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HOW WELL ARE AUSTRALIAN BUSINESS GRADUATES PREPARED FOR THE WORKPLACE?

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ABSTRACT
The gap between business graduates’ skills and competencies, and the graduates’ needs in the workplace has been well researched and documented. However, no comprehensive model appears to have been developed on which to base curriculum decisions in this field. The current paper contributes to this area by investigating Australian graduates’ skills needs in terms of the importance of nominated skills and satisfaction with the education received for those developed skills as perceived by graduates. Analysis of a survey shows that generic marketing skills are valued at a lower level than general attribute skills. Thus, university marketing programs may need to focus more on general skills and personal attributes.

INTRODUCTION
Modern education systems of the world seek to provide the foundation for workers and citizens to contribute individually and collectively to a better world. With rapid global changes bringing new dynamics and expectations to daily lives and workplace practices, workers, employees and organisations are increasingly being required to quickly adapt to new ideas and requirements (Carter 2004). Such expectations have resulted in some employers claiming that the skills and attributes needed for success in the modern working world are not forthcoming from educational systems (Crebert et al. 2004; Deckinger et al. 1989; Evans et al. 2002; Hawkins & Winter 1995; McLarty 2000). This pressure from employers as well as the increased competition between universities to attract students from a finite pool of recruits has resulted in some universities attempting to become more customer focused (Wiklund & Wirlund 1999). That is, some universities are attempting to improve the quality of their higher education offerings to improve graduate and employer satisfaction. This goal has led some universities to focus on the essential measurement of graduate satisfaction (Nasser & Abouchedid 2005) since graduates are an important link between employers and the
universities. That is, graduates are not only the consumers of higher education, but they are also the supplier of skills and attributes, acquired through higher education, to employers.

Despite this progress, research to address the needs of graduates as potential employees has been slow, particularly within the tertiary Australian business education sector (Athiyyaman 2001). Much of the research has been directed toward employer’s perceptions of graduate skills and attributes needed (BTEC 1996; Hawkins & Winter 1995; McLarty 2000; Scott & Frontczak 1996). However, employers provide only a one-sided perspective rather than a dual perspective that employed graduates offer. Furthermore, studies about the perceptions of Australian business graduates appear to be limited and those who have studied this issue appear not to have developed a comprehensive list of skills and attributes to provide a holistic picture. Therefore, this paper aims to develop research in this area by investigating the educational needs of business university graduates in contributing to the ever-changing Australian workforce and its expectations. The paper aims to contribute to the literature and practice by examining the process of curriculum-based decision-making.

THE LITERATURE
In essence, research about graduates’ can be broken down into two areas of ‘what to teach’ (for example, Athiyyaman 2001; Barrie 2006; Nasser & Abouchedd 2005; Scott & Frontczak 1996; Shruprine & Willenburg 1998) and ‘how to teach’ (for example, Bath et al. 2004; Medlin, Graves & McGowan 2003; Miller & Liciardi 2003). ‘What to teach?’ refers to identifying those skills and attributes that graduates should be taught in their degrees. For example, Shruprine and Willenburg’s (1998) survey revealed that marketing graduates wanted soft skills (such as technology applications, teamwork and time management skills), marketing related theory (including sales management and customer service) and hands on experience (such as internships, real world examples of marketing, career and employment advice and information) to be incorporated into their degrees.

In another study, Athiyyaman (2001) identified another set of generic skills and attributes that graduates felt were relevant to them gaining employment. Skills identified as important included communication, negotiation, motivation, teamwork and supervision skills while personal attributes include initiative and enthusiasm. In yet a third study, Nasser and Abouchedd (2005) found that graduates wanted discipline specific theory and application as well as language and technical skills to be incorporated into their education to assist them in getting a job.

Not only is it important to identify ‘what to teach’ but it is also necessary to know ‘how to teach it’. ‘How to teach’ refers to the strategies that academics should pursue in effectively imparting knowledge and application of important skills and attributes to tertiary students. For example, Medlin et al. (2003) devised and tested
strategies to teach accounting specific theory and application as well as communication, teamwork and problem solving skills, and ethics. Some strategies that were found to be effective include providing hints and tips for assignments, and providing problem solving questions and debates in tutorials. Bath et al. (2004) showed that an action learning approach is an effective strategy for teaching generic skills and attributes such as communication, creativity, critical judgement independence, ethics, and theory and practice into tertiary curriculum.

Although both ‘what to teach’ and ‘how to teach’ questions should be addressed by academics, it is the former question with which this research is concerned. The differences in the sets of skills and attributes identified in all of the above studies indicate that no apparent consensus exists about which set of skills should be taught, nor is there a holistic range of skills provided by any of these studies. Therefore, it can be argued that a consensus should be reached about what to teach before finding strategies for how to teach. In order to devise a comprehensive list of skills and attributes for testing, this research supplemented the graduate literature with literature from the perspective of employers as discussed next.

Employer studies: Various authors have developed categorisations of ‘what to teach’ in tertiary educational courses based on employers’ input. For example, some authors have noted that personal characteristics such as self awareness, action planning and self promotion are important graduate attributes (Hawkins & Winter 1995; McLarty 2000). Some focus more on general competency skills such as numeracy, learning and studying, and information processing as important graduate skills (BTEC 1996). Yet others have taken a more comprehensive approach to skill development and have emphasised both personal and competency based skills as important (Harvey, Moon & Geall 1997). At the most sophisticated level, authors have identified three sets of skills/knowledge: underpinning basics; occupational specific skills; and, overarching capabilities (Gordon, Parsons & Walsh 1997).

Although the cited works provide important insights, no apparent consensus exists about which are categorically appropriate. Therefore, this research has devised three categories of skills and attributes based on the various categorisation schemes in the employer literature (as shown in figure 1). The three categories devised are category specific skills, generic skills and personal attributes. Furthermore, both the graduate and employer literature were used to provide examples of the types of skills/attributes that fall under each of these three categories (refer figure 1). A comprehensive list of skills and attributes falling under each category can be found in the findings section.
Figure 1: categories of skills and attributes that could be incorporated into tertiary education

![Diagram showing categories of skills and attributes]

What should be taught?

Occupation specific skills – marketing discipline
- Conduct a situation analysis;
- Apply consumer behaviour knowledge;
- Determine strategies for targeting/positioning

Generic skills (underpinning basics)
- Oral communication;
- Basic IT applications;
- Working autonomously;
- Teamwork;
- Report writing;
- Developing innovative solutions

Personal characteristics /attributes
- Willing to take responsibility;
- Enthusiasm/motivation;
- Commitment/reliability;
- Personal presentation;
- Take constructive criticism

Source: Developed for this research

It should also be noted that the discipline specific category in figure 1 focused on marketing skills rather than other occupational specific skills such as accounting and finance (for example) because the research was undertaken within a marketing department, and all business students must undertake some core marketing courses. Therefore, the department was interested in investigating which marketing skills should be incorporated into or improved within its curriculum.

METHODOLOGY
The current research was based on the realism paradigm (Brown 1997; Easterby-Smith & Thorpe 2002; Guba & Lincoln 1994; Hastings 2000; Healy & Perry 1998) and entailed the survey technique. The sampling population for the survey consisted of University of Southern Queensland (USQ) business graduates who had previously consented to participating in university research and who were permanent residents/citizens of Australia. Graduates in this context refer to students who have completed their degrees and graduates were selected for the research project because they were considered the strongest link between the educational sector and industry. That is, their experience of both education and industry were firsthand and placed them in a strong position to make a judgement. Given that 99 of the 113 graduate respondents were already employed, they served as a reliable source for providing the researchers with first-hand experiences and ideas of skills and attributes required by them in their work.
The sampling frame comprised a database of these graduates compiled by the university with the scope of the research limited to a single university's business graduates to reflect the population of interest for this university consultancy project. This sampling frame is in line with the ones used in other studies where a single university is studied (for example, Athiyaman 2001; Medlin, Graves & McGowan 2003; Miller & Liciardi 2003). However, further research on a wider population of students across Australian universities would be required in order to be able to generalise the findings.

The survey questionnaire involved asking business graduates to indicate the level of importance they felt their employers placed on a list of marketing specific skills, general skills and personal attributes. Next, graduates were asked to indicate how satisfied they were with how well their skills/attributes were developed by their tertiary educational system (where they obtained their qualifications).

Both “Importance” and “Satisfaction” levels were measured on a five-point scale with 1 being Not at all important/Not at all satisfied to 5 being Very important/Very satisfied. A Not Applicable (N/A) category was also included (but was posed as a separate question to the rating scale to maintain the interval nature of the rating scale) in the questionnaire for each skill or competency question to exclude responses from those who did not perceive that a particular skill or competency was relevant to their employment. The scale used to measure importance levels of skills/attributes was adapted from Athiyaman's (2001) interval scale. The adoption entailed providing a more unbalanced scale with more importance levels because it was felt that this method would provide a more exact answer to the question especially since graduates may be tempted to note all skills and attributes as being important. A similar scale was used to measure satisfaction level to maintain consistency in comparisons.

The instrument was tested for validity and reliability. Validity and reliability was achieved because the inventory of skills and attributes developed for the survey was compiled from the literature. In addition, reliability of the questions in the survey was tested during a pilot test with 25 respondents to ensure that they understood and correctly interpreted each question.

The questionnaires were mailed to a comprehensive sample of 500 graduates on the database, returning 113 usable questionnaires (a response rate of 22.6%). Although many differing analytical techniques can be used on this rich data set, the main aim was to present findings about the responses from the interviewees. Accordingly, univariate analysis was conducted to provide information for this paper. The discussion of findings from this research is detailed next.
FINDINGS
A total of 113 business graduates responded to the project’s survey. These graduates completed qualifications in a range of business disciplines including accounting (29.7%), business administration (25.2%), marketing (18%) and other disciplines such as human resource management, business administration and accounting (61.2%). Almost half of the respondents had completed either an undergraduate (44.4%) or postgraduate degree (48.1%) with only a small proportion of respondents being diploma students. In addition, the sample was split almost equally between females (45.1%) and males (54.9%) with most of the respondents being 25 years or older, indicating a sample of mostly mature aged students. The age of these respondents was seen as an advantage, allowing their work and life experiences to place them in a stronger position to judge the quality of a tertiary education meeting the needs of the worker.

The following section summarises statistics for “Importance” and “Satisfaction” levels for each of the three types of skills and competencies (refer table 1). Given the length restrictions imposed on this paper, only the overall means for importance and satisfaction for each set of skills or competencies were provided as well as an overall mean of all three areas of skills or competencies.

Firstly, the percentages of respondents stating that each skill area or competency was relevant for their employment vary with most marketing skills being the least relevant. Results show that the percentage of respondents noting each marketing skill to be relevant varies from 34% to 76% with data analysis and situation analysis skills being perceived as the most relevant to most respondents. In contrast, almost all general skills and personal attributes were perceived to be relevant to most respondents with the percentage of respondents stating their relevance as being between 85% and 99%.
Table 1: Importance levels placed on marketing skills and satisfaction levels with university education related to these skills

<table>
<thead>
<tr>
<th>Marketing skills</th>
<th>Generic Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>*analyse data/understand statistics (76)</td>
<td>*communicate effectively with others (99)</td>
</tr>
<tr>
<td>*conduct a situation analysis (76)</td>
<td>*having a range of basic IT skills (97)</td>
</tr>
<tr>
<td>apply consumer behaviour knowledge (54)</td>
<td>*working autonomously (97)</td>
</tr>
<tr>
<td>design research methodology (54)</td>
<td>*working as a member of a team (97)</td>
</tr>
<tr>
<td>*determine strategies for targeting/positioning (53)</td>
<td>*report writing skills (97)</td>
</tr>
<tr>
<td>*manage product/service plan (51)</td>
<td>developing innovative solutions (97)</td>
</tr>
<tr>
<td>segment markets (49)</td>
<td>showing independence in problem solving (97)</td>
</tr>
<tr>
<td>*manage marketing budgets (46)</td>
<td>applying problem solving across a range of areas (97)</td>
</tr>
<tr>
<td>*prepare a marketing plan (46)</td>
<td>*presentation skills (96)</td>
</tr>
<tr>
<td>*use marketing forecasting skills (44)</td>
<td>*working with people of different backgrounds (96)</td>
</tr>
<tr>
<td>develop distribution strategies (44)</td>
<td>*applying teamwork to a range of situations (96)</td>
</tr>
<tr>
<td>*implement a marketing plan (43)</td>
<td>*multi-tasking (96)</td>
</tr>
<tr>
<td>conduct interviews (42)</td>
<td>*willingness to learn continuously (96)</td>
</tr>
<tr>
<td>use marketing pricing skills (40)</td>
<td>negotiation skills (96)</td>
</tr>
<tr>
<td>develop and prepare advertising program (38)</td>
<td>leadership (96)</td>
</tr>
<tr>
<td>devise marketing strategies for intern’l markets (34)</td>
<td>*having professional and personal ethics (96)</td>
</tr>
<tr>
<td></td>
<td>*time management (96)</td>
</tr>
<tr>
<td>Importance levels: 3.65</td>
<td>*open to learning new skills (96)</td>
</tr>
<tr>
<td>Satisfaction levels: 3.27</td>
<td>adapting to new situations (96)</td>
</tr>
<tr>
<td><strong>Personal attributes</strong></td>
<td>application of discipline concepts/techniques (96)</td>
</tr>
<tr>
<td>*willing to take responsibility (96)</td>
<td>establishing/using networks (96)</td>
</tr>
<tr>
<td>*enthusiasm/motivation (96)</td>
<td>*use industry related software (95)</td>
</tr>
<tr>
<td>*commitment/reliability (96)</td>
<td>*collecting and organising information (95)</td>
</tr>
<tr>
<td>*personal presentation (96)</td>
<td>acquisition of discipline knowledge (95)</td>
</tr>
<tr>
<td>*take constructive criticism (95)</td>
<td>*analysing and evaluating information (94)</td>
</tr>
<tr>
<td>self esteem (94)</td>
<td>awareness of industry being worked in (94)</td>
</tr>
<tr>
<td>sense of humour (94)</td>
<td>allocating people &amp; other resources to task (93)</td>
</tr>
<tr>
<td>personality matches the org’s cultural values (93)</td>
<td>establishing clear project goals (92)</td>
</tr>
<tr>
<td></td>
<td>identifying business opportunities (85)</td>
</tr>
<tr>
<td>Importance levels: 4.46</td>
<td>Importance levels: 4.47</td>
</tr>
<tr>
<td>Satisfaction levels: 3.48</td>
<td>Satisfaction levels: 3.66</td>
</tr>
</tbody>
</table>

Source: Data collected in this study

Next, the average importance level for each skill set or competency (for those who perceived that the skills and competencies were relevant to their employment) was calculated. Results show that once again, marketing skills were perceived to be
the least important compared to general skills and personal attributes. The average importance level for all marketing skills was 3.65 compared to 4.46 for general skills and 4.47 for personal attributes. The skills and competencies within each set were compared to their means to find out which fell below or above the average importance levels for set. An asterisk next to the skill or competency in table 1 indicates those skills and competencies fall above their aggregated mean. Overall, there were a number of above average important marketing skills such as data analysis skills, situation analysis skills, target marketing, developing and budgeting marketing and services/product plans. However, all of the general skills and personal attributes had means above 4 (that is, all were perceived to be important).

Finally, the satisfaction levels for all three skill sets or competencies were compared and the results indicate that satisfaction was significantly lower than importance levels for all skills and competencies. Mean satisfaction levels for marketing skills (3.27) were almost as low as general skills (3.66) and personal skills (3.48) indicating that graduates were not very satisfied with any of the core skill areas of education at university.

IMPLICATIONS AND AVENUES FOR FURTHER RESEARCH
Clearly, this research indicates that there is a large gap between university-based curricula and the skills and competencies required by those in the work place. Of further concern is the indication that very little research is being conducted to address this perceived imbalance. This is the key strength of this paper in that it provides direction to academics to guide the construction of a comprehensive framework for the creation of business, and in particular marketing, curricula.

Avenues of research to consider following this study include repeating this research utilising a wider stratified sample of students drawn from various business disciplines in order to be able to generalise the findings as this was the key limitation of this study. Further, data collection from both employers and tertiary institutions concerning their perceptions of graduate skills and competencies and their resultant satisfaction levels is vital to ensure an holistic view of the situation is possible. Following this, a comparison between these two cohorts' perceptions needs to be conducted with the view to carrying out more sophisticated analyses in order to formulate a typology that Australian tertiary institutions can utilise to make curriculum-based decisions in the future concerning business students.

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