Graduate employability: Teaching staff, employer and graduate perceptions

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Employability of graduates is deemed an outcome universities should strive for as government, industry and students demand increased accountability measures. Most higher education institutions are exploring mechanisms for enhancing the student experience through the inclusion of authentic learning experiences and ‘real world’ assessment strategies in the curriculum. While ‘getting a job’ is a straightforward concept, the notion of employability and what it means to be employable is open to debate. Capabilities deemed to be highly desirable in determining the capacity of a graduate to be collaborative, productive and innovative in the workplace vary according to the perceptions of particular stakeholders. This comparative study gathered feedback on the importance of employability capabilities from a range of stakeholders including graduates, employers and teaching staff. Data was collected from the same group of stakeholders about the proficiency of graduates in relation to each of the employability capabilities as a result of graduating from a degree program. Teaching staff, graduates and employers of graduates from two large undergraduate programs at Curtin University in Western Australia were surveyed. Both qualitative and quantitative data from the surveys was analysed. The data collected paints an interesting picture of different perceptions of employability. The most highly regarded employability capabilities in each of the disciplines are highlighted and those that are perceived to be lacking in curriculum design identified. Data from the three key stakeholders was triangulated to ascertain diversity in perceptions. Comparison of feedback across disciplines recognises both the diversity and similarity across professions and the varied perceptions of different stakeholders.

Keywords: Employability, Stakeholder feedback, Graduate capabilities, authentic assessment.

Background

The Australian higher education system is undergoing radical reform with a significant investment in funds and infrastructure to ensure a more inclusive and quality driven sector (Commonwealth of Australia, 2009). The essence of the reform is based on the aspiration to create a highly skilled, innovative and sustainable Australian workforce which is globally competitive and drives economic growth and development. The reforms are based on the premise of a stronger Australia; fairness for all Australians; and the capacity to meet the needs of a rapidly changing global economy and future demands (Robertson & Scott, 2010). An integral component of the reform agenda is the increased focus on quality and transparency. ‘Institutions will be required to demonstrate that their graduates have the capabilities that are required for successful engagement in today’s complex world’ (Commonwealth of Australia. P 31). Employability of graduates is deemed an outcome universities should strive for as government, industry and students demand increased accountability measures (Knight & Yorke, 2004).

The mandate for transparency and accountability for higher education institutions with an emphasis on user choice in an internationally competitive market, challenges many of the traditional approaches in universities (Layer, 2006). With the availability of comparative data in the public arena satisfaction levels of all stakeholders are integral to the reputation and sustainability of institutions (Department of Industry, Innovation, Science, Research and Tertiary Education, 2011). It is of increasing importance that higher education institutions explicitly embed employability in the curriculum and provide evidence of the skill acquisition for all stakeholders (Ewan, 2009).

Stakeholders want to see a return on investment; the government agenda aims for a sustainable and skilled Australian workforce; employers desire a pool of competitive applicants from which to recruit; and graduates strive to be highly employable through the acquisition of employability capabilities as a consequence of their educational experience (Australian Learning and Teaching Council, 2011; Mason, 2010). Student feedback strongly supports the provision of a relevant and authentic curriculum with opportunities to integrate theory and practice in settings which reflect the workplace (Robertson & Scott, 2010). Pivotal to an engaging educative student experience is quality teaching.

In order to provide the educational and life experiences essential for providing an inclusive and holistic course experience, engagement with the community is of paramount importance. Universities need to be responsive to market demands thereby ensuring currency and relevance of course content. Establishing and maintaining
partnerships with industry is a key ingredient for institutions to provide authentic learning experiences which enhance graduate employability (Hodges, 2011). To ensure graduate mobility, skills acquired need to be transferable across different contexts. According to van Rooijen (2011) universities should be ‘a hybrid with society’ (p.6) to ensure the theoretical components of a university education blend with authentic practice based settings culminating in work ready graduates. Mutually beneficial relationships between industry bodies and higher education institutions are fundamental to an inclusive student experience with desirable outcomes for both parties.

Employer expectations are heightened with a demand for work ready graduates who have intellectual capacity and are also equipped with workplace expertise. While industry representatives appear satisfied with the technical or discipline-specific skills of graduates, there is a perception that employability skills are under-developed (Precision Consultancy, 2007). According to Ward (2007) higher education systems worldwide are being called upon to educate more students, provide more support for them, address workforce needs, solve social, scientific and technical problems and do it all better, and more efficiently, and in physical facilities and surroundings appropriate to the task. Graduate employers are considered important stakeholders in higher education and a valuable source of information pertaining to the capacity of graduates in the workplace from a quality assurance perspective (Coates, 2010). According to Coates, the employer’s voice is of significant relevance with the profile of higher education increasing as a mechanism for addressing the needs of an increasingly global, knowledge economy.

**Methodology**

This comparative study gathered feedback on the importance of employability capabilities from a range of stakeholders including graduates, employers and teaching staff. Data was collected from the same group of stakeholders about the proficiency of graduates in relation to each of the employability capabilities as a result of graduating from a degree program. Teaching staff, graduates and employers of graduates from two large undergraduate programs at Curtin University in Western Australia were surveyed. Both qualitative and quantitative data from the surveys was analysed. The data collected paints an interesting picture of different perceptions of employability. The most highly regarded employability capabilities in each of the disciplines are highlighted and those that are perceived to be lacking in curriculum design identified. Data from the three key stakeholders were triangulated to ascertain diversity in perceptions. Comparison of feedback across disciplines recognises both the diversity and similarity across professions and the varied perceptions of different stakeholders.

The *Graduate Employability Indicator Surveys (GEI)* were developed as a result of an Australian Learning and Teaching Council (ALTC) Competitive Grant, *Building course team capacity to enhance graduate employability* led by Beverley Oliver (2011). The GEIs are a suite of three online surveys which gather the perceptions of graduates (of up to five years), employers and course teaching teams about fourteen graduates capabilities (see Table 1 below). The survey provides valuable information about the effectiveness of a course in nurturing employability capabilities from the perspectives of each of the stakeholders (Oliver et al., 2011). This instrument gathers both qualitative and quantitative data about employability capabilities. The survey is administered to relevant stakeholders in viable courses at Curtin University through the Comprehensive Course Review (CCR) process. Surveys are administered to graduates via Alumni and the Head of School sends the survey link to teaching staff. While the Head of School emails the survey link to employer contacts and peak bodies, respondents are invited to forward the survey to other employers. A gap analysis of the quantitative data collected through administration of the GEI survey is visually represented signifying the gap between aspirations and reality of graduate employability capabilities. Data from graduates, employers and teaching staff is triangulated to determine variations in stakeholder perceptions. Ethics approval was granted.

The GEI surveys comprise fourteen capabilities (see table 1) which are based on attributes, skills and personal qualities evident in pre-existing surveys (Oliver, 2010). Following a scan of universities’ Graduate Attributes, Oliver posits that these capabilities address the spectrum of attributes used by universities.
### Table 1: Graduate capabilities

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

Two qualitative items ask respondents to comment the best aspects of the degree for developing employability skills and how could the degree be changed to improve skills for employment.

The Graduate Employability Indicators provide evidence to answer the following questions in relation to graduates of a degree program:

1. How important are the capabilities for early professional success?
2. To what extent do graduates generally demonstrate the capabilities (according to employers and teaching staff), or do courses contribute to their development (according to graduates)?
3. To what extent are graduates work-ready?
4. How confident are teaching staff in teaching and assessing the capabilities?
5. Which are the capabilities that are most important yet demonstrated or developed to a lesser extent?

The data presented is based on stakeholder feedback about two large undergraduate degrees at Curtin University. Both degrees incorporate a series of scaffolded work placements and undergo rigorous professional accreditation. Program A is a health sciences discipline while program B is a professional humanities degree.

### Results

The number of respondents in each stakeholder group is outlined in Table 2 below. It is not possible to calculate response rates as the number of live email addresses is unknown and the total number of recipients of the survey cannot be ascertained as respondents are invited to forward the email to others.

<table>
<thead>
<tr>
<th></th>
<th>Program A</th>
<th>Program B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Employers</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td>Teaching staff</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

### Graduates

Figure 1 and 2 below show a comparison of graduate perceptions about the extent the degree experience contributed to capability development with the perceived importance of the capabilities.
Figures 1 and 2 signify a gap between the importance of capabilities as perceived by graduates and the level to which the degree supports the development of the capabilities. The disciplines differ in the views of important capabilities, but all graduates agreed that knowledge, writing, speaking, problem solving and teamwork are important. Significant gaps in the degree experience are evident in program B in relation to problem solving, value and ethics, community engagement, using ICT and industry awareness. There appears to be greater synergy between importance and capabilities addressed in program A data.

**Employers**

Figure 3 and 4 demonstrate a comparison of employers' perceptions of the importance of the capabilities and the extent to which graduates demonstrate achievement of those capabilities.
Figures 3 and 4 show disparity in the capabilities employers consider important and those demonstrated by graduates. While there are minor differences between the two sets of employers, there appears to be general consensus about what is important and where the gaps are in graduate skills. It is interesting to note that using ICT is the only skill employers perceive as being adequately evident in graduates.

**Teaching team**

Figure presents a comparison of the teaching teams’ perceptions of the extent new graduates demonstrate each capability with the importance of capabilities.
Figures 5 and 6 indicate a level of agreement between the teaching teams of both programs on what capabilities are important for graduate success. Both teaching teams perceive significant gaps in what graduates demonstrate and the important capabilities with industry awareness indicated as a skill rarely demonstrated.

Figure present a comparison of the teaching team’s perceptions of their confidence in teaching and assessing each capability (percentage agreement with “quite confident” and “very confident”).
Figures 7 and 8 suggest staff from both disciplines feel confident to teach and assess most capabilities with some trepidation associated with values and ethics and community engagement. Interestingly, there appears to be challenges for staff in teaching and assessing using ICT.

**Triangulation of stakeholder perceptions**

Figure 9 and 10 present a triangulation of the three stakeholder groups’ perceptions of the importance of the capabilities.
Figures 9 and 10 are indicative of a high level of agreement between all stakeholders across both degrees about what capabilities are perceived to be important to early professional success.

Figure show a triangulation of the perspectives of the stakeholder groups about the extent that new graduates demonstrate the capabilities (employers and program teaching team) or the extent graduates perceive they are developed in their course.
Figure 11: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more demonstrated or developed (Program A)

Figure 12: A comparison of graduate, employer and teaching team perceptions of capabilities perceived as more demonstrated or developed (Program B)

The triangulated data in figures 11 and 12 highlight the variations in stakeholder perceptions about the capabilities graduates demonstrate. Figure 11 indicates some agreement on the development of independent learning, teamwork and community engagement but significant variation in perceptions of industry awareness, problem solving and knowledge. In figure 12, the greatest variation occurs in social contexts, knowledge, speaking and writing.

Discussion

Employment and employability are complex phenomena and are more than the acquisition of generic skills (Yorke, 2006). Generic capabilities are interdependent and realistically exist as a cluster of skills rather than isolated achievements. However, the data highlights that perceptions of the important employability capabilities are consistent for all stakeholders. While there was variation among stakeholders in relation to the specific skills lacking, a gap between the importance of skills and the level to which graduates demonstrated proficiency consistently appeared. The differences in perceptions between the two programs may be due to the demands of
the discipline, not necessarily that one program of study addresses generic attributes better than another. There are several key points which are generated through analysis of the data. Firstly, there appears to be a general consensus that while using ICT is important, graduates tend to demonstrate expertise in this area, possibly as a result of ICT underpinning all components of a degree program. Secondly, while it was agreed that knowledge is an important attribute, employers did not cite it as the most essential skill, other skills such as problem solving, teamwork and communication were considered more critical elements of employability.

Possibly the most intriguing data is evident in the responses from the teaching team. It appears staff are equally confident in teaching and assessing the employability capabilities, yet feedback from all stakeholders, including staff, suggests there is a significant gap in the acquisition of these skills among graduates. This finding poses the questions around curriculum design, teaching strategies and assessment processes if staff are confident but graduates are still not demonstrating proficiency in these skills. Quantifying employability capabilities; applying metrics to determine student outcomes; and collating appropriate evidence is complex (Chalmers, 2007). Traditional assessment methods typically used in universities are not adequately designed for capturing students’ ability to apply generic skills in a practice-based setting. The inclusion of authentic learning experiences which provide opportunities for students to practice work-based skills are resource intensive and require specific expertise and professional development. According to Layer (2006) strategies around teaching and learning and student support need to change in order to have an impact on the acquisition of employability capabilities. Layer believes the increasing diversity in student cohorts will exacerbate the challenge of designing and delivering a relevant curriculum which provides equitable experiences for all. Refocusing education providers to addressing industry outcomes will require a major cultural shift for institutions and initiate significant professional change and adaptation for many staff (Skills Australia, 2010). The findings in this investigation support the notion that while staff acknowledge the importance of generic capabilities, their ability to articulate these in curriculum and design fair, equitable and relevant assessment to determine student outcomes is an area warranting further investigation. The findings suggest that professional development programs for teaching staff need to explicitly address this shortfall and upskill staff in this area. The evident gaps in the curriculum also has implications for resourcing teaching areas to incorporate authentic experiences and engage with industry thereby establishing partnerships to enrich the student experience.

Conclusion

According to Oliver (2011) there has been abundant investigation into the assurance of graduate outcomes in relation to graduate capabilities but there is a lack of research into how these attributes are developed and assessed. This research demonstrates the divergent perspectives of graduates, employers and teaching staff on the importance of employability capabilities and the degree to which they are demonstrated by graduates. Challenges associated with embedding graduate capabilities into curriculum and ensuring authentic assessment practices will increase as the widening participation agenda takes effect with increasing class sizes and associated staff workload (Hodges, 2011). Despite the move towards massification of the higher education system, graduate employability has taken 'centre stage’ requiring universities to explore and implement effective ways of embedding and assessing employability skills (Pegg, Waldock, Hendy-Isaac, & Lawton, 2012). The data produced through administering the GEI is of immense worth when reviewing programs of study and undertaking curriculum renewal. The visual evidence provides the impetus for staff to question the focus of delivery and encourages consultation with industry bodies. The inclusion of staff perceptions provides enhanced credibility and facilitates staff engagement. The visual stimuli instigate rigorous discussion about course content and learning experiences to maximise employability outcomes for students. The findings suggest opportunities for further research into the links between discipline trends, assessment profiles, student satisfaction and the development of generic capabilities. Furthermore, the importance and value of partnerships between industry and institutions is highlighted by the variations in perceptions. Investigation into models of partnerships; resourcing partnerships; and ensuring optimal student experience through effective partnerships would be of immense value to the sector (Nixon, Smith, Stafford, & Camm, 2006).
References


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