higher Education Council Commissioned Report No. 20*, Australian Government Publishing Service, Canberra.
- Oliver, B., Jones, S., Tucker, B. and Ferns, S. (2007), "Are our students work-ready? Graduate and employer feedback for comprehensive course review", paper presented at The Assessment and Evaluation Conference, 20-23 November, Brisbane.

### Corresponding author

Mahsood Shah can be contacted at: [shah\\_mahsood@hotmail.com](mailto:shah_mahsood@hotmail.com)

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)