Student perceptions of the value of career development learning to a work-integrated learning course in Exercise Science

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ABSTRACT

Work-integrated learning has become a significant feature of Australian universities over the past decade. Prior research indicates that some form of career development is essential to prepare undergraduate students for a competitive employment market. The 2008 National Association of Graduate Careers Advisory Services (NAGCAS) Symposium sought to establish best practice in the integration of career development learning and work-integrated learning. The NAGCAS Symposium and resulting project served as a catalyst for the current study, which examined the value of career development learning to work-integrated learning through student perceptions of the benefits of career education workshops in Field Project, a final year course for the Bachelor of Exercise Science at Griffith University, Gold Coast. The findings suggest that university students should be exposed to courses which provide a combination of career education and work-integrated learning as part of their formal studies to maximize their employment potential for optimal economic and social outcomes.

Keywords: Work-integrated learning; career development learning; Exercise Science

CAREER DEVELOPMENT LEARNING

Career development for adult Australians has only recently become a focus in Australian universities. Previously tertiary students had been provided with programs comparatively less developed than those provided in the compulsory secondary school system (OECD, 2002; Patton, 2005). The Professional Standards for Australian Career Development Practitioners (Careers Industry Council of Australia, 2006) views career development as the process of managing learning, work, leisure and transitions throughout life to assist individuals in determining their future in the workplace. Career development learning helps “inform, guide and assist students to critically appraise not only the world of work, but also the specific occupation they have selected.... and may be deployed to raise students’ awareness of employability and how to self-manage their studies and extra-curricular activities to optimise the employability” (Smith et al., 2009, p. 18).

In response to the need for a theoretical framework to understand the complexity of the current world-of-work, Patton and McMahon (2006) developed the Systems Theory Framework (STL), which reconceptualised WIL through the lens of career development. STF encompasses individual, social and environmental influences, as well as chance events. STF first considers the range of personal factors which may affect an individual’s career e.g. self-concept, values, personality. These factors are also influenced by an individual’s experiences in work-integrated learning. A number of social factors are represented in STF (e.g. socioeconomic status, employment market, globalization), which affect one another, as well as the personal factors. Finally, STF considers the individual (Past, Present and Future) and the effects of the influences previously described at different stages of an individual’s career.

Patton and McMahon (2006) also inferred that part of higher education’s role is to develop capacities that will permit graduates to be proactive and self-directed learners. The STF suggests that the choice of one’s career should not be considered as a singular decision with a logically

determined pathway and that higher education needs to develop particular skills and abilities that allow graduates to be proactive and self-directed learners (Smith et al. 2009).

CAREER DEVELOPMENT LEARNING AND EMPLOYABILITY

A significant number of studies have indicated the benefits of career development to individuals (Herr, Cramer & Niles, 2004; Organisation for Economic Cooperation and Development, 2004; Purcell et al., 2008). Career development learning (CDL) has the potential to positively affect social equity and human capital (Access Economics, 2006) and can be viewed at the individual, organizational or societal levels, over immediate, intermediate and long-term timeframes (Watts, 1999). Within Australian higher education career development in particular has been shown to play important roles in relation to access, equity and social justice (McIlveen, Everton & Clarke, 2005).

The development of self-management skills in students and graduates will enhance lifelong employability. Graduates from Australian universities experience relatively high levels of full-time employment, however these statistics may not accurately represent levels of demand and dissatisfaction related to students' learning experiences or their positioning within the world-of-work following graduation. Numerous strategies may be employed to raise tertiary students' awareness of employability and develop the skills necessary to manage their studies and extra-curricular activities to optimize their employability. Yorke (2006,p.8) views employability as "a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy".

The increasing costs involved in higher education internationally have placed greater emphasis on the development of 'graduate employability' (Orrell, 2004). In general, students participate in higher education with the view to improving their career opportunities (Smith et al.,

2009), with the relationship between learning and employability clearly identified by The Organisation of Economic Co-operation and Development (OECD, 2004). The landmark report, *Graduate Employability Skills* (Precision Consultancy, 2007), emphasised the need for higher education to provide work-related experiences and also focus on the development of capacities required for employment.

In 2002 the Employability Skills for the Future Framework was produced by the Australian Department of Employment, Science and Training and indicated generic employability skills required by Australian industry, focusing on communication, teamwork, problem-solving, initiative and enterprise, planning and organizing, self-management, self-improvement and technology. The Framework also listed personal attributes that were considered relevant to employability e.g. loyalty, reliability. Many of these employability skills have been expressed in university statements related to graduate attributes. The higher education sector has made significant gains in the promotion of graduate attributes within academic curricula and programs (Bath, Smith, Stein & Swann, 2004; Precision Consultancy, 2007).

Research has demonstrated that students appreciated the inclusion of generic skills in the curriculum in regard to their employment prospects, but they indicated a desire for more opportunities to develop these skills in practical settings, as well as exposure to industry (Blackwell, Bowes, Harvey, Hesketh & Knight, 2001; Crebert, Bates, Bell, Patrick & Cragolini, 2004). Smith et al. (2009) proposed that the embedding of career development learning in work-integrated learning programs can fulfil this need whilst students are still in a learning environment.

THE ROLE OF CAREER DEVELOPMENT SERVICES IN CAREER DEVELOPMENT LEARNING

Career development coursework has been demonstrated to positively affect job satisfaction, selection of a degree major, course satisfaction, graduation rates and grade-point average (Folsom &

Reardon, 2003). Patton and McMahon (2006) indicated that preparing for lifelong career development is even more important for students enrolled in non-vocational degrees, as they may be most affected by changes in the world of higher education and work. However, the provision of career guidance within higher education has been found inadequate (Watts & Fretwell, 2004). Career services at Australian Universities offer a range of career development services, but vary significantly in regard staffing and resource profiles. Career services can play an important role in supporting students in individual, group and mass delivery activities. Career services are in an excellent position to provide services to students and employers and equally well positioned to bring academics and employers together for the benefit of students.

CAREER DEVELOPMENT LEARNING ENHANCES WORK-INTEGRATED LEARNING

The key benefits of CDL in regard to lifelong learning relate to self-awareness, opportunity awareness, decision making and transition learning (Watts, 2006). These processes were originally developed as the DOTS Analysis (Law and Watts, 1977), which has proven very useful as a model for organizing WIL experiences. Watts (2006) indicates that WIL programs can be designed by academics and employers while students, as the recipients and beneficiaries, are more actively and positively engaged in the process through career development. Through this process, Watts (2008) suggests career development learning significantly augments the quality of work-integrated learning by placing students at the centre of such programs, and adding value to their quality, by helping students to be career ready, as well as work ready.

Smith et al. (2009) held similar beliefs in the value of CDL to WIL. Career development learning integrates students' workplace experiences, clarifies their career plans and provides a better understanding of the curriculum and relevance of university academic experiences (Smith et al., 2009). However, the potential for career management skill development has proven to be generally unrealised in universities (Watts, 2005). A 2002 OECD report noted that many students in

Australian tertiary education appear to have little understanding of the purpose of their studies or the direction in which they are heading (OECD, 2002). This is particularly significant in Australia where individuals, rather than institutions, determine their entry pathways into the world of work (Andrews & Wu, 1998; Lamb, Long & Baldwin, 2002).

WORK-INTEGRATED PROGRAMMES IN AUSTRALIAN UNIVERSITIES

Work-integrated learning (WIL) programmes have been available through Australian universities for many decades, particularly in vocationally oriented degrees such as nursing, education and medicine, as a means of providing the links between theory and practice in a logical and transformative experience for students (Smith et al., 2009). Strong emphasis on WIL in higher education is evident in the international context (Billett, 2008) with Australian universities taking a significant interest (Daniel, 2010), as demonstrated by the 'WIL report: a national scoping study' (Patrick et al., 2008), the establishment of a 'National WIL Portal (Australian Collaborative Education Network, 2009) and the project report 'Career Development Learning: Maximizing the contribution of work-integrated learning to the student experience' produced by the National Association of Graduate Careers Advisory Services, Australia , Inc. (Smith et al., 2009).

WIL is generally accepted as a potent medium for developing both generic and professional skills to provide students with the opportunity to enhance their employability and work readiness (Patrick et al., 2008). The Business, Industry and Higher Education Council's report (Precision Consultancy, 2007) situated work-integrated learning as an important medium for the development of graduate attributes and employability skills. Universities Australia (2008) similarly promoted the importance of WIL in its statement on establishing a national internship scheme for Australian university students.

Griffith University values the inclusion of WIL activities in its degree programs and courses. WIL experiences at Griffith University are designed to meet the personal and professional aspirations

of students and to enable their transition to the world of work. The University's Teaching and Learning Committee views WIL as the educational activities that integrate theoretical learning with its application in the workplace (Griffith University, 2006). McCowan and McKenzie (1997) have promoted a similar approach by suggesting that career education should be integrated with the curriculum, rather than added as an extraneous service, with its delivery shared by various parties (e.g. educators, employers). This integrative strategy has been utilized in the development of the Griffith University course, which is the focus for this research.

STUDENT CENTRED APPROACH

Today's knowledge and information society requires learners to be problem-solvers and creative thinkers. Thus, the curriculum needs to shift from a focus on content to one that integrates content with process (De la Harpe et al., 2000; James et al., 2004). This change necessitates a student-centred approach as the teacher must start the process from the student's stage of development, keeping their expectations in mind (Green et al., 2009). As the skills developed in career management programs are very personal, applied and reflective, students need to be engaged in a range of activities, including role-plays, self-audits, problem-based group work, work-integrated learning and peer review of resumes (Watts, 2006). To be successful, these activities require significant time and planning by staff. This scenario can be further complicated by large student numbers, which make tailoring these strategies challenging to put into practice. Academics focused on student learning are more likely to construct learning environments that foster the development of graduate attributes, with tasks that are "self-directed, reflective and relevant to students" (Luca & Oliver, 2002). This approach has been adopted in the particular university course examined in this study.

ASSESSING WIL AND CDL

Assessment is a driving force in the design of curricula and students pay attention to those aspects of courses which are assessed. Many undergraduate students do not actively consider their future careers until graduation (Lau & Pang, 1995; Perrone & Vickers, 2003), thus Bridgstock (2009) suggests the development of career management skills needs to commence early in university programs and should be an assessable component of coursework. Good assessment practices of work-integrated learning inform educational institutions of the preparedness of their graduates for the workplace. One aspect of this study considered the benefits of changing the status of a course, which included both career management skills and work-integrated learning, from non-graded to graded.

THE NAGCAS SYMPOSIUM AND PROJECT

The 2008 NAGCAS Symposium in Melbourne was attended by 168 delegates as representatives of the major stakeholders, who came together to characterise best practice in the integration of career development learning into work-integrated learning in Australian universities. The Symposium was followed by a forum of more than 60 students and employers for further discussion of the themes, principles, problems, solutions and models put forward at the Symposium. These two major events played important roles in the enhancement of the delivery of career development learning in Australian higher education. The Symposium resulted in the discussion paper 'Career Development Learning & Work-integrated Learning in Australian Higher Education' (NAGCAS, 2008) and the final project report 'Career Development Learning: Maximising the contribution of work-integrated learning to the student experience' (Smith et al., 2009). The NAGCAS Project sought to bring WIL and career development learning together in order to eventually "potentiate one another so that students' preparations and transitions into and through the world-

of-work are fulfilling and rewarding” (Smith et al., 2009). The NAGCAS Project served as a catalyst for this particular study, which examined the value of career development learning to work-integrated learning.

CASE STUDY

Griffith University has several campuses located in Brisbane and the Gold Coast, Queensland. Griffith University’s teaching and learning programs aim to provide opportunities for students to acquire knowledge and skills that can be applied in the community. Field Project is an elective third year course in the Bachelor of Exercise Science program conducted at the Gold Coast campus. The rationale for including this course in the program is to make students aware of the requirements of the industry they wish to enter and to expose them to the working environment of various organizations in which they may wish to seek employment. The course is designed to link and complement the student’s program of study by preparing and introducing them to the work environment. The main objectives of this course are: (a) to provide students with work experience within the industry they may seek employment; (b) to introduce students to various aspects related to the work environment; and (c) to provide career planning procedures and job search skills training. Students are required to complete a minimum of 80 hours work experience in an industry of choice (approximately one day per week) throughout the semester

The course includes both career development learning and work integrated learning with 13 two-hour workshops. Students are introduced to professional and personal techniques to assist them to gain entry into the workplace and to function successfully once they are in the workplace. The course is staff-intensive with input from lecturers from the School of Physiotherapy and Exercise Science, Careers and Employment Services and relevant employer groups. The workshops include:

- Introduction to the world of work (1 week)

- Career education lectures (7 weeks)

Career planning, job search, resumes, applications, selection criteria, interviews, mock interview, cultural inclusiveness

- Presentations by industry representatives (5 weeks)

Fitness, cardiac services, sleep disorders, sport & recreation, sports coaching & administration, event management, pharmaceutical sales, rehabilitation, physiotherapy

Assessment items for the course were selected from both CDL and WIL and included: attendance and participation; resume and job application; interview performance and reflection; ePortfolio; performance in fieldwork placement; placement handbook completion; and a critical reflection report.

RESEARCH METHODOLOGY

This particular study examined the links between career development learning and work-integrated learning through student perceptions of a series of Career Education workshops within Field Project, an Exercise Science course at Griffith University, Gold Coast. The results will be used to improve the outcomes for future students. The research included eleven research questions:

1. *What did students consider to be the five most important outcomes of the course?*
2. *How effective did students perceive the career education workshops in preparing them for their future careers?*
3. *How did students perceive the career education workshops assisted their development in regards to the four tasks outlined in the DOTS analysis?*
4. *Which workshops were considered to be of most benefit to students' career development?*

5. *What did students consider they learned about themselves from their experiences in the workshops?*
6. *How did students perceive the workshops prepared them for their placements?*
7. *To what degree did students consider the workshops improved their employment potential by maximizing the benefits of their studies and extra-curricular activities?*
8. *In what ways did students believe the career education workshops affected their employability?*
9. *How important did students consider the inclusion of career education in Field Project?*
10. *What suggestions did students have to improve the content or methodology of the workshops?*
11. *What impact did the fact that the items were marked, rather than non-graded, have on students' motivation and outputs?*

Procedure

The research was conducted using 22 students in their final semester of study in a three year Bachelor of Exercise Science, who made up the entire cohort in the course, Field Project, at Griffith University in their final semester of study. The instruments used for data collection included the Measure of Guidance Impact (Killeen, 1992), which was used before and after the workshops. The questionnaire used a five-point Likert scale with students asked to respond to questions such as “I have a good idea of a job that will suit me” and “I have made a plan for my working life”. Students also responded to the following self-completion questionnaire designed for this study:

Questionnaire: Field Project

a) DOTS Analysis

In the space provided record a figure between 0 and 5 in relation to **how the career education workshops assisted your development** in regards to each of the following criteria:

0 = no development   1 = minimal development   2 = some development

3 = moderate development   4 = high level of development   5 = very high level of development

Self awareness

- Identify knowledge, abilities and transferable skills developed by your degree _____
- Identify personal skills and how these can be deployed _____
- Synthesise your key strengths, goals and motivations as they apply to job searching _____

Opportunity awareness

- Demonstrate knowledge of general trends in graduate employment and opportunities for graduates in your discipline _____
- Demonstrate understanding of the requirements of graduate recruiters _____

Decision making

- Relate self-awareness to knowledge of different employment opportunities _____

Transition learning

- Demonstrate understanding of effective job search strategies _____
- Apply understanding of recruitment/ selection methods to applications _____
- Demonstrate ability to use relevant vacancy information, including ways of accessing unadvertised vacancies _____
- Demonstrate capacity to vary self-presentation in resumes and interviews to meet requirements of specific job opportunities _____
- Demonstrate ability to present oneself effectively in selection interviews and other selection processes _____

b) Self-completion questionnaire

Please consider the career education workshops to respond to the following questions:

Career planning	Job search	Developing a resume	Job applications
Selection criteria	Interviews	Mock interviews	Feedback session
Intercultural communication			

Which workshops were of most benefit to your career development? Give reasons.

What have you learned about yourself from your experiences in the workshops?

In what ways did the workshops prepare you for your placement?

How have the workshops improved your employment potential by maximizing the benefits of your studies and extra-curricular activities?

How have the career education workshops affected your employability? Explain your response.

Do you believe career education should be part of a work experience course? YES NO (Please circle) Provide reasons.

What suggestions do you have to improve the content or methodology of the workshops?

What impact did the fact that the items were marked, rather than non-graded, have on your motivation and outputs?

The Measure of Guidance Impact (MGI) was used as it is a valid and reliable instrument, which is completed before and after guidance related to career development. Its main purpose is to provide objective information to assist training organizations and guidance agencies to evaluate the effectiveness and monitor the learning outcomes of adult guidance programmes and interventions (National Foundation for Educational Research, 1992). The MGI may be used to provide a general indication of the value added through guidance services or to compare the value of different types of guidance in relation to their longer-term economic outcomes (Christophers et al., 1993).

There are two forms of the MGI – Form 1 is used pre-guidance and Form 2 post-guidance. Each Form contains 25 statements, for which clients are asked to record, on a scale of 1 to 5, the extent of their agreement. Thus, the maximum score that can be achieved is 125 (25 x 5). Average scores (norms) were developed as a result of a large-scale pilot study involving 807 subjects. The statements are simply phrased and have been designed to be read by the majority of adults. The needs of those clients who are learning English have also been considered in the construction of the statements.

The MGI provides an overall score for clients, demonstrating the extent of change that may be attributed to the effect of the guidance they have received. This is achieved by measuring the level of career awareness the clients demonstrate when they commence a guidance program, compared with the level they attain following the program. Form 1 of the MGI was administered during the first lecture of the course, while Form 2 of the MGI was administered after the lecture/workshops had been concluded.

Students also completed a two-page questionnaire to allow them to answer freely and explain their perceptions, suggestions and experiences. The researchers developed the questionnaire, which consisted of short answer questions focusing on different aspects of the program. Some questions were closed to elicit specific information and ratings (e.g. DOTS analysis), while other questions were open to allow students to provide personal responses to the effectiveness of the program and make suggestions with regard to possible future improvements in the course.

RESULTS

The research findings have been reported using the eleven research questions as headings:

What did students consider to be the five most important outcomes of the course?

Students were asked to nominate the five most important outcomes of the course from a list or make additions where appropriate. The results demonstrated a mix of career education and work-integrated learning outcomes, emphasizing the importance of providing both aspects in courses of this nature. The outcomes nominated by the students were marked with a 1-5 scale. The overall results (in order of considered importance) were as follows:

- 1 Gained experience in being interviewed;
- 2 Developed job application writing skills;
- 3 Gained insight into professional work;
- 4 Research and/or practical skills enhanced; and
- 5 Improved development of career path.

How effective did students perceive the career education workshops in preparing them for their future careers?

Form 1 of the Measure of Guidance Impact was administered in the first lecture/workshop of the course. Mean scores obtained were 80.4 for Griffith students (out of a possible maximum of 125

points), whilst scores on Form 2 (conducted following the lecture/workshops) demonstrated a mean of 99.1. The change in mean scores of the Griffith students from results obtained from Form 1 and Form 2 was 18.7, indicating the effectiveness of the course in preparing students for the workforce (two tailed t-test: $t = 6.2$, $p < 0.05$).

How did students perceive the career education workshops assisted their development in regards to the four tasks outlined in the DOTS analysis?

Students were asked to rate how the career education workshops assisted their development in relation to the four tasks outlined in the DOTS analysis via a self-completion questionnaire. The mean scores (out of maximum possible of 5) are shown in Table 1. The overall mean of 3.75 indicated that the students perceived that the career education workshops provided moderate to high development in the four tasks.

TABLE 1
Student perceptions of the benefits of the career education workshops to the four tasks outlined in the DOTS analysis

Process	Skill or ability	Perceived level of development
Self awareness	Identify knowledge, abilities & transferable skills developed by your degree	3.7
	Identify personal skills and how these can be deployed	3.8
	Synthesize your key strengths, goals & motivations as they apply to job searching	3.9
Opportunity Awareness	Demonstrate knowledge of general trends in graduate employability & opportunities	3.5
	Demonstrate understanding of the requirements of graduate recruiters	3.6
Decision Making	Relate self-awareness to knowledge of different employment opportunities	3.3

Transition Learning	Demonstrate understanding of effective job search strategies	4.2
	Apply understanding of recruitment/ selection methods to applications	4.0
	Demonstrate ability to use relevant vacancy information including ways of accessing unadvertised vacancies	3.5
	Demonstrate capacity to vary self-presentation in resumes & interviews to meet requirements of specific job opportunities	3.9
	Demonstrate ability to present oneself effectively in selection interviews & other selection processes	3.8

Which workshops were considered to be of most benefit to students' career development?

Students were given a list of the career education workshops and asked to nominate the workshops which they considered to be of most benefit to their career development. The results demonstrated that the following workshops were nominated equally by students as providing most benefit to their career development:

Developing a resume
Mock interviews

What did students consider they learned about themselves from their experiences in the workshops?

Student responses were sought in relation to the aspects they had learned about themselves from their experiences in the career education workshops. The data indicated the common responses (number of students shown in brackets) were: confidence in interview situations (8); better understanding of skills & knowledge developed in my degree (7); how to direct my resume to the criteria (5); my personal limitations or areas for improvement (4); and relevance of transferable skills (3).

How did students perceive the workshops prepared them for their placements?

Students were asked how the workshops prepared them for their industry placements.

Typical responses to this question were:

- “Prepared me for situations involving language or cultural difficulties”
- “Developed a professional attitude in dealing with patients and professional problems”
- “Directed me to a particular industry in which I wish to work”
- “Reinforced the need to take advantage of opportunities”

To what degree did students consider the workshops improved their employment potential by maximizing the benefits of their studies and extra-curricular activities?

Students provided their considerations of the effects of the career education workshops on their employment potential through the focus of maximizing the benefits of their academic studies and extra-curricular activities in their resumes and job applications. The data indicated significant benefits with responses such as:

- “Highlighted my key skills and qualities that I have learnt from my degree”
- “Better understanding of how to use my studies & community activities to market myself”
- “See the broad range of skills, both clinical and personal, that I have developed”
- “Identified areas of my study that are valued in the workplace”

In what ways did students believe the career education workshops affected their employability?

Students provided a variety of responses in relation to their perceptions as to the ways in which the career education workshops affected their employability – some responses were related to professional behaviour, whilst others were more specific and personal. Some examples provided by students included:

- “Developed my resume to a professional level”
- “I have now some idea of what to expect in an interview”
- “The idea of approaching an organisation like a hospital previously dumbfounded me – now I have a means to approach such an organisation”
- “They awake students to the complexity, time & effort involved in getting a job”
- “Guidance for structuring answers during interviews using the STAR approach”
- “I can now emphasize the strengths I can bring to the job”
- “Now I can actually respond to selection criteria & answer questions succinctly”
- “Gives me the tools to showcase myself to the best of my ability”

How important did students consider the inclusion of career education in Field Project?

100% of students responded positively in response to the question “do you believe career education should be part of a work experience course”? This is a significant demonstration of the link between career education and work-integrated learning. Typical reasons given by students for this response were:

- “Learn how to behave in a professional environment”
- “Provides a clearer career path”
- “Gives you knowledge to apply to a variety of jobs”
- “Gives students’ perspective of employers”
- “Fully prepares students for life after placement”

These reactions provide the authors with a strong conviction of the importance of the integration of career education and work-integrated learning opportunities for students in Australian universities.

What suggestions did students have to improve the content or methodology of the workshops?

Students provided minimal suggestions as to possible improvements to the content or methodology of the workshops, probably as the course had been continually updated following student feedback over the last ten years. Some typical responses included:

- “I have no suggestions – they were great!!!!!!!!!!”
- “More group discussions on resumes & responses to selection criteria”
- “Identify main career goals of individual students – try to tailor discussions to cover those goals”
- “Bring in more guest speakers from different occupations in the health industry”

What impact did the fact that the items were marked, rather than non-graded, have on students’ motivation and outputs?

All students commented that marking increased their motivation and effort in completing assessment tasks. Several students also indicated that a good grade would boost their Grade Point

Average, which would assist when applying for entry into post-graduate programs. The following responses were relevant to the issue of the graded versus non-graded status of a course.

“I personally think that grading the course was a great idea. I was motivated to produce a high quality resume and to give 100% effort in the mock interview process, which will prove beneficial during job career searching. My resume is now employer ready, with the only adjustment being to keep it updated”.

“Having marked work has been beneficial in knowing what level of quality my work has been. In real life a resume will be judged on more than just a Pass/Fail basis. It helps our employment prospects if we can identify areas which need improvement”.

CONCLUSIONS

The results of this research clearly identify positive trends in students’ perceptions in regard to the benefits of this course, which combines work-integrated learning with career development learning. Although the course has a heavy workload, the benefits to the students in terms of preparation for their careers are significant. This research has clearly identified the value-add which career development learning brings to work-integrated learning, as well as the importance of embedding CDL within an assessable environment. In summary, there were several important findings from this study:

- At the start of this course students were below average in work readiness (as determined by the MGI). This is of concern as the students are in their final year of study. Many other students in their cohort did not complete this course and were therefore probably ill-prepared for the workforce. However, the participants changed significantly by the completion of the course, demonstrating its effectiveness.
- The five most important outcomes of the course (as perceived by students) identified a mix of career education and work-integrated learning outcomes, demonstrating the important links between these aspects of the course.

- The career education workshops, which were tailored specifically for Exercise Science students, provided moderate to high development in the four tasks outlined in the DOTS analysis – self-awareness; opportunity awareness; decision making; and transition learning.
- Students indicated they had achieved significant personal development through involvement in the workshops, which had improved their employability and readiness for the workforce.
- All students in the course agreed with the inclusion of career education in a work experience course, clearly identifying the link between career education and work-integrated learning. Their positive responses suggest that courses incorporating this integrated approach should be provided to students in Australian universities to increase their employment potential.
- The change from non-graded to graded status of the course had significant positive effects on student motivation and outputs. Students appreciated that Pass/Fail is not sufficient in the preparation for a competitive job market.

RECOMMENDATIONS FOR PRACTICE

It would seem appropriate that university students should be exposed to a combination of career education and work-integrated learning as part of their formal program of study to optimise their employment potential for optimal economic and social outcomes. University academics and career development practitioners need to work closely with industry partners to integrate their services to produce graduates, who can not only find satisfying employment, but also successfully manage their lifelong careers. This research has provided a practical example of the integration of CDL and WIL for the benefits of students in relation to their employability and adds weight to the strategies promoted in the NAGCAS Report (Smith et al., 2009). Further research is required in regard to the effects of other combinations of CDL and WIL in Australian universities, academic programs and courses in order to enhance student employment prospects in a rapidly changing world.

REFERENCES

Andrews, L., & Wu, T. (1998). *The labour market experience of higher education graduates over the last decade*. Canberra: Department of Employment, Education, Training and Youth Affairs.

Access Economics. (2006). *The economic benefits of career development services: Scoping study by Access Economics Pty Ltd for the Career Industry Council of Australia*.

Australian Collaborative Education Network. (2009). *The WIL (Work Integrated Learning) report: A national scoping study*. Retrieved 15 January 2011 from www.acen.edu.au

Bath, D., Smith, C., Stein, S., & Swann, R. (2004). Beyond mapping and embedding graduate attributes: bringing together quality assurance and action learning to create a validated and living curriculum. *Higher Education Research & Development*, 23(3), 313-328.

Billett, S. (2008). Developing agentic professionals through practice-based pedagogies. *Final report for ALTC Associate Fellowship*. James Cook University. Retrieved 25 January 2011 from http://www.jcu.edu.au/teaching/idc/groups/public/documents/advice/jcuprd_047059.pdf

Blackwell, A., Bowes, L., Harvey, L., Hesketh, A.J. & Knight, P.T. (2001). Transforming work experience in higher education. *British Educational Research Journal*, 27(3), 269-285.

Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31-44.

Christophers, U., Stoney, S., Whetton, C., Lines, A., & Kendall, L. (1993). *Measure of Guidance Impact – User Manual*. National Foundation for Educational Research. Nelson Publishing Company Ltd.: Windsor, UK.

Crebert, G., Bates, M., Bell, B., Patrick, C-J., & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: graduates' perceptions. *Higher Education Research & Development*, 23(2), 147-165.

Daniel, R. (2010). Career Development and Creative Arts Students: An Investigation into the Effectiveness of Career Theory and WIL Experiences on Practice. *Australian Journal of Career Development*, 19(2). 60-64.

De la Harpe, B. Radloff, A. & Wyber, J. (2000). Quality and generic (professional skills. *Quality in Higher Education*, 6(3), 231-243.

Folsom, B., & Reardon, R. (2003). College career courses: Design and accountability. *Journal of Career Assessment*, 11(4), 421-450.

Green,W., Hammer, S., & Star, Cassandra. (2009). Facing up to the challenge: why is it so hard to develop graduate attributes? *Higher Education Research & Development*, 28(1), 17-29.

Griffith University. (2006). *Strategic Plan 2006-2010*. Brisbane: Office for Community Partnerships. Retrieved 22 January 2011 from http://www.griffith.edu.au/_data/assets/pdf_file/0020/51284/strategic-plan-2006-2010.pdf

Griffith University. (2009). *Work-integrated learning workshops*. Retrieved 25 January, 2011 from https://learning.griffith.edu.au/webapps/blackboard/content/courseMenu.jsp?course_id

Herr, E.L., Cramer, S.H., & Niles, S.G. (2004). *Career Guidance and Counselling through the Lifespan*. 6th edition. Boston: Pearson.

James, B., Lefoe, G., & Hadi, M. (2004). Working 'through' graduate attributes: A bottom-up approach. In F.Sheehy & B. Stauble (Eds.), *Transforming knowledge into wisdom: Holistic approaches to teaching and learning*. Higher Education Research and development Society of Australasia HERDSA Conference, Miri, Sarawak, (pp.174-184). Milperra, NSW: Author.

James Cook University. (2009). What is WIL? *Work Integrated Learning*. Retrieved 15 January 2011 from http://www.jcu.edu.au/teaching/wil/JCUPRD_038535.html

Killeen, J. (1992). *The Client Review Questionnaire*. London: UK Department of Employment.

Lamb, S., Long, M. & Baldwin, G. (2002). *Performance of the Australian Education and Training System*. Melbourne: Victorian Department of Premier and Cabinet.

Lau, A. & Pang, M., (1995). Undergraduates' career perceptions and first job needs in Hong Kong. *International Journal of Career Management*, 7(3), 14-24.

Law, B. & Watts, A.G. (1977). *Schools, Careers and Community: A study of some approaches to Career Education in Schools*. London: Church Information Office.

Luca, J., & Oliver, R. (2002). Developing an instructional design strategy to support generic skills development. In A. Williamson, C. Gunn, A. Young & T. Clear (Eds.), *Winds of change in a sea of learning: Proceedings of the 19th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)* (pp.401-411), Auckland: UNITEC Institute of technology.

McIlveen, P., Everton, B., & Clarke, J. (2005). A university career service and social justice. *Australian Journal of Career Development*, 14(2), 63-71.

McGowan, C., & McKenzie, M. (1997). *The Guide to Career Education. For Careers Personnel Working in Australian Schools and Colleges*. North Sydney: New Hobsons Press.

National Association of Graduate Careers Advisory Services. (2008). *Career Development Learning & Work-integrated Learning in Australian Higher education: A Discussion Paper*. Melbourne: Author.

National Foundation for Educational Research. (1992). *Measure of Guidance Impact*. NFER-Nelson Publishing Company Limited. Berkshire, UK: Author.

Organisation for Economic Cooperation and Development. (2002). *OECD review of career guidance policies – Australia country note*. Retrieved January 24 2011, from <http://www.oecd.org/dataoecd/17/47/1948341.pdf>

Organisation for Economic Cooperation and Development. (2004). *Lifelong Learning. Policy Brief*. Retrieved 15 January, 2011 from <http://www.oecd.org/dataoecd/17/11/29478789.pdf>

Orrell, J. (2004). *Work-integrated learning programmes: Management and educational quality. Proceedings of the Australian Universities Quality Forum: AUQA Occasional Publication*. Flinders University: Adelaide.

Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). *The WIL (Work-integrated Learning report: A National scoping study (Australian Learning and Teaching Council (ALTC) Final report*. Brisbane: Queensland University of Technology. Available online at www.altc.edu.au and www.acen.edu.au

Patton, W. & McMahon, M. (2006). *Career development and systems theory: Connecting theory and practice*. Rotterdam: Sense Publishers.

Perrone, L., & Vickers, M.H. (2003). Life after graduation as 'a very uncomfortable world': An Australian case study. *Education & Training*, 45(2/3), 69-79.

Precision Consultancy. (2007). *Graduate employability skills: Prepared for the Business, Industry and Higher Education Collaboration Council*. Canberra: Commonwealth of Australia.

Purcell, K., Elias, P., Ellison, R., Atfield, G., Adam, D., & Livianos, I. (2008). *Applying for Higher Education – the diversity of career choices, plans and expectations. Findings from the First Futuretrack Survey of the 'Class of 2006' applicants for Higher Education*. Retrieved 14 March, 2011, from <http://www2.warwick.ac.uk/fac/soc/ier/news/wfreport0408.pdf>

Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). Career development learning: Maximising the contribution of work-integrated learning to the student experience. *Final Project Report. June, 2009*. University of Wollongong. Careers Central. Academic services Division.

Universities Australia. (2008). *A national internship scheme: Enhancing the skills and work-readiness of Australian university graduates*. Canberra: Author.

Watts, A.G. (1999). The economic and social benefits of guidance. *Educational and Vocational Guidance Bulletin*, 63, 12-19.

Watts, A.G. (2006). *Career development learning and employability*. Heslington, York: The Higher Education Academy.

Watts, A.G. (2008). Career development learning and work-integrated learning: A conceptual perspective from the U.K. *Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated learning (WIL) to the Student Experience*. Melbourne.

Watts, A.G., & Fretwell, D.H. (2004). Public policies for career development. Case studies and emerging information and guidance systems in developing and transition economies. Retrieved 25 March, 2011, from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079984605/PublicPolicy_CareerDev.pdf

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Theory and Practice

Question: What are the processes involved in the DOTS analysis?

Answer: Self-awareness; opportunity awareness, decision-making; transition learning.

Question: What are the benefits of integrating career development learning and work-integrated learning?

Answer: Keeps student at the centre of programs; adds value to program quality by assisting students to be career ready, as well as work ready; integrates students' workplace experiences; clarifies career plans; better understanding of curriculum and relevance to university academic experiences.