

Career Development Learning:

Maximising the contribution of
work-integrated learning to
the student experience

Final Project Report June 2009

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On behalf of the:

National Association of Graduate Careers Advisory Services

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1. Foreword

This project comes at an important time for the higher education sector. As the global financial crisis focuses the attention of governments and policy makers, a consistent theme that emerges is the manner in which the capacity to build and manage skills can maximise the effective use of human capital in a rapidly changing world

Like their international counterparts, Australian universities are engaging their students in the world-of-work through a host of mechanisms including work-integrated learning. Inherent to this challenge is the process of engaging students in their learning outside of the traditional confines of the university so that they may enjoy the full benefits of higher education.

This project has demonstrated the value of career development learning as a vehicle for maximising the contribution of work related learning to the student experience.

The project and the accompanying online Resource Manual, are initiatives of the National Association of Graduate Careers Advisory Services, Australia, Inc. NAGCAS represents the professional interests of career development practitioners and Careers Services within the Australian higher education sector. NAGCAS provides leadership and professional development so that Australian university students and graduates are provided the highest possible quality in career development services. NAGCAS is a member association of the Career Industry Council of Australia and is a signatory to the Professional Standards for Australian Career Development Practitioners.

The project was managed and delivered by a NAGCAS project team consisting of individuals representing Australian university Careers Services. NAGCAS is grateful for the generous funding provided by the Australian Learning and Teaching Council.

NAGCAS commends the Final Report and Resource Manual to you, We are pleased to bring this service to the higher education community.



Dawn White
President of NAGCAS (2008-2009)
June 2009

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- Ms Val Butcher, United Kingdom
- Professor Tony Watts, United Kingdom

4. Statement of Acknowledgement

On behalf of the project leaders, I would like to express our thanks and gratitude for the valuable contribution made by the project support staff, members of the steering committee, and international consultants. Those individuals have been named in the project personnel section of this report. We give special thanks to Dr Anna Lichtenberg, our project manager with extraordinary energy.

We are likewise grateful for the support of the Australian Learning and Teaching Council; firstly, for the project's funding; and secondly for the contributions made by ALTC staff, including Professor Richard Johnstone and Dr Elizabeth McDonald, whose gracious hosting of the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, was most appreciated.

We also acknowledge the many individuals who generously gave their time and effort to support the project, particularly those who completed the online questionnaires; participated in research groups, the national symposium, and the student and employer forum; and provided material for case studies. The national symposium ran smoothly as a result of collaboration amongst all participants and support staff, particularly those who acted as table facilitators.

Thanks also go to Belinda McLennan (Tasmanian Polytechnic), Peter Tatham (Career Industry Council of Australia), and Natalie Lundsteen (University of Oxford), for acting as our "critical friends" in reading drafts of the final reports and manual.

Finally, we thank the management committee and members of the National Association of Graduate Careers Advisory Services for their support and entrusting us with the project.



Martin Smith, Project Leader
University of Wollongong (Lead Institution)

5. Acronyms

AAGE

Australian Association of Graduate Employers

ACEN

Australian Collaborative Education Network

ALTC

Australian Learning & Teaching Council

BIHECC

Business, Industry and Higher Education Collaboration Council

CDL

career development learning

CICA

Career Industry Council of Australia

DEEWR

Department of Education, Employment and Workplace Relations

NAGCAS

National Association of Graduate Careers Advisory Services

OECD

Organisation for Economic Cooperation and Development

WIL

work-integrated learning

6. Key Terms and Definitions

Career

Career can be defined as “a lifestyle concept that involves the sequence of work, learning and leisure activities through a lifetime. Careers are unique to each person and are dynamic: unfolding throughout life. Careers include how persons balance their paid and unpaid work and personal life roles” (Career Industry Council of Australia, 2006, p. 37). Adapted from Canadian National Steering Committee for Career Development Guidelines and Standards (2004).

Career Development

Career development is the “lifelong process of managing learning, work, leisure and transitions in order to moved towards a personally determined and evolving future” (Career Industry Council of Australia, 2006, p. 38).

Career Development Learning

“Career development learning in its broadest form relates to learning about the content and process of career development or life/career management. The content of career development learning in essence represents learning about self and learning about the world of work. Process learning represents the development of the skills necessary to navigate a successful and satisfying life/career” (McMahon, Patton, & Tatham, 2003, p. 6).

Career Education

The development of knowledge, skills and attitudes through a planned program of learning experiences in education and training settings which will assist students to make informed decisions about their study and/or work options and enable effective participation in working life” (Career Industry Council of Australia, 2006, p. 39).

Employability Skills

The attributes, skills, knowledge, and attitudes required in the world-of-work; akin to transferable skills. The term graduate employability skills refers to employability skills developed through higher education; subsumed by the higher order notion of graduate attributes.

Service Learning

Work-integrated learning which is initiated by community organisations, and which provides explicit social benefit to the organisation.

Work-integrated Learning

Learning which is embedded in the experience of work: which may work which is paid or unpaid; or full-time or part-time; or formally endorsed as part of a university course; or extra-curricular and complementary of studies; or totally independent of studies; in the past, present, or future; and which is made meaningful for a student when reflected upon in terms of personal learning and development occurring as part of a career development learning experience or course-related process.

Work related learning

Work related learning can occur in activities inside and outside of the curriculum. and outside of the University itself through students own part time employment, vacation work, voluntary work, work experience and extra curricular activities. Students learn from their work related learning experiences – wherever they occur. (Moreland, 2005)

7. Executive Summary

All Australian universities provide work-integrated learning of some type in their academic programs. Universities' Career Services have historically played a significant role in the delivery of work-integrated learning. However, the extent and manner in which career development learning, as a pedagogical framework, has been embedded in the work-integrated learning experiences of students has been unclear. Furthermore, the extent to which Career Services and other university departments which deliver work-integrated learning interact and cooperate with one another in their separate or joint delivery of work-integrated learning varies across the sector. Accordingly, the National Association of Graduate Careers Advisory Services (NAGCAS) secured project funding from the Australian Learning and Teaching Council (ALTC) to investigate career development learning services and strategies that contribute to and enhance the outcomes of work integrated learning in university programs.

7.1. Project Brief

This project focused on the career development learning experience of Australian university students and graduates, and the provision of educational services and experiences that enhance and improve career development learning. Within this parameter, work-integrated learning is taken to be an educational vehicle or portal for the direct or indirect provision of services and experiences that contribute to career development learning. In summary, the project aims included:

1. scoping the relationship between career development learning and work-integrated learning in higher education;
2. producing an analysis of how the two could be integrated and synergized; and
3. producing learning resources to support university staff and employers in their delivery of career development learning and work-integrated learning.

7.2. Significance

Following on from the OECD's (Organisation for Economic Cooperation and Development, 2002) review of career development services in Australia broadly, and the Australian Government's review of career development services in tertiary education, (Department of Education Employment & Workplace Relations, 2008) this project is the most significant investigation into career development practice in Australia. Whilst the OECD and DEEWR reports are of significance, this project's focus upon a specific form of career development practice (i.e., work-integrated learning) in a specific educational sector warrants it being regarded as a baseline for future research and practice.

7.3. Recommendations

7.3.1 Curriculum Reform

The literature underpinning this project, and the ongoing stakeholder input, supports the assertion that career development learning enhances: student engagement; the student experience; student transitions; and contributes to workplace productivity.

It is valuable to provide a wide spectrum of workplace experiences to facilitate student participation in work related learning, hence curriculum reform and design across the sector (including learning tools and resources) should enhance this wider access to career development learning and work related learning.

- This approach will require increased support for career development learning within the curriculum—made possible through curriculum renewal processes, where career development staff are utilised to provide input to the educational reform processes. Related resourcing issues must be addressed.

Key recommendation for the consideration of deputy vice chancellors (academic), deans, faculty education committees, and ALTC policy makers.

7.3.2 Modes of Practice

The research process has identified the value of providing a wide spectrum of workplace experiences to facilitate student learning.

Opportunities need to be created to embed career development learning and structured work-integrated learning models. The scope of service learning, and many extra-curricular activities, has to be fully optimised and exploited for student learning.

Students' engagement in paid work roles, such as casual and part time work, also needs to be fully addressed in terms of its capacity to broaden students' learning opportunities. Including extra-curricular and paid employment will provide a richer source of experiences for transformational learning through reflection and articulation, and for incorporation into future academic, career and life planning.

- To facilitate this wider spread of activity and improve student access, consideration needs to be given to strategies to monitor and validate student involvement, such as informal transcripts, or the Australian Higher Education Graduation Statement.

Key recommendation for the consideration of senior university administrators (DVC'S), deans, and DEEWR policy makers.

7.3.3 Workplace Reform

The lack of evidence for explicit processes in workplace settings to support the career development learning of students placed in these settings represents a lost opportunity, and is indicative of a disconnection between career development practice in education and in workplace settings.

Further, the lost opportunity to invigorate career development of individuals engaged in supporting or supervising "placement students" negates an opportunity to value-add from the perspective of the host organisation. There is scope to consider staff career development opportunities through their assisting the career development of students. This has implications for a potential dual role for human resources staff as career development practitioners as well as their traditional operational roles, or alternatively a strengthening of the industry/university nexus to facilitate higher education career development practitioners providing a stronger consultancy role to industry.

Benefits of this would extend beyond the work-related learning context, to supporting industry responsiveness to workforce development needs, particularly in the case of smaller organisations.

- For workplaces to obtain the best outcomes from work related learning, career development support needs to be explicit and articulated in the workplace for students and employees.

Key recommendation for the consideration of DEEWR policy makers, professional associations, industry bodies and HR practitioners, university careers services.

7.3.4 Diversity and Access

The project has identified significant challenges associated with participation and equitable outcomes for diversity cohorts: specifically for students with a disability and international students.

Whilst good practice was identified in a number of institutions, resourcing issues and a positive approach from employer communities are important factors to consider.

- To foster improved inclusion and participation rates, resources need to be identified and allocated to diversity practices which facilitate appropriately designed and embedded career development learning (CDL) in curricula and increased opportunities for placements.

Key recommendation for consideration of senior university administrators (DVC's), deans, DEEWR/ALTC policy makers, professional associations, industry bodies and HR practitioners.

7.3.5 Leadership and Communities of Practice

The scoping process of the project identified good practice spread across institutions (both in Australia and overseas). However, effective mechanisms for sharing practice are not readily available. Professional bodies (such as NAGCAS, GCA and AAGE) all make worthy contributions in this regard, however the lack of an appropriate resource base (human and financial) hinders their effectiveness.

When the key practitioners have heavy workloads, new measures to support leadership and communities of practice must be explored. Whilst the ALTC Exchange project is designed to foster interaction and sharing of practice, it is only one of a range of such measures.

An associated issue is the pressing need to provide professional development to university staff in the disciplinary fields of career development learning and work-integrated learning.

- To enhance further developments, program innovations and development of widespread good practice, funding and recognition programs are required to foster stronger collaboration and sharing processes.

Key recommendation for the consideration of DEEWR/ALTC policy makers, professional associations, industry bodies.

7.3.6 Resources for Structural Reform

This project involved consultations with UK institutions and their recent experience in managing increasing interest in the agendas of employability and career development; and enterprise and workplace learning. The development of Centres of Excellence has highlighted opportunities to recognise higher education Careers Services as equal partners in driving curriculum reform associated with these converging agendas.

Successful practice has resulted when government funding is linked to institutional proposals that reflect collaboration between career development practitioners, academic and professional staff.

- Many of the project recommendations point to the need for increasing funding to the sector, to support career development learning, employability enhancement and workplace learning initiatives. Linking external funding to mutually developed targets and measures will underpin good practices across these important agendas.

Key recommendation for: DEEWR/ALTC policy makers, senior university administrators, professional associations, university careers services.

7.4. Project Methodology

The project methodology is described in further detail in Appendix A. The project was conducted over a period of approximately 18 months, commencing in October 2007. The project took an applied research and development approach with an emphasis upon action research methods through which knowledge and solutions would be generated by and for the key stakeholders.

7.4.1. Project Mandate

Acting on behalf of NAGCAS, personnel from the Career Services of the University of Wollongong, Monash University, University of Southern Queensland, Flinders University, and RMIT conducted this project, along with support expressed by the Career Services of twenty-seven other universities across Australia. It is important to note that this project was not a broad scoping investigation into work-integrated learning in Australian higher education per se; such an endeavour was addressed in another ALTC project conducted by the Australian Co-operative Education Network: *Work Integrated Learning: a national framework for initiatives to support best practice* (Patrick, C-J. et al., 2009).

7.4.2. Stakeholders

Whilst not an exhaustive list, the key stakeholders for this project were university staff who provided career development services and/or work-integrated learning (e.g., career development practitioners, placement coordinators, lecturers); organisations that provide paid or unpaid work-integrated learning opportunities (e.g., supervisors, employers, mentors); professional associations which influence degree program requirements pertaining to industry experience; and university students.

7.4.3. Research Process

The research process included:

1. A literature review apropos of career development learning and work-integrated learning, particularly in higher education, with literature drawn from Australia and internationally;
2. preliminary group-based research studies involving career development practitioners;
3. online questionnaires administered to distinct stakeholder groups to gather their appraisals of their work-integrated learning programs and their links to career development learning: career services personnel; university academics who are involved with, or coordinate the work integrated learning programs within their program; industry/employer or community providers of places; and a worldwide questionnaire to gather information about work integrated learning and career development practices outside Australia;
4. larger group-based research studies constituting the National Symposium on Career Development Learning and Work-integrated Learning and the Student and Employer Forum; and
5. case study analyses indicative of practices which integrate career development learning and work-integrated learning.

An extended summary of the project methodology is included in the Appendices of this report.

7.5. Project Deliverable Outcomes

7.5.1. Symposium and Forum

The National Symposium on *Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience* was conducted in Melbourne, June 2008, was a crucial milestone of the project. The symposium was attended by 168 delegates who were representative of the major stakeholder groups. The symposium comprised key note papers and a series of semi-structured group sessions in which participants were set specific questions and problems to be solved. A paper summarising the symposium was produced by Professor Tony Watts (2008b) and is included in the Appendices of this report.

As a follow-up to the national symposium, over 60 students and employers participated in a forum to validate and expand upon the themes, principles, problems, solutions, and models which emerged from the national symposium and the preliminary research findings of the surveys and case studies.

These two major events were inherent to the action research process. The national symposium and forum of students and employers were in themselves significant outcome of the project. These two major national events represented an historical milestone in the enhancement of the delivery of career development learning in Australian higher education.

7.5.2. Principles of Practice

A set of principles for the conceptualisation and delivery of career development learning and work-integrated learning were derived from the action research process and likewise validated by the key stakeholders.

1. Flexible partnerships support effective career development learning
2. Workplace experiences can provide genuine career development learning opportunities for all students. Multiple experiences and contexts enrich this learning.
3. Career Development Learning is student centred, and designed to engage actively students in the workplace experience.
4. Career development learning supports quality student centred learning opportunities across all aspects of students' lives.
5. Universities encourage students' career development and workplace learning by supporting their capacity to systematically reflect, record, and articulate the acquired skills and experience.
6. Quality assurance across the experience contributes to better outcomes.

These principles may be used to inform the design and evaluation of student learning and teaching in the higher education context.

7.5.3. Validation of Theoretical Framework

The research process validated the relevance of an international framework of career development learning in higher education in the Australian context. The so-called DOTS framework (Watts, 1977, 2006) conceptualises career development learning as four key elements: self-awareness, opportunity awareness, transition learning, and decision making. These higher level elements can likewise be decomposed to themes that may inform student learning and teaching.

7.5.4. Graphical Model

To complement and extend upon the principles of practice, graphical models were developed to assist the conceptualisation of career development learning as a pedagogical framework for reflective practice and work-integrated learning. The model depicts the career development and work integrated learning relationship, and it can be applied in the curriculum in Australian university programs as a learning resource.

7.5.5. Guide to Terminology

It became apparent in the discussions and face-to-face interviews that terminology or language proved a major barrier in effective communication across stakeholder sectors (such as academics, career services personnel and employers and community members). A language/terminology matrix was developed to capture the meaning of the key elements of the career development learning framework DOTS. This serves as a basis for the future development of nationally agreed or understood terminology.

7.5.6. Resource Manual

An online resource manual for staff working in universities, business and industry who facilitate work-integrated learning experiences was developed. The manual provides resources to support student learning and teaching activities (e.g., readings, templates for learning agreements, assessment, case studies). The manual is located within the website of NAGCAS at www.nagcas.org.au.

7.5.7. Quality Framework

The preliminary foundations for a framework for a quality system of career development learning and work-integrated has been drafted and presented in this report. The framework is informed by the standards set down by the Career Industry Council of Australia.

8. Career self-management and Career Development Learning

If “career development is the lifelong process of managing progression in learning and work” (Watts, nd), then how university graduates are prepared to sustain their employability over their lifetimes, in the evolving context of the world-of-work, is a crucial issue pertaining to employability, and, moreover, their lifelong career development. In this report we position career development learning and work-integrated learning as educational vehicles for graduate attributes and graduate employability.

Given that career development for adult Australian citizens has, until relatively recently, been comparatively less developed than that within the compulsory school system (Organisation for Economic Cooperation and Development, 2002; Patton, 2005), how Australian universities prepare their adult students and graduates for the world-of-work should be critically appraised. There is a degree of scepticism among academics about the relationship between career development services and the exigencies of education and industry (e.g., McIlveen, 2007). Yet, the objective of considering the activities of Australian universities necessarily brings the career development services provided by the universities into focus; and requires consideration of how those services contribute to the development of graduate employability through lifelong learning and career development, and can best be enacted to secure all those kind of outcomes.

8.1. A Contemporary View of Career

The meaning of work and career in the contemporary world has undergone significant revision and reformulation within the career development literature (e.g., Blustein, 2006; Collin, 2000; Patton & McMahon, 2006; Watts, 1999b). Within the Australian context, The Professional Standards for Australian Career Development Practitioners (Career Industry Council of Australia, 2006) holds to the definition of career and career development respectively as:

A lifestyle concept that involves the sequence of work, learning and leisure activities through a lifetime. Careers are unique to each person and are dynamic: unfolding throughout life. Careers include how persons balance their paid and unpaid work and personal life roles (p. 37); and

The lifelong process of managing learning, work, leisure and transitions in order to moved towards a personally determined and evolving future (p. 38).

Indeed, career is more than a job (McMahon & Tatham, 2001); and an individual's career is not simply a function of conscious, free choices and decisions pertaining to his or her interests, and the work opportunities he or she confronts or discovers. Certainly, a clear distinction between what is merely paid work and an occupation (or vocation) is a degree by which individuals identify with that paid work. Career is a multi-faceted, complex, personal process that extends over a lifetime, and is influenced by dynamic personal, interpersonal, societal, economic, and environmental factors (Patton & McMahon, 2006).

A contemporary approach to developing university students' and graduates' careers requires a theoretical framework that captures the complexity of the current world-of-work (cf. McMahon, Patton, & Tatham, 2003). In their Systems Theory Framework (STF), Patton and McMahon (2006) elucidate the myriad influences that make up careers. Figure 1 depicts the Systems Theory Framework. Through this heuristic lens, the individual is at the centre, and his or her career is constituted by personal influences (e.g., abilities, interests, self-concept) which recursively interact with broader contextual influences beyond the individual, including change over time and happenstance. Selecting a few of the contextual influences depicted in the figure of the Systems Theory Framework, readily serves to exemplify the complexities of the careers of graduates in the contemporary world-of-work. Many of the influences have been prominent topics in the career development literature: take as examples globalisation (Amundson, 2005); rapid changes in labour markets and workplace reforms (Storey, 2000); the effects of social class (Liu & Ali, 2005), race and ethnicity (Michael, 2004); family influence on career choice (Whiston & Keller, 2004); balancing the needs of family and work (Schultheiss, 2006).

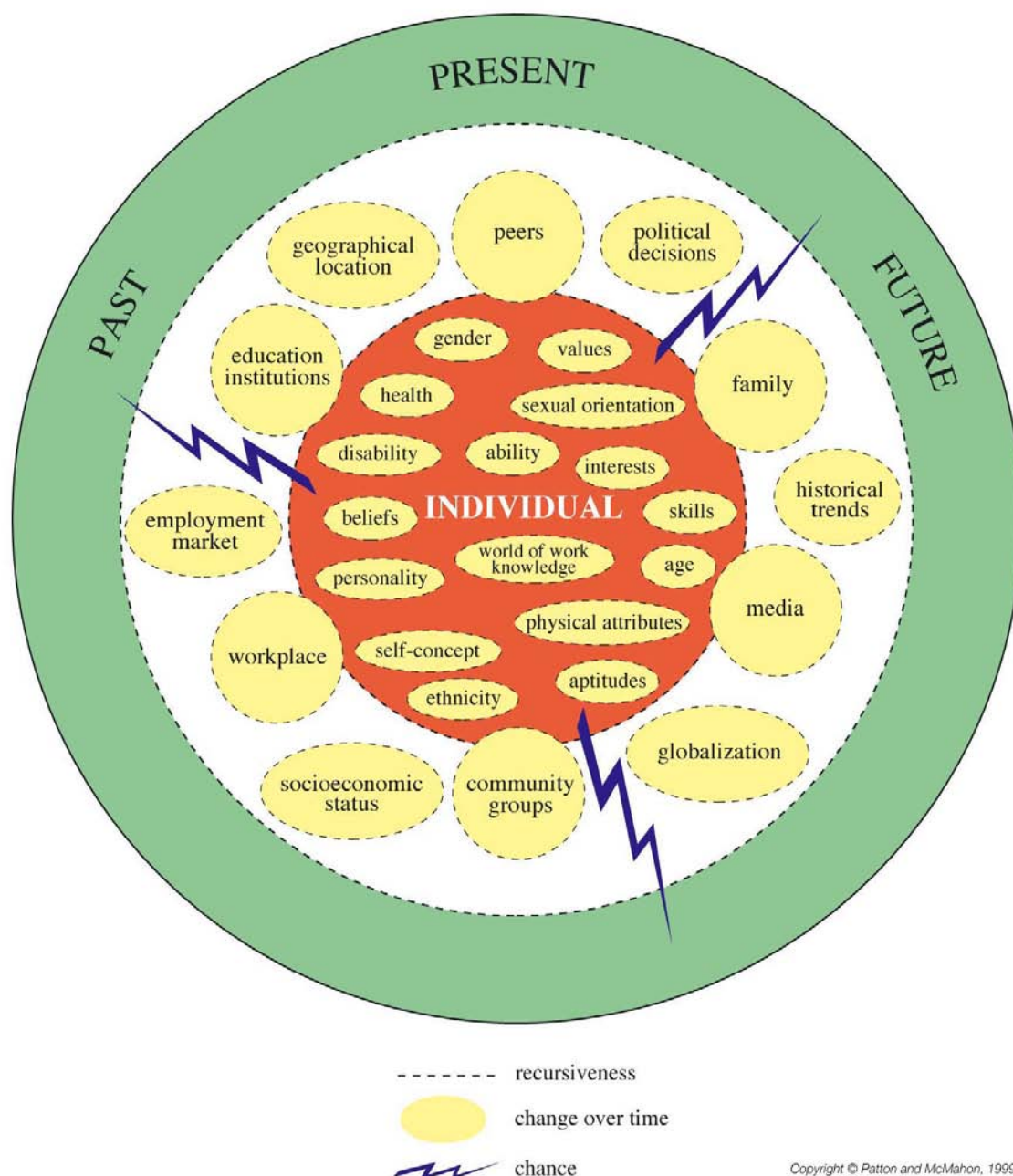


Figure 1. Systems Theory Framework (STF). *Reproduced with permission.*

8.1.1. STF and Work-integrated Learning

This STF is relevant for reconceptualising work-integrated learning through the lens of career development. Firstly, the red centre of the STF highlights the range of personal factors which make up an individual's career and work-integrated learning is influenced by, or it influences, those personal factors. Work-integrated learning is not just about developing skills—it can be a transformative pedagogy which entails a wider range of personal development and experiential learning. Take self-concept for example: a student's higher education toward a profession is inherently bound up in notions of professional identity and learning for the profession. Self-concept is in turn influenced by the other factors which make up an individual's sense of career (e.g., abilities, interests, disability).

Secondly, the STF "decentres" career from being simply a matter of occupational interest and choice, to a broader socioeconomic construct inherently defined by context. This framework ensures that educators revisit their notions of student learning and career decision-making; and how they as educators create learning environments which facilitate students' development of a more adaptive view of educational contexts and outcomes apropos of career over a lifetime. For instance, the STF diagram presents a number of social factors in yellow, and these factors influence one another and also influence the personal factors in the red centre. A comprehensive approach to formulating and delivering career

development learning and work-integrated learning should take into account if and how broader life and contextual factors impinge upon a student's experience and learning journey.

The contextual influences present in the STF and most relevant to this project—with respect to the relationship between career development learning and work-integrated learning in higher education—include education institutions (e.g., taught content and access to industry experience), workplaces (e.g., quality and breadth of industry experience), community groups (e.g., acceptance of service learning), geographical location (e.g., difference of accessibility and variety of industry experience across inner, outer metropolitan, and rural and regional centres), employment market (e.g., difficulty in recruiting appropriate staff), socio-economic status (e.g., unfamiliarity and access to networks and opportunities), and globalization (e.g., international learning opportunities). All play a role in the influences that constitute an individual student's world-of-work and learning that constitute the broader influences of his or her career. Moreover, those influences go toward a student's experience of higher education and his or her graduate outcomes. Bringing coherence to myriad influences, from the perspective of the student and the university, can be achieved through the lens of career development learning.

8.2. Career Development Learning

If we are to learn from a contextual view of career derived from the Systems Theory Framework (Patton & McMahon, 2006), then career development practitioners, academics, and employers should not consider career as a once-an-a-lifetime decision with a resultant trajectory. That is: school-leavers selecting an undergraduate degree and consequently career is logically determined. Indeed, the purpose of higher education is positioned quite differently when career is viewed as a complex lifelong experience of which higher education is but one moment, although often at the commencement point of engaging in a particular occupation. This critical view brings the experience of higher education into focus and raises questions in terms of its relevance to individuals and their lifelong career, and lifelong learning in and for the world-of-work. It also suggests that part of higher education's role is to develop capacities that will permit graduates to be proactive and effectively self-directed (i.e., agentic) learners.

Further, according to the STF career development learning should also be considered in the context of organisational learning. Concepts of private and public benefit of career development learning are often considered from the perspective of "public" representing bigger picture, national priorities. However it is reasonable to drill down to consider the direct benefits to the workplace where the learning takes place. The schema of figure 1 can be applied to organisations as well as individuals. While there are many external influences on a learning organisation, an individual experiencing career development learning in the context of a work integrated learning event can potentially "cross the divide" by bringing external influences into the heart of the organisation. These influences have the potential to not only refresh organisational approaches to achieving outcomes, but also the career development of those within the organisation who are assisting the "external" learner, and of those they influence.

8.2.1. Career Development and Career Education

Although the theoretical and professional intent and meaning is shared internationally, the precise terminology of the career development industry is not uniformly defined internationally (Patton & McMahon, 2006). With minor deviations, in this report we prefer the Australian terminology (see Career Industry Council of Australia, 2006) and use career development as the overarching term pertaining to deliberate activities that go toward the improvement of an individual's career, including securing effective transitions from higher education into work life beyond university. Career development can be conceived as a professional activity performed by Career Development Practitioners and alike. It can also be conceived of as a subjective experience-in-process of developing one's career. Therefore, it should be emphasized that career development learning is not the sole preserve of formally qualified Career Development Practitioners.

Notwithstanding the Australian definition of career development, the definition of the equivalent term *career guidance*, which was agreed upon by the Organisation for Economic Cooperation and Development (OECD), European Commission, and the World Bank, is presented here to broadly describe the overall educational activities of career development:

Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Such services may be found in schools, universities and colleges, in training institutions, in public employment services, in the workplace, in the voluntary or community sector and in the private sector. The activities may take place on an individual or group basis, and may be face-to-face or at a distance (including help lines and web-based services). They include career information provision (in print, ICT-based and other forms), assessment and self-assessment tools, counselling interviews, career education programmes

(to help individuals develop their self awareness, opportunity awareness, and career management skills), taster programmes (to sample options before choosing them), work search programmes, and transition services (OECD, 2004b, p. 10).

This definition was again supported by the European Union in its statement affirming the need for states to ensure access to lifelong career guidance (Council of the European Union, 2009). Albeit positioned in the European context, this definition of career guidance succinctly captures the main forms of services that make up career development practice. It also reflects the first part of what Dewey proposed as being to keep purposes of education when associated with vocations. That is, to assist individuals identify to what vocation they are suited. The second, is to assist individuals develop the capacity is for their chosen vocation. Importantly, given the turbulent nature of contemporary work life and the requirement for occupational transitions, career development should not be conceived of as a one-shot intervention limited to young school-leaver, but rather a lifelong service available for all citizens for both private and public good (OECD, 2004a; OECD 2004b; Watts & Sultana, 2004).

Career development learning can be conceived of as:

learning about the content and process of career development or life/career management. The content of career development learning in essence represents learning about self and learning about the world of work. Process learning represents the development of the skills necessary to navigate a successful and satisfying life/career (McMahon, Patton, & Tatham, 2003, p. 6).

Career development learning, like work-related learning more generally, occurs in a range of contexts and it can be fostered in experiences facilitated by other education and training practitioners.

Whilst the professionalized activities of career counselling, career assessment, and delivery of career information, form important dimensions of the broader discipline and professional activity of career development, *career education* is a primary vehicle for career development learning and work-integrated learning. Career education is well defined and positioned within Europe (Guichard, 2001) and North America (Hoyt, 2005). Likewise, within the Australian context, (e.g., McCowan & McKenzie, 1997; Morgan & Hart, 1977; Patton & McMahon, 2001), career education aims to assist students to:

- develop knowledge and understanding of themselves and others as individuals, including the personal resources both actual and potential they bring to situations (i.e., strengths, limitations, abilities, skills, qualities, needs, attitudes and values);
- develop knowledge and understanding of the general structures of [post-university] life, the range of opportunities and alternative pathways, and the demands, rewards and satisfaction associated with each;
- learn how to make considered choices and plan options in relation to anticipated careers, occupations, and life roles; and
- effectively manage the implementation of the considered choices and the transitions from [university] to [post-university] situations in adult life and work life (McCowan & McKenzie, 1997, p. 17).

8.3. The Benefits of Career Development Learning

Career development also has potential to produce benefits with respect to social equity and human capital (Access Economics, 2006; Council of the European Union, 2009; Organisation for Economic Cooperation and Development, 2004a; Watts, nd). The benefits of career development learning may be considered at the level of the individual, the organization, and society, over immediate, intermediate and long-term time frames (Watts, 1999a). Whilst there remains some scope to clarify different measures of outcome for each of those levels (Maguire, 2004), there is a considerable and long-standing evidence indicating the benefit of career development to individuals (Brown & Ryan Krane, 2000; Herr, Cramer, & Niles, 2004; Holland, Magoon, & Spokane, 1981; Oliver & Spokane, 1988; Organisation for Economic Cooperation and Development, 2004a; Purcell et al., 2008; Sexton, Whiston, Bleuer, & Walz, 1997; Swanson, 1995). For example, empirical meta-analytic studies of career development have demonstrated it to be an efficacious, useful human service for individuals, with individual face-to-face intervention showing the largest effect, followed by class-based career education, then by services not delivered by personnel (e.g., ICT delivery) (Whiston, Sexton, & Lasoff, 1998). Longitudinal investigations also indicate a sustained positive impact from individual guidance (e.g., Bimrose & Barnes, 2006; Kirschner, Hoffman, & Hill, 1994).

The relationship between career development and social justice is explicit within the career development literature internationally (e.g., S. S. Hansen, 2003; Hartung & Blustein, 2002; Irving, 2005; K. M. O'Brien, 2001) and there is an emphasis upon how career guidance should contribute to public policy apposite of social and economic outcomes (e.g., Herr, 2003; Hughes, Bosley, Bowes, & Bysshe, 2002; McIlveen, in press; Watts, 2000, 2002, nd; Watts, Sweet, Haines,

& McMahon, 2006). Specifically, in the career development literature there has been an enhanced focus upon the career development needs of individuals from disadvantaged backgrounds including persons-of-colour, indigenous peoples, women in non-traditional occupations, individuals with variant sexual orientation and expression, mature-age persons, those from culturally and linguistically diverse heritage, and those who have experienced rural isolation or lower socio-economic status (e.g., Brown & Lent, 2005; Diemer, 2009; Diemer & Ali, in press; Diemer & Blustein, 2006, 2007; Diemer & Hsieh, 2008; Herr, Cramer, & Niles, 2004; Niles, 2002; Packard & Babineau, 2009; Patton & McMahon, 2006; Scott & Ciani, 2008). The extensive longitudinal *Future Track* project in the UK indicated the importance of career guidance in individuals' choices of university studies, and that issues of access to quality career-related information were an important dimension in decision-making (Purcell et al., 2008).

Within the Australian higher education sector, career development and university career services are seen as pivotal in the work of access, equity and social justice (McIlveen, Everton, & Clarke, 2005). Therefore, there seems to be long-standing and persuasive bases for enacting an effective provision of career development within higher education, and one in which its effectiveness is premised upon engaging in work life experiences that help inform, guide and assist students critically appraise not only the world of work but also the specific occupation they have selected.

8.4. Career Development Learning and Employability

Australian university graduates generally enjoy persistently higher levels of full-time employment (e.g., Graduate Careers Australia, 2005, 2006, 2007a) that are relatively superior to cohorts exiting other levels and types of education (Australian Bureau of Statistics, 2004). These statistics are ostensibly indicative of a higher education system that prepares graduates for the world-of-work. Yet, they may not fully indicate levels of demand and dissatisfaction that impinge upon students' learning experiences and graduates' positioning within the world-of-work as an outcome of their university education. This goes to the issue of developing career self-management skills in students and graduates which underpin their lifelong employability.

According to Watts (2008a) career development learning address the to key issues of *directionality* and *sustainability* in relation to employability and enterprise. In his paper prepared for the National Symposium on career development learning and work-integrated learning, Watts stated that:

Directionality is important because while some of these competences are generic, others are linked more closely to some career pathways than to others. Career development learning can help students to clarify the path they want to choose, around which they can build their employability and enterprise competences (p. 4).

Moreover, Watts commented that:

Sustainability is arguably even more important because, without it, employability tends to be narrowly defined as 'work readiness'. It is career development learning that transforms it into a focus not only on securing a first job but on acquiring competences that enable graduates to remain employable throughout life. (p. 4).

Accordingly, notions of graduate employability, employability skills, graduate attributes, and students' experience of employability are important to the formulation of career development learning and work-integrated learning in higher education.

Career development learning may be deployed variously to raise students' awareness of employability and how to self-manage their studies and extra-curricular activities to optimise the employability. This approach may, for example, be undertaken through curriculum-integrated strategies in which career development learning is an explicit vehicle for degree or unit-level learning outcomes. Assignments or other assessable course work may require students to engage in reflective activities in relation to their past, current, and lifelong employability using their particular discipline area of interest as a site of personal enquiry, using the DOTS model (Watts, 2006) as a teaching tool to frame students' conceptualisations of employability.

8.4.1. Defining Graduate Employability

Put simply—or perhaps simplistically—employability is the relationship between present and future industry demands for specific labour (as knowledge and skills), and concomitantly, the labour an individual has to offer (cf. Fugate, Kinicki, & Ashforth, 2004). Employability is a rather unwieldy multidimensional notion: it can be considered from the subjective perspective of the student or graduate in terms of his or her confidence and preparedness for the world-of-work (e.g., abilities, interests, skills, knowledge, self-concept, health); it can also be considered from an objective perspective of government and policy-makers, employers, and universities, all of which take stock of graduate outcomes.

Yorke's (2006a) definition pertains to the higher education sector and is a useful guide for conceptualising graduate employability:

Employability is taken 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 (p. 8).

Despite being conceptually complex, the notion of employability, from either the subjective or objective perspective, provides a useful point of departure for consideration of graduates in the Australia higher education system.

8.4.2. Employability Skills for Career Success

Australian industry demands a flexible workforce with the skills to secure a viable economic future for the nation (Australian Chamber of Commerce and Industry & Business Council of Australia, 2002; Precision Consultancy, 2007). Australian employers seek university graduates who are 'employable' through their possession and workplace expression of a host of generic skills in addition to specific professional skills and knowledge (ACNielsen Research Services, 2000; Curtis & McKenzie, 2001; Field, 2001; McLeish, 2002). Other OECD nations (McKenzie & Wurzburg, 1997), such as the United Kingdom (Archer & Davison, 2008; Confederation of British Industry, 2009; Harvey, Moon, & Geall, 1997; Herrmann, Hannon, Cox, Ternouth, & Crowley, 2008), have similarly seen employers seeking generic skills within their graduate employees. The composition and definition of employability skills vary (Australian Council for Educational Research, 2002), yet there is clear consistency in purpose: defining a theoretically ideal employee from an employer's perspective; and self-managing one's employability as an individual in terms of what employers are seeking.

In the landmark report *Graduate Employability Skills*, which was prepared for the Business, Industry and Higher Education Collaboration Council (BIHECC, Precision Consultancy, 2007), the sustained employability of Australian graduates was affirmed as a project for government, industry, and universities. The report submitted a number of recommendations to the Australian Government, including those directly targeting the provision of work-integrated learning in the higher education sector.

Research into Australian employers' views on employability skills (ACNielsen Research Services, 2000) found a consistent set of opinions on employability with respect to their satisfaction with graduate employees. This research was extended in subsequent research conducted by the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) (2002) on behalf of the Australian Department of Employment, Science and Training, which produced the *Employability Skills for the Future Framework*. The Framework indicated the generic employability skills required by Australian industry:

- communication skills that contribute to productive and harmonious relations between employees and customers;
- team work skills that contribute to productive working relationships and outcomes;
- problem solving skills that contribute to productive outcomes;
- initiative and enterprise skills that contribute to innovative outcomes;
- planning and organizing skills that contribute to long-term and short-term strategic planning;
- self-management skills that contribute to employee satisfaction and growth;
- learning skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes;
- technology skills that contribute to effective execution of tasks.

The report also went on to list personal attributes that purportedly contribute to employability (e.g., loyalty, reliability, adaptability).

8.4.3. Graduate Attributes

All Australian universities take their own independent positions on preparing students and graduates for the world-of-work and their employability, and this is most often expressed in universities' statements on their expectations for the development of well-rounded graduates with generic attributes, qualities, and skills—all variously conceptualized and defined. Although the Employability Skills Framework was recommended for adoption by the Australian higher education sector, it has not emerged without criticism however (e.g., Sheldon & Thornthwaite, 2005). Indeed, universities may actually view employability skills as a lower-order skill set that is subsumed by the higher-order graduate attributes (Precision Consultancy, 2007).

Nevertheless, there is a public perception that Australian universities are not adequately dealing with the nexus of education and employment (Crebert, Bates, Bell, Patrick, & Cragnolini, 2004b). This perception is reflected within the realm of academia in which some disciplines traditionally eschew overt movements to 'vocationalise' university curricula (Bath, Smith, Stein, & Swann, 2004; Harris, Guthrie, Hobart, & Lundberg, 1995; J. O'Brien, 1990), whereas others are bound up with matters of compliance with the standards and accreditation guidelines of professional bodies (e.g., Gilbert, Balatti, Turner, & Whitehouse, 2004; Hager, 1995; Harvey, 1999).

The situation is complicated by the finding that academics of various disciplines may not share a common theoretical view or understanding of generic attributes (S. C. Barrie, 2004). Indeed, it is noteworthy that students, academics and employers may hold different perceptions of generic skills and their relative importance (R. Bennett, 2002; Leggett, Kinnear, & Boyce, 2004; Nicholson & Cushman, 2000; Sinclair, 1997). Despite the proliferation of descriptive terms such as graduate attributes and/or graduate qualities (and their adoption by universities and industry), there has been limited critical inspection of their conceptual basis and terminology (S. C. Barrie & Prosser, 2004).

Recent Australian research and development within the higher education sector has highlighted the important gains made in establishing the position of graduate attributes within the curricula of various institutions and academic programmes (Australian Council for Educational Research, 2002; S. C. Barrie, 2004; Bath, Smith, Stein, & Swann, 2004; Crebert, Bates, Bell, Patrick, & Cragnolini, 2004a, 2004b; Precision Consultancy, 2007).

Apart from the integration of employability skills into the curriculum of university programmes through top-down policies on graduate attributes, Bath et al. (2004) demonstrated progression from the mapping of attributes in curriculum to the assurance of actually developing the attributes from the learning experiences generated by the teaching of the curriculum. Harvey (1999) differentiated between embedding skill learning into the curriculum or bolting learning on as an adjunct to the core curriculum. Bolting-on learning experiences has received some criticism purported on the basis that it is decontextualised from the discipline under instruction and mechanical (Bath, Smith, Stein, & Swann, 2004). The *Student Employability Profile* produced by the UK Higher Education Academy (2006) usefully composed graduate attributes for a wide range of disciplines making it easier for academics to conceptualise their discipline-specific content in terms of employability skills.

8.4.4. Student Experience of Employability

In a recent survey of 32 000 students of Australian universities (Graduate Careers Australia, 2007b), students rated the extent to which they had developed generic employability skills using a rating scale from non-existent through to very strong. Focusing on the percentage of students who rated a skill as being fairly strong or very strong, communication (81.7%) and learning ability (80.0%) were the most well-developed skills, followed by self-management (78.1%), technology (74.4%), technical skills results from your course (74.3%), planning and organizing (72.8%), and then by teamwork (65.9%), initiative and enterprise (60.0%), and problem solving (54.2%) being at the lower level of development. The survey found that students' ratings of a skill being fairly strong or very strong increased over the duration of studies from the beginning, middle, and near completion of a degree course.

Research into university students' experience found that they generally valued the inclusion of generic skills in the curriculum with respect to their employment prospects, but they sought greater opportunities through which they could learn the skills in practical settings and exposure to industry (e.g., Blackwell, Bowes, Harvey, Hesketh, & Knight, 2001; Crebert, Bates, Bell, Patrick, & Cragnolini, 2004a; Little & Harvey, 2006). Career development learning embedded in work-integrated learning programs can provide opportunities for students to assess their skill development and plan to grow areas needing attention while they are still in a learning environment.

8.5. Career Development Services in Higher Education

"Career Guidance" has been the subject of increasing attention with no less than 37 nations being brought under review (Watts & Sultana, 2004). Whilst there are pragmatic guides for the implementation of career guidance services within higher education institutions (e.g., Herr, Cramer, & Niles, 2004; United Nations Educational Scientific and Cultural Organisation, 1998), with the United Kingdom demonstrating an exemplary, comprehensive approach (e.g., Harris, 2001; Watts, 1977; Watts, 1997), the level of service delivery within the higher education sector at large is largely inconsistent from an international perspective (Organisation for Economic Cooperation and Development, 2004a, 2004b). In the UK, external policy agendas relevant to work integrated learning have been a driver for university careers services: employability, enterprise, personal development planning, and employer engagement (Watts, 2008a). Watts reported that

in the UK career development learning and work-integrated learning were viewed vehicles for graduate attribute, graduate employability, with particularly emphasis on employer engagement.

The positive effects of career guidance extend to college and university students (Pickering & Vacc, 1984). Take undergraduate coursework career education as an example; this learning experience has been found to produce positive outputs on career-related thoughts, career decision-making skills, career decidedness, and vocational identity (Folsom & Reardon, 2003). Moreover, Folsom and Reardon's review found significant evidence that career development coursework positively affected job satisfaction, selecting a degree major, course satisfaction, graduation rates, and grade-point average. Given that career-related anxiety in undergraduate students has been found to be a predictor of academic persistence, it was recommended that career guidance be implemented as an additional strategy to address student retention and progression (Kahn, Nauta, Gailbreath, Tipps, & Chartrand, 2002). Moreover, the issue of preparing for lifelong career development (Patton & McMahon, 2006) is brought into sharper focus when students of non-vocational degrees (e.g., humanities) and non-traditional students are brought into the frame; for it is those students who are potentially most vulnerable to the rapidly evolving world of higher education and work.

8.5.1. Career Development Services in Australian Universities

Following a widespread review of OECD member states in the period 2001–2002, it was concluded that career guidance services within many of the tertiary education sectors for each nation were insufficiently prepared to manage the needs of students within increasingly complex and diversified educational systems (OECD, , 2004a). Notwithstanding the inherent economic exigencies of providing career guidance systems within low- and middle-income nations (E. Hansen, 2006), the provision of career guidance within the tertiary education sectors of developing and transitional economies has likewise been found wanting (Watts & Fretwell, 2004).

Within Australia, all universities have a Careers Service of some kind and they were recently reviewed by the Commonwealth Government as part of a broader review of career services provided in the tertiary education sector (Department of Education Employment & Workplace Relations, 2008). The staffing and resource profiles of those organizations nevertheless vary considerably. Typical career development services offered on a university campus would include:

- advice, support and delivery of career development learning into the curriculum;
- career assessment and counselling, including selection and change of major;
- career education classes;
- information services relating to occupations, employers, and educational institutions;
- employment placement services for casual, vacation, internship and graduate employment;
- co-ordination of employer interviewing;
- operating large-scale employment events (e.g., Career Fair);
- training on employment application processes (e.g., resumes); and
- academic crisis counselling (e.g., considering dropping out).

With the inherent breadth of their service remit, Career Services can therefore play an effective role in supporting students, through intensive one-on-one activities (e.g., counselling), to group or class-based activities (e.g., workshops, service teaching), to mass information delivery (e.g., websites), and functions (e.g., graduate employment fairs).

As a conduit between the university and the world-of-work, Career Services are well positioned to provide services to students and employers; and they are equally well positioned to bring academics and employers together into working partnerships for the sake of the students. Thus, Career Services can take on the role of fostering partnerships between the three parties. With respect to this project, we argue that Career Services take on an important role in supporting the necessary logistical requirements of work-integrated learning (e.g., relationship management) and directly providing work-integrated learning in partnership with academics and employers.

8.5.2. Intersecting Interests

Given the foregoing, career development learning can be envisaged at the centre of overlapping sectoral interests of society (e.g., government, culture), community (e.g., workplaces), and formal institutions of learning. This may be depicted—akin to the STF—as a number of overlapping spheres of interest in which career development learning sits amidst. See Figure 2.

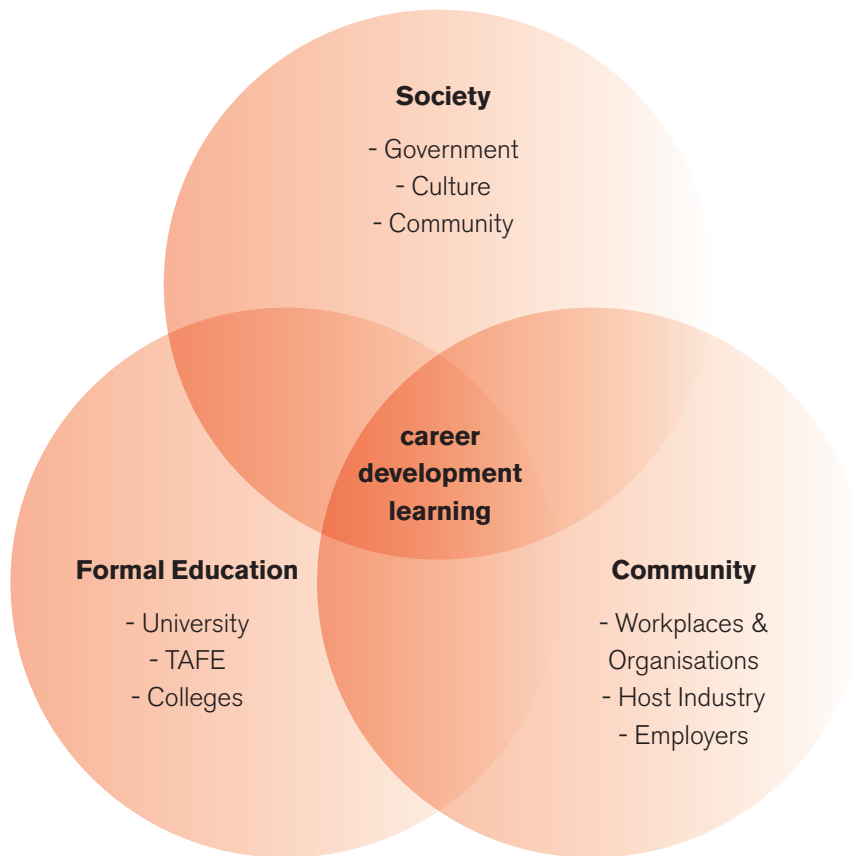


Figure 2. Intersecting Interests

9. Work-integrated Learning

Universities in the United Kingdom (see N. Bennett, Dunne, & Carre, 2000; Harvey, Locke, & Morey, 2002; Hunt, 2000; Yorke, 2006b; Yorke & Knight, 2006) and North America (National Commission for Co-operative Education, 1999; Sovilla & Varty, 2004) have provided significant international leadership in research into and the pedagogical application of work-integrated learning. Australia is no exception with widespread distribution and uptake of work-integrated learning (Martin, 1996; Trigwell & Reid, 1998). Yet, there is, of course, significant variation within the Australian higher education sector (Trigwell & Reid, 1998). The report prepared for Business Industry Higher Education Collaboration Council (Precision Consultancy, 2007) positioned work-integrated learning as an important vehicle for the development of graduate attributes and employability skills and featured as a core recommendation of the report. Universities Australia (2008) has likewise highlighted the importance of work-integrated learning in its statement on establishing a national internship scheme for Australian university students. The Australian Collaborative Education Network (ACEN) also provides leadership on work-integrated learning in the Australian higher education sector and recently completed a major scoping study (Patrick et al., 2008).

The current project was not a study of work-integrated learning per se, rather its focus was on the nexus of work-integrated learning and career development learning. Only a précis of major themes pertaining to work-integrated learning is given in this section of the report. Readers are advised to consult Patrick et al. (2008) for a comprehensive view of work-integrated learning.

9.1. Defining Work-integrated Learning

Internationally (and within Australian higher education) there are many definitions of cooperative education and work-integrated learning (Groenewald, 2004). Within Australia, work-integrated learning has been described as “a generic term to subsume a range of programs which provide students with a combination of workplace experience and formal learning which are integrated as part of a course of study in higher education (Precision Consultancy, 2007, p. 29) and “an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick et al., 2008, p. iv).

The situation is made complex by an array of terms pertaining to work (e.g. paid and unpaid), learning (e.g. curricula and extra-curricula), and assessment (e.g. formative and summative): for example, work-based learning, work-related learning, industry-related learning, work-based project, industry project, industry experience, work experience, practicum, co-operative education, practicum, sandwich course, internship, or placement; and there are more! There is a range of current interest in work-integrated learning, although much of it is motivated by concerns about developing generic employability skills. Models of work-integrated learning, along with discipline-based examples, are presented in Appendix B of this report.

9.1.1. Work-integrated Learning is Education

Work-integrated learning is not simply a process of students engaging in work experience with the hope that it will result in employability (Yorke, 2006a). Instead, work-integrated learning is an educational process, service, and experience, with foundational pedagogy and theory (Moreland, 2005; Pedagogy for Employability Group, 2006; Yorke, 2006a; Yorke & Knight, 2006), and can be aligned with the processes and outcomes of experiential learning (Kolb, 1984), which seeks to secure and maximise learning through experience, often outside the education's tradition.

Cooperative education is perhaps the most long-standing institutional form of this approach to organising experiential learning. Groenewald (2004) suggested that cooperative education consists of four key characteristics:

- an integrated curriculum;
- learning derived from work experience;
- cultivation of a supportive client-base for the availability of quality learning opportunities; and
- the proper coordination and organization of the learning experience.

Groenewald's argument is important because it tethers the learning experience to the requirement of arranging access to learning experiences: this is an important issue for the delivery of work-integrated learning, because it is the access to, and engagement in and full utilisation of these experiences which stand to enrich students' learning.

Because of its alignment with career development learning, we considered Moreland's (2005) description of work-related learning as offered a useful perspective:

- Work-related learning involves students learning about themselves and the world-of-work in order to empower them to enter and succeed in the world-of-work and their wider lives. Work-related learning involves:
- learning about oneself;
- learning and practising skills and personal attributes of value in the world-of-work;
- experiencing the world-of-work in order to provide insights and learning into the world-of-work associated with one's university studies; and
- experiencing and learning how to learn and manage oneself in a range of situations, including those found at work (p. 4).

In this description of work-related learning there is a higher-order theme of "learning to learn". Developing such a metacognitive capacity in students enables them to consider *how* they learn and make sense of *what* they learn, and concomitantly optimise both how and what they learn through career development learning and work-integrated learning.

Notwithstanding differences in terminology (i.e. work-based learning versus work-integrated learning), in a review of a sample of British universities Hunt (2000) suggested that the main features of work-based learning (WBL) include:

- WBL opportunities can stand-alone or be embedded in university curricula, or a combination of both.
- WBL programs are normally accredited components of courses at universities.
- WBL programs link theory and practice and are underpinned by appropriate professional knowledge and reflective practice.
- WBL provides identifiable learning in the work environment, which enhances on-campus programs, and which can be assessed.
- Individual WBL programs are designed collaboratively by the university, the student and the workplace.
- The objectives of WBL programs meet the needs of students, relevant university courses, and the workplace.
- WBL emphasises student participation in the development and design of appropriate, individualised programs.
- The skills developed in WBL may be discipline-specific and may also include globally transferable skills, relevant to lifelong learning requirements, such as: critical thinking; written and oral communication; teamwork; problem-solving; managing; and organizing (p. 2).

9.2. Students' Experience of Work-integrated Learning

Research into university students' experience found that they generally valued the inclusion of learning generic, employability skills in the curriculum with respect to their employment prospects, but they sought greater opportunities through which they could learn the skills in practical settings and exposure to industry (e.g., Blackwell, Bowes, Harvey, Hesketh, & Knight, 2001; Crebert, Bates, Bell, Patrick, & Cragolini, 2004a; Harvey, Moon, & Geall, 1997; Little & Harvey, 2006). Weisz and Smith (2005) summarized the not inconsiderable student-related benefits of work-integrated learning; and these include academic benefits: enhanced thinking, motivation to learn, problem solving skills, ability to apply theory to practice, academic grades; and personal benefits: increased self-esteem and confidence, and improvements in communication, interpersonal and professional skills. In addition, work-integrated learning has a positive impact upon students' careers (Dressler & Keeling, 2004). These benefits are similarly reflected in the findings of other research into students' experiences (e.g., Little & Harvey, 2006) and the views of employers (e.g., Harvey, Moon, & Geall, 1997). There is some evidence, however, that the experience is not always positive (e.g., Martin, 1996), as is the case with all kinds of educational and learning experiences. Nevertheless, what is important is to try to improve the quality and maximise the outcomes of these experiences.

9.3. Employers' Views of Work-integrated Learning

Employers can benefit from involvement in work-integrated learning (Braunstein & Loken, 2004) and, in the UK for example, there have been calls for enhanced links between universities and employers (Archer & Davison, 2008). Work-integrated learning programs have obvious high potential for close synergy with "pre-recruitment" employment programmes (e.g., co-operative employment, vacation employment, cadetships, internships). These types of programmes are conceptualized as "pre-recruitment" because they provide employers an opportunity to engage in a form of graduate recruitment which falls before the traditional final year recruitment season with its attendant pressures and market competition.

A survey of 175 Australian large corporate or government graduate employers (High Fliers Research, 2007), indicated that cadetship, co-operative employment, and vacation employment programs were used as a means of pre-recruitment: with cadetships highest amongst accounting (54.6%) and State government (23.9%); co-operative programmes highest in motor manufacturing (52.2%), followed accounting (29.7%); and vacation programmes used most in accounting (43.3%), and to a lesser, but significant, extent in law (15.4%) and mining (13.6); all other industry sectors had results under 10% for the three types of employment programme. Universities may elect to allow students to use such employment as a vehicle for fulfilling study and assessment requirements. If, however, the results of this particular survey are indicative of the entire graduate recruitment market in Australia, they may conversely be indicative of limitations in the availability of opportunities for work-integrated learning in terms of the quantum of opportunities and the limitations of industry sectors' offering of such programmes. These limitations extends to geographical constraints: with New South Wales offering the most cadetships (54.8%), followed by Queensland (15.4%); and a staggering 71% of co-operatives in Victoria, followed by New South Wales (17.1%). Vacation programmes were more evenly distributed: New South Wales (27.7%), Queensland (18.9%), Victoria (23.8%), and Western Australia (21.0%).

A similar survey of 180 employers in 2008 (High Fliers Research, 2008) found an overall increase in the number of pre-recruitment programmes on offer compared to results found in 2007: cadetships (38%); co-operatives 33%; and vacation schemes 61%; with Victorian organisations offering the bulk of placements. Whilst the trend upward is promising in terms of fielding places for work-integrated learning opportunities, it nevertheless signals that student uniform access to these experiences stands as an issue for students and universities seeking places with large corporations and government departments. Whilst the results are indicative of a select range of larger organizations, there are no equivalent reports for the small and medium size sector or community organizations. What this evidence suggests is that there are distinct current patterns in the provision of work-related experiences linked to university studies, but that the overall quantum and scope of these experiences is inadequate in the context of efforts to improve, and in some instances, make universal requirement for extensive work-related experiences. The impact of the current economic climate will, of course, have to be considered as employers revisit their recruitment and promotion strategies.

10. Frameworks for Career Development Learning and Work-integrated Learning

It follows that for work-integrated learning, the delivery of career development learning should be based upon a lifelong learning perspective and framework (Organisation for Economic Cooperation and Development, 2004b; Patton & McMahon, 2001, 2006). Accordingly, work-integrated learning can be subsumed under and serve as a practical vehicle for the broader notion of career development learning. McCowan and McKenzie (1997) argued 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, parents) and not simply by specialist groups. Watts (2006) suggested that career development learning could be delivered through specific modules, general cross-curriculum integration, or separate from the academic curriculum. The modular approach would entail either delivery of generic content relevant to all, customization of generic modules to suit a department or discipline, or modules that are specifically designed for the needs of a particular discipline. Furthermore, Watts suggested that career development learning could be delivered by the university Career Service independently or in partnership with academic staff. In this section we overview conceptual, educational, and administrative frameworks that can be used to underpin career development learning and work-integrated learning.

10.1. Principles of Practice

Through an iterative process involving stakeholders in various surveys, forums and consultations (see the project methodology in Appendix A), the principles of practice listed below were developed for the design and delivery of career development learning and work-integrated learning.

1. Flexible partnerships support effective career development learning.
2. Workplace experiences can provide genuine career development learning opportunities for all students. Multiple experiences and contexts enrich this learning.
3. Career Development Learning is student centred, and designed to actively engage students in the workplace experience.
4. Career development learning supports quality student centred learning opportunities across all aspects of students' lives.
5. Universities encourage students' career development and workplace learning by supporting their capacity to systematically reflect, record, and articulate the acquired skills and experience.
6. Quality assurance across the experience contributes to better outcomes.

10.2. Lifelong Career Self-Management

Cutting across employability, employability skills, and graduate attributes, is the idea of lifelong career self-management (King, 2004; McMahon, Patton, & Tatham, 2003; Thite, 2001). This implies and subsumes the former through its emphasis upon developing and sustaining an individual's economic viability over his or her life. It goes beyond mere employability skills. However, it also implies ideas of personal growth, development, and extension—akin to the roundedness of graduate attributes; yet it entails a contemporary view of career that is holistic and balanced, as in the Systems Theory Framework (Patton & McMahon, 2006).

The *Australian Blueprint for Career Development* (Miles Morgan Australia, 2003), available online at www.blueprint.edu.au, represents the most significant policy outcome toward a national framework for lifelong career development within this country. The Blueprint builds upon earlier Australian work (McCowan & McKenzie, 1997) that proposed the notion of learning career management skills within the curriculum. The Blueprint specifies “career competencies that all Australians need to develop in order to effectively manage life, learning and work” (p. 10). The Blueprint also specifies competencies at different developmental stages of life, ranging from young children, through adolescence, and to adulthood. It also indicates how the career competencies may be developed in terms of principles of learning.

The Blueprint lists 11 main career competencies within three main areas:

Area A: Personal Management

- Build and maintain a positive self-image;
- Interact positively and effectively with others;

- Change and grow throughout life;

Area B: Learning and Work Exploration

- Participate in life-long learning supportive of career goals;
- Locate and effectively use career information;
- Understand the relationship between work, society, and the economy;

Area C: Career Building

- Secure/create and maintain work;
- Make career enhancing decisions;
- Maintain balanced life and work roles;
- Understand the changing nature of life and work roles;
- Understand, engage in and manage the career building process.

Areas B and C, Learning and Work Exploration and Career Building are the more relevant for the current project. Nevertheless, a holistic view of student experience and development should take into account personal management. Lifelong career development learning—at least within Australia—should take account of the competencies in the Blueprint and establish them as key learning outcomes. Readers are advised to consult the Blueprint for a deconstruction of the competencies into their lower-level units.

10.3. Learning Domains and Criteria: DOTS

A key objective of this project was to select a broad theoretical framework for career development learning which has been proven as relevant to the higher education sector, both in Australia (through this project) and internationally. Given the outcomes of the preliminary research processes of the project, we concluded that the conceptual framework which best satisfied criteria in terms of integration with the world-of-work, self-reflection, and transferability across settings was the DOTS framework (Watts, 1977, 2006). We chose the DOTS model of career development (Watts, 2006) because it:

- has sustained decades of implementation in the higher education sector, particularly in the United Kingdom;
- may be represented in a succinct format, unlike more complex models such as the Australian Blueprint for Career Development; and
- lends itself to being readily understood by individuals who are not necessarily schooled in the theory of career development (e.g., academics, students, employers).

Using the DOTS framework, the key benefits of career development learning, with respect to lifelong learning and employability, pertain to the learning domains and criteria of: self-awareness, opportunity awareness, decision making, and transition learning.

Self awareness

- Identify knowledge, abilities and transferable skills developed by one's degree;
- Identify personal skills and how these can be deployed;
- Identify one's interests, values and personality in the context of vocational and life planning;
- Identify strengths and weaknesses, and areas requiring further development;
- Develop a self-reflective stance to academic work and other activities; and
- Synthesise one's key strengths, goals and motivations into a rounded personal profile.

Opportunity awareness

- Demonstrate knowledge of general trends in graduate employment and opportunities for graduates in one's discipline;
- Demonstrate understanding of the requirements of graduate recruiters; and
- Demonstrate research-based knowledge of typical degree-related career options and options in which one is interested

Decision making

- Identify the key elements of career decision-making, in the context of life planning;
- Relate self-awareness to knowledge of different opportunities;
- Evaluate how personal priorities may impact upon future career options;

- Devise a short/medium-term career development action plan;
- Identify tactics for addressing the role of chance in career development; and
- Review changing plans and ideas on an ongoing basis.

Transition learning

- Demonstrate understanding of effective opportunity-search strategies;
- Apply understanding of recruitment/selection methods to applications;
- Demonstrate ability to use relevant vacancy information, including ways of accessing unadvertised vacancies;
- Identify challenges and obstacles to success in obtaining suitable opportunities and strategies for addressing them;
- Demonstrate capacity to vary self-presentation to meet requirements of specific opportunities; and
- Demonstrate ability to present oneself effectively in selection interviews and other selection processes (Watts, 2006, pp. 10-11).

These processes of career development learning may also be considered as cyclical stages, with a person progressively moving through each, all the while generating understanding of himself or herself and pragmatic solutions to career-related problems or challenges. They also serve as a clear and simple model for arranging work-related learning experiences toward the end of career development learning.

10.4. Language and terminology

Despite the clarity and operability of the DOTS model, there are issues associated with the words and terminology used by different stakeholders. One of the key findings of the project was the need to develop a common language around which career development learning and work-integrated learning could be better understood. To that end, an initial terminology framework was established as part of the project outcomes, shown in Table 1. The matrix evolved as the project team grappled with maximizing communication across the stakeholder sectors. The matrix will further develop as discussion of this topic continues; however it is included as a resource to facilitate the communication between university personnel, academics and industry/employer/community hosts.

Table 1. Career development learning terminology and language for different stakeholders

CDL Elements	Academics	Employers/Hosts	Career Services	Students
Self awareness	<ul style="list-style-type: none"> ■ Self knowledge and the profession (and citizens), ■ The student's place in the world, or self and society 	<ul style="list-style-type: none"> ■ Awareness of employability ■ Becoming self aware 	<ul style="list-style-type: none"> ■ Self awareness ■ Knowing one's interests, values, skills, personality, work styles and preferred environments 	<ul style="list-style-type: none"> ■ Knowing me ■ About me
Opportunity Awareness	<ul style="list-style-type: none"> ■ Researching options ■ Learning about options ■ Researching opportunities 	<ul style="list-style-type: none"> ■ What's out there? ■ Employment attractors ■ What's on offer? ■ What does the organization have to offer? 	<ul style="list-style-type: none"> ■ Opportunity awareness ■ Knowing discipline areas and links with job descriptions and relevant workplaces 	<ul style="list-style-type: none"> ■ Knowing my options
Decision making	<ul style="list-style-type: none"> ■ Decision learning 	<ul style="list-style-type: none"> ■ Making the decision 	<ul style="list-style-type: none"> ■ Decision-making process based on reflective awareness of self and the options and opportunities available ■ Making the best, informed choice at the time 	<ul style="list-style-type: none"> ■ Making my choice
Transition Learning	<ul style="list-style-type: none"> ■ Transition learning 	<ul style="list-style-type: none"> ■ Making the move 	<ul style="list-style-type: none"> ■ Career development ■ Transferable and generic skills ■ Graduate attributes or employability skills 	<ul style="list-style-type: none"> ■ Making my move/ moves

10.5. Experiential Learning

Experiential learning is intrinsic to work-integrated learning. Patton and McMahon (2001) argue that career development learning should align with Kolb's (1984) model of experiential learning—an approach which was adopted in the Australian Blueprint for Career Development (Miles Morgan Australia, 2003). In this way, career development learning would be considered as a process, not just an outcome, and it would be a continuous process grounded in experience. Furthermore, career development learning would be seen as a holistic process of adaptation and working within one's environment, and it would entail the resolution of conflicts toward an adaptive outcome using concrete experiences, reflective observation, abstraction, and experimentation. Ultimately, career development learning would facilitate the production of relevant personal knowledge necessary for lifelong success and productive adaptation to the world-of-work.

Application of Kolb's (1984) approach in career development is similar to its relevance to work-integrated learning (see Eames & Cates, 2004). Milne (2008) noted that learning from experience has been used as an important strategy in many university programs. The development of an applied theory is seen in the seminal work of Kolb (1984), who laid the foundations for contemporary interpretations and applications of experiential learning theory. The importance of learning through experience is captured by Kolb's definition: "learning is a process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p.38). Career development learning, by emphasizing reflection through the four dimensions (of DOTS), engages students/individuals and makes their learning experiences meaningful. Career development learning provides the process for ongoing transformation and lifelong learning. Kolb's identification of a series of propositions underpinning experiential learning and subsequent actions have been noted and considered in relation to key elements of career development learning framework. We have blended the notion of career development learning with Kolb's propositions, as shown in Table 2.

Table 2. Career development learning adapted to Kolb's (1984) Framework

Proposition	Action	Career development learning
Learning is best conceived as a process, not in terms of outcomes.	Learning is continually modified by experience.	CDL is a lifelong process of reflecting on experiences in relation to self and opportunities, making or revising decisions and utilizing (or developing) skills to make decisions a reality (transitions).
Learning is a continuous process grounded in experience.	Learning is testing and examining, then integrating new learning into what is known.	CDL is an ongoing process of reflecting on life/work experiences based on the DOTS domains.
The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world.	Learning is resolving conflicts between concrete experiences and abstract concepts; observation and action; the known and the unknown.	Through concrete/work based experiences individuals reflect on their abstract understandings of the world and workplaces, to revise their life/work plans and actions.
Learning is a holistic process of adaptation to the world.	Learning is a function of the total human interaction with the world, including thinking, feeling, perceiving and behaving.	As CDL is focused on student/client perceptions and ongoing self awareness and reflection. CDL requires thinking, feeling, perceiving and behaving to facilitate more congruent decisions and outcomes.
Learning involves transactions between the person and the environment.	Learning is an active and self-directed process.	The CDL process explicitly involves consideration of opportunities in relation to self, through active involvement in workplace settings.
Learning is the process of creating knowledge.	Learning is continuously refining and redefining knowledge.	Individuals reflect and develop new understandings of self and their role in life/work – identifying directions for life work and learning

Whilst we have used Kolb's framework in this report and project, there are, of course, other guiding principles of experiential learning which may be brought to career development learning and work-integrated learning (e.g., National Society for Experiential Education, 1998).

10.6. Reflective Learning: Two-Way Mirror

Workplace experiences where career development learning is effectively embedded provide benefits to the student, their educational institution, and the workplace. A critical success factor in the workplace experience being transformational for all parties is that the underpinning reflective practices are designed around career development learning. The metaphor of the *two-way mirror* embodies the unique capacity which career development learning brings to the experience. Therefore, career development learning becomes the process which brings clarity and understanding to workplace experiences. The graphical model of career development learning and work-integrated learning depicted as two-way mirror was derived from the national symposium (see project methodology in Appendix A).

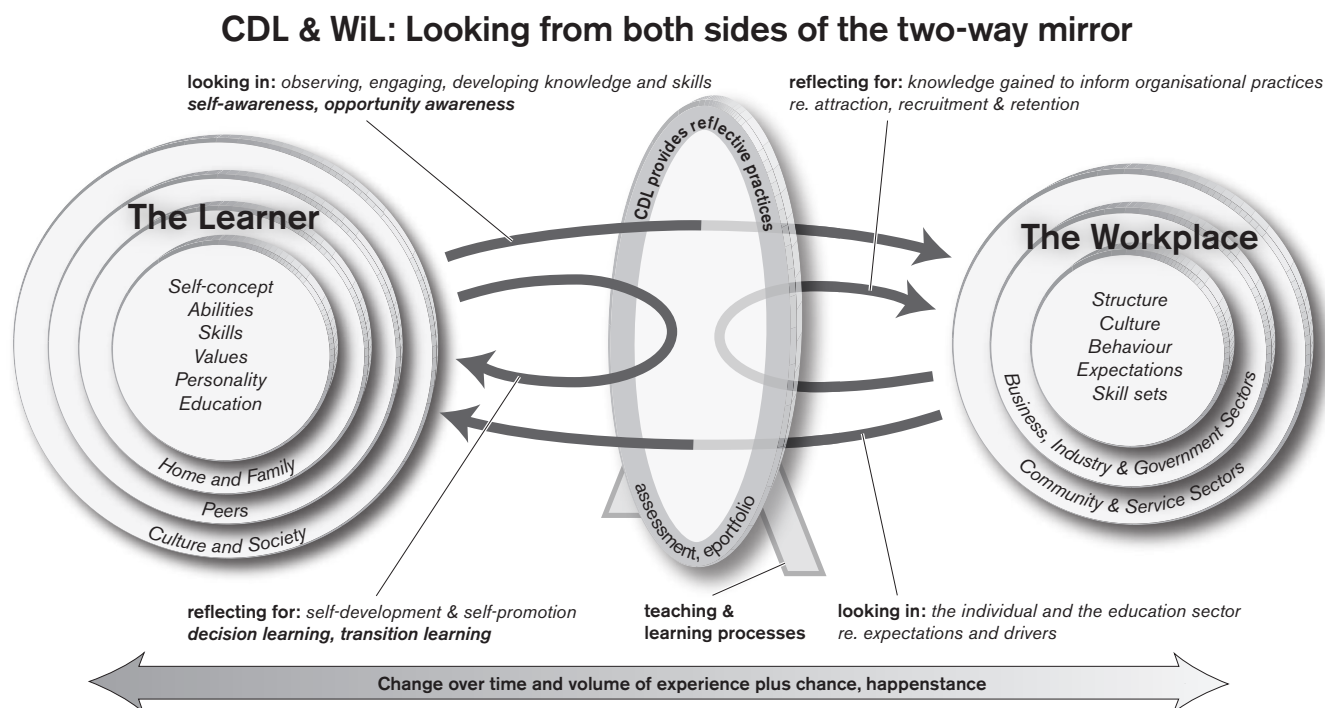


Figure 3. Two-way Mirror

10.6.1. The Learner's Perspective

As the Systems Theory Framework of career development (Patton & McMahon, 2006) suggests, career development learning occurs as a result of a range of internal and external variables. The internal elements are influenced most directly by the immediate environments of peers, home, family and community and, these are inevitably, influenced by the prevailing external variables such as culture/society/government and legislation. Individuals are uniquely influenced by: self concept & self esteem; personality; ethnicity; physical attributes; aptitudes; age; skills; interests; ability; values; sexual orientation; gender health; disability beliefs; work knowledge. In this domain of influence the following will have an influence on family, peers and ultimately individuals: media; employment market; education institutions; workplace legislation; workplace contexts; political decisions; globalisation.

Before: Looking into the mirror

Before the workplace experience, the learner can reflect upon themselves in order to make informed choices about a suitable workplace experience.

During: Looking through the mirror

During the workplace experience, the learner can gain insights into the structure and culture of the workplace and its requisite skills sets and expectations. This can be achieved through observation and engagement in work related activities.

After: Looking into the mirror

After the workplace experience the learner uses reflective practices which leads to the transformation of the experience into learning and can inform their career and academic decision making. This can also be used for self development and articulation of experiences and skills for potential job search activities.

10.6.2. The Workplace Perspective

Before: Looking into the mirror

Before hosting the workplace experience, an organisation reflects upon their internal contexts, establishing appropriate projects, task and related skills requirements to conduct the activities, as well as identifying current staff who have the right skills to oversee the project and who may benefit the most from the experience.

During: Looking through the mirror

During the workplace experience, the organisation gains knowledge and understanding of future workers and their capacities and drivers, as well as the university sector itself.

After: Looking into the mirror

After the workplace experience the organisation reflects upon new ideas and approaches brought to the organisation and considers how these may be incorporated in future business processes. Staff involved in project supervision would also reflect upon their own skill development and factor into their own career and development plans. In addition the organisation reflects upon knowledge of future workers to inform their attraction, recruitment and retention strategies.

Useful strategies/programs that support and encourage the reflective processes may be captured through various assessable and non assessable activities, such as e-portfolios, portfolio building, journals and post experience reports and presentations.

10.7. Fundamentals of a Quality Framework

As self-accrediting institutions operating in a competitive environment replete with various systems of external benchmarking, each Australian university has its own quality assurance policies and procedures for academic courses and services. University courses and units align their curriculum around agreed upon learning criteria for each discipline, perhaps in compliance with externally-established standards set by professional bodies. Measures of students' performance against those criteria (e.g., assessment) provide one form of quality control; indicating how a university education is preparing students to meet the demands of their discipline. Similarly, the diffusion of employability skills and graduate attributes into curriculum and concomitant indicators of their being taught within degrees provides another dimension of quality. It would not be unreasonable to suggest that institution-specific policies and procedures could be extended to cover the delivery of career development learning and work-integrated learning. Consultation with stakeholders throughout this project revealed a need to develop a quality system for the delivery of career development learning and work-integrated learning. The issue of quality in the design and delivery of career development learning was reinforced in ACEN's national scoping study of work-integrated learning in higher education. (Patrick et al., 2008).

10.7.1. Cross-sector Comparison

Whilst the high school sector is not the focus of this report, it is informative to briefly overview some of the attempts to generate a quality framework around workplace learning within the school sector. The Department of Education, Science and Training report into school workplace learning identified six elements in the guidelines for high quality workplace experiences for TAFE and secondary education sectors (PhillipsKPA, 2005, pp. 1-2). The elements were:

1. Efficient, effective and appropriately resourced internal organizational arrangements;
2. Strong and enduring relationships with clients and stakeholders;
3. Managing demand for places sensitively and effectively;
4. Workplace preparation arrangements are systematic and consistently rigorous for employers and students;
5. Aim for mutually beneficial and rewarding workplace experiences for employers and students of all backgrounds; and
6. Reliability of the outcomes of the student's workplace experience.

The report list a number of pertinent points that should be considered by stakeholders in career development learning and work-integrated learning in higher education settings:

- Provision of specific descriptions of the learning objectives including identified industry competencies and employability skills;
- Relevance of the tasks undertaken by the student in the work integrated learning and the students university course/ program;
- Suitability of the work integrated learning experience (duration and form) for the student and employer needs and preferences;
- Effectiveness of outlined processes for monitoring and supervision of placements effectively; and
- Ensuring multiple and rigorous sources of information for assessment processes. (e.g., up to date records of tasks and reflections in workplace learning records and student journals, supervisors' comments, competence against the relevant industry standards and direct observation of competencies performed in workplace settings).

In regard to career education delivered in the school sector, the Australian Commonwealth's *Career Education Quality Framework* (Willet, 1999) sets down standards for benchmarking and auditing, and as a tool to guide for the design and delivery of career education. The Framework aligns with the principles of the Australian Quality Council. It covers six main areas:

- Leadership and Innovation
- Strategy and Planning Processes
- Data, Information and Analysis
- People
- Customer and Market Focus
- Processes, Products and Services
- Results

Notwithstanding the value of the Career Education Quality Framework for the school sector, it has to some extent been superseded by the Australian Blueprint for Career Development (Miles Morgan Australia, 2006), described previously, and the quality initiatives introduced by the Career Industry Council of Australia.

10.7.2. Career Industry Council of Australia Standards

The Career Industry Council of Australia has promulgated two key measures for the career development industry: the *Professional Standards for Australian Career Development Practitioners* (Career Industry Council of Australia, 2006) and *Guiding Principles for Career Development Services & Information Products* (Career Industry Council of Australia, 2007).

The Professional Standards establish the entry-level qualifications of *career development practitioners* and it is incumbent upon practitioners and their employers to ensure that they are appropriately trained in the various competencies which compose the profession, and that they ethically discharge their responsibilities. The National Association of Graduate Careers Advisory Services (NAGCAS) is member of the CICA and is a signatory to the Professional Standards. As the professional body representative of career development practitioners in Australian higher education, and with the majority of university staff being members of NAGCAS, the Professional Standards, as a measure of quality, will influence the delivery of career development learning and work-integrated learning.

The *Guiding Principles for Career Development Services & Information Products* (Career Industry Council of Australia, 2007) were designed to support the individuals or organisations involved in the design, delivery, funding, management, or evaluation of career development services and products. The principles are relevant to career development learning and work-integrated learning in the higher education sector. A brief adaptation of the principles is shown in Appendix D.

10.7.3. Standardised Measures

University course and unit assessment provide an ideal vehicle for determining the impact and outcome of career development learning and work-integrated learning. In this vein, the career management competencies stipulated in the Australian Blueprint for Career Development, for example, would provide a useful framework by which curriculum and assessment could be adapted and evaluated. Beyond this framework, however, there would be value in establishing national measures of the student-related outcomes of career development learning. For example, a career education module may very well cover the content of certain disciplinary criteria or graduate attributes which can be assessed formatively or summatively. The assessment could be extended to include indicators of student learning which are specific to the psychosocial dimensions of career development learning which express not only what a student has learned, but whether

or not, or to what extent, he/she has been personally transformed. Such an approach to quality may mean the introduction of empirically established psychometric measures of factors such as career decision-making self-efficacy (Betz, Klein, & Taylor, 1996) or perceptions of employability (Rothwell, Herbert, & Rothwell, 2008). These measures would quite likely be theoretically independent of the course and unit content and thus have the capability to be used as generic measures for a range of courses.

High-level evaluation of career development learning impact—short, medium, and long-term—continues to be an important theme in the literature (e.g., Maguire, 2004; Watts & Dent, 2006). If such standardised psychometric measures were to be used consistently within university programs and courses, and on a national scale, the measures would similarly provide a means of evaluating the impact and outcome of career development learning in higher education more broadly. For example, once standardised, these measures may be utilised by the Australian University Quality Agency, or similar agencies, to make comparisons within an institution and over time to determine progressive improvements; or they could be used to make comparisons between institutions.

11. Themes and Discussion

Over the course of the project and through its applied research processes, a number of key thematic findings were revealed.

11.1. Student-Centred Lifelong Learning

The stakeholders who participated in this project (in surveys, focus groups, interviews) reaffirmed the position that a successful career is not the outcome of a single decision or action made by students at a particular moment in their learning journeys. Career development learning involves awareness of the many different lifespan roles and stages which require active involvement by individuals in decisions related to ongoing life transitions. Career development learning contributes to students' engagement with learning and persistence with studies.

Stakeholders believed that work-integrated learning should be student-centred. Career development learning is intrinsically student-centred, entailing active student engagement. By including elements of career development learning in work-integrated learning the student is necessarily placed at the centre of the learning process; therefore contributing to the enhancement of student engagement. It is also vital that students be involved in the process of planning their learning experiences, through such processes as being transparently involved in the selection and management of their work-integrated learning.

11.2. Pedagogical Considerations

Career development learning is focused upon student learning plans and needs, and it entails reflection upon learning undertaken in relation to those plans and needs: reflective learning is at the core of career development learning. Including career development learning activities in work-integrated learning can enhance its capacity for reflective learning.

There is evidence of some providers explicitly linking career development learning and work-integrated learning to institutional graduate attributes in addition to discipline or course-level learning outcomes or criteria. This project revealed a need for the better integration of career development learning, work-integrated learning, and graduate attributes within curricular and extra-curricular settings.

Concomitant with placing the student at the centre of learning, using reflective learning and integrating with graduate attributes, the project found diversity in practices in which formative and summative assessment was used for career development learning and work-integrated learning. There is, however, scope to explore how they can be better integrated into the curriculum, particularly in terms of facilitating strategic learning.

All learning experiences in a diversity of contexts can be valuable for students' experiences of career development learning and work-integrated learning. Formalised learning within the university curricula and context, and natural learning in the workplace or community contexts can be equivalently valuable and useful for students' career development learning and work-integrated learning programs. Programs for career development learning and work-integrated learning should incorporate cross-disciplinary approaches within and external to the formal curriculum. Accordingly, the provision of flexible models, processes and programs will ensure that career development learning and work-integrated learning can occur in a broad range of contexts, and be adapted for the needs of the relevant educational institutions, industries and stakeholders.

There is a diversity of terminology used by the various stakeholders in the field. Effective partnerships, practices, and implementation across sectors require commonly understood language and terminology for career development learning and work-integrated learning.

11.3. Institutional Support and Funding

Students' learning experiences and outcomes derived from career development learning and work-integrated learning should be valued by universities. This should be demonstrated to students in universities' approaches to student learning whereby policy and curriculum are inclusive of career development learning and work-integrated learning. Taking responsibility for demonstrating their value will enhance students' equal opportunities for broader educational experiences which may be reflexively drawn back into students' experiences of the formal curricula.

Concerns have been raised about the level of institutional and Commonwealth government support for work-integrated learning (Weisz & Smith, 2005). Whilst arguing for a national internship scheme, Universities Australia (2008) recognized that the establishment of such a national programme would indeed require significant investment to secure access of

opportunity across the sector: \$16 million p.a. for internship liaison co-coordinators; \$29.2 million p.a. for academic sub-Deans; and between \$105 million and \$263 million p.a. for employer subsidies and incentives to engage with the scheme. Furthermore, there must be an emphasis upon co-operation and partnerships amongst stakeholders (Precision Consultancy, 2007; Universities Australia, 2008), such that universities and employers are brought together for mutual benefit. Yet, however important the development of partnerships may be for work-integrated learning and the university, there is a need to consider the realities and complexities of maintaining partnerships in the long-term (Reeve & Gallacher, 2005), as these have been demonstrated to be demanding and resource intensive on the part of both partners and can be subject to exhaustion without careful maintenance.

11.4. Student Finances and Employment

The discussion paper by Universities Australia highlights that many undergraduate students already participate in the labour market through part-time and casual work. This issue has been the subject of major national research (Long & Hayden, 2001; McInnis & Hartley, 2002). Long and Hayden (2001) indicated, for example, that approximately 70% of the more than 34 000 Australian students surveyed were in paid work, and that approximately 20% believed that their work adversely affected studies. With respect to full-time students, the report found that those in paid employment were working an average of 14.5 hours per week. The report also found that a significant proportion of students missed classes due to problems with travel arising from paid work commitments. So, whilst students' part-time work may provide some scope for work-integrated learning, it may also present a disincentive for students who are unable to manage an additional workload, let alone the basics of travel to and from work or university.

11.5. Deploying Employment

Notwithstanding concerns associated with balancing work and study, there is ample scope to consider how students and universities can leverage past and current employment experiences for the purposes of active or post hoc reflective work-integrated learning. Within the UK, for example, there is evidence of degree programmes making extensive use of past and present paid employment as a vehicle for work-integrated learning (e.g., Hunt, 2000). Not all university students are "typical" full-time, young, school-leavers. Many students are part-time workers, experienced professionals, paraprofessionals, or tradespersons upgrading their qualifications, or using higher education to transit from one professional occupation or specialisation to another. Students in these situations understand the complexities of balancing life, work, and study. Moreover, they have an appreciation of their career positioning and trajectory, and in making transitions from one major life experience to another.

11.6. Workplace Engagement

Whilst they should be focused upon the student, career development learning and work-integrated learning programs should benefit all participants in some way. Employment settings particularly stand to benefit from the rich resources brought by students and their universities. Sites and supervisors hosting work-integrated learning students can benefit from the opportunity to glean fresh ideas, knowledge, skills and approaches from students; and benefit also from the opportunity to use work-integrated learning as a pre-recruitment strategy for their organisation.

Although universities have developed administrative, marketing, and bespoke educational resources for their particular career development learning and work-integrated learning programs, most worksites have not developed the same level of resources which support the learning and supervision processes needed for effective work-integrated learning to occur. Supporting organisations to develop or acquire such resources may assist current host organisations to continue existing work-integrated learning programs, or it may encourage other organisations to host a work-integrated learning scheme for the first time.

The lack of evidence of explicit processes in workplace settings to support the career development learning of students placed in these setting is indicative of a disconnection between career practice in education and in workplace settings. If workplaces are to obtain the best outcomes from the workforces then career development processes and support need to be explicit. The alternative is unnecessary staff turnover as workers move between organisations in the belief that this approach best supports their career development. This leads to unnecessary expense in recruitment and induction, and could be interpreted as suggesting a mechanistic approach with little organisational interest or investment in developing human capital for both public and private benefit.

The opportunity to invigorate career development of individuals engaged in supporting "placement students" is often overlooked as an opportunity for the host organisation. A triage approach could enable hosts to consider their own career

development opportunities through explicitly assisting the career development of others, and through fresh insights gained from those who are less ingrained in organisational culture. The 'two-way mirror' of career development learning described in this report further explains this opportunity.

This has implications for a potential dual role for human resources staff as career development practitioners as well as their traditional operational roles, or alternatively a strengthening of the industry/university nexus to facilitate higher education career development practitioners providing a stronger consultancy role to industry. Benefits of this would extend beyond the work integrated learning context to supporting industry responsiveness to workforce development needs, particular in the case of smaller organisations. This would strengthen the organisational learning emanating from work integrated learning activity. Evidence for such an approach can be seen in the Early Career Learning at Work: LiNEA project in the UK (<http://www.tlrp.org/>) (Eraut, 2007).

11.7. Diversity and Equity

Although many career development learning and work-integrated learning programs cater for a wide range of students, some groups of students experience limitations upon their access and opportunities to work-integrated learning due to structural impediments (e.g., students with a disability, international students). Career development learning can play an important role in ensuring prospective students and current students choose appropriate educational and employment pathways. Universities Australia (2008) has highlighted the importance of considering social equity in the establishment of a national internship scheme. Indeed, it cannot be assumed that a one-size-fits-all approach to graduate employability and work-integrated learning is appropriate. Policy, pedagogy, and professional practices for the development of graduate employability must take into account the needs and circumstances of all students; and such an approach require significant consideration of diversity and equity when formulating notions of employability in policy and pedagogy (Moreau & Leathwood, 2006). This suggests that there may have to be particular forms of support for particular kinds of learners, whatever universal policies of integrating experiences within the academy and practice settings occur. This assertion gains further support from the findings of the national scoping study by ACEN (Patrick et al., 2008). Career development learning can provide an appropriate pedagogical framework to support students from disadvantaged backgrounds to make the most of their work-integrated learning experiences; in terms of access, decision-making, and reflective learning.

11.8. International Students

The specific challenges for international students in accessing and benefiting from workplace experiences has been clearly articulated by all stakeholders in all forums associated with this project. A complex blend of federal government legislation, employer attitudes, labour market fluctuations, market forces associated with the education export industry, language capacity, and intercultural competence all contribute to a challenging environment for institutions and their students. This is situated against a backdrop of increasing international student interest in accessing workplace experiences and other career development activities (Graduate Careers Australia, 2007b, 2008).

Whilst a small number of institutions are making strong progress in this space, it is a resource intensive undertaking which also relies heavily on stakeholders from the employer communities to understand the value add which international students may bring to their workplaces. Consequently, dual-edged innovations are required in educational programming within institutions, as well as an educative process for the employer communities.

11.9. Staff Training and Development

Securing and delivering quality in work-integrated learning experiences requires individuals—academics, career development practitioners, employers—who are sufficiently prepared, trained, or resourced (Jancauskas, Atchinson, Murphy, & Rose, 1999). Indeed, from an academic's perspective, there is a long tradition of engagement with work-integrated learning, yet there is need to contemplate work-integrated learning as a legitimate academic pursuit in terms of disciplinary scholarship (cf. Reeders, 2000) and how they engage with it (Martin, 1998). From another perspective, the Professional Standards for Australian Career Development Practitioners (Career Industry Council of Australia, 2006) go some way to mandate competencies that may effectively support the provision of work-integrated learning, primarily under the aegis of competencies pertaining to career education and labour-market. The role definition of staff members who actively coordinate and supervise work-integrated learning activities (and are not necessarily academic staff or career development practitioners per se), needs some consideration with respect to training and duty definitions and organizational location (Coll & Eames, 2000). Career development learning and work-integrated learning are forms of learning and knowledge creation – therefore part of developing academic staff is to encourage a broadening of often narrow academic course constructs and

teaching approaches, to include a recognition that valuable, transferable learning and knowledge creation occurs beyond the 'academy walls'.

As for professional development and training in the discipline of career development for the benefit of university staff and workplace supervisors, the Australian Government commissioned the *Australian Career Development Studies* website (Miles Morgan Australia, 2008). This site contains all of the learning materials necessary for a general introduction to the field of career development for non-professional users or supporters of career development activities, such as community groups, parents, and sport coaches. It also contains the material for Certificate IV level qualification, which may be assessed by registered training organisation; and a higher education unit of study which may be assessed by a number of registered universities, with the option of using it for credit in a graduate qualification. All content is self-paced and does not mandate summative assessment. This is a significant resource which may be of value to university personnel involved in career development learning and work-integrated learning, but who require some professional development to improve their knowledge of career development learning.

A number of Australian universities offer graduate qualifications in career development studies (e.g., RMIT, Queensland University of Technology, University of Southern Queensland, Edith Cowan University, and Australian Catholic University), with others currently developing programs. Whilst not all personnel involved in the delivery of career development learning and work-integrated learning would necessarily choose to complete a full postgraduate program, such as the graduate certificate required by the Career Industry Council of Australia (and therefore relevant for staff members of NAGCAS), there is scope to consider the benefit of staff enrolling in single units of study.

There is also scope to consider partnership arrangements between professional bodies (e.g., NAGCAS, ACEN) and qualification providers. In the UK, for example, the University of Reading operates a postgraduate career development studies program in association with the UK equivalent of NAGCAS (viz, AGCAS). Engagement in programs such as this should not be reliant upon the good will of individual staff members alone; instead, universities, employers, and government may have some role to play in the professional development of career development and work-integrated learning personnel in universities, so as to ensure a minimum standard of qualification for work in the area.

11.10. Cross-sector Linkages

Effective partnerships among stakeholders are vital to the success of work-integrated learning. By stakeholders sharing their understanding and holding to commonly accepted principles, career development learning and work-integrated learning could be facilitated in a broad range of contexts and opportunities—curricular and extra-curricular. A key finding associated with this theme is that many of the academic stakeholders identified elements of career development learning, typified in the DOTS framework of career development (Watts, 1977, 2006) in their current teaching. There was recognition of the potential to merge the intellectual and educational resources of the academic stakeholders with those of the university Career Services

The Commonwealth Government's review of career services provided in the tertiary education institutions of Australia (Department of Education Employment & Workplace Relations, 2008) indicated that university career services were more clearly articulated than those in other sectors. With the recent review of the higher education system in Australia exploring the relationship between universities and vocational education and training sectors (Bradley, Noonan, Nugent, & Scales, 2008), it would be appropriate to review work-integrated learning in terms of cross-sector linkages to determine how one may enhance the potential of the other to provide students with wider opportunities for learning. University career services may play a role in such integration, given their current established role and resources; however there would need to be some consideration given to how career services in other sectors would be able to furnish their students with access to career development learning.

11.11. Themes for Future Research and Development

The research process of this project revealed an extraordinary diversity and quality in the career development learning and work-integrated learning practices implemented in the higher education sector in Australia; however, there is a dearth of publishing which would share valuable knowledge with the sector and establish appropriate benchmarks for delivery and quality.

11.11.1. Multi-level Integration

There are a variety of ways in which career development learning be integrated can be integrated into a student's learning journey, extending from the bolted-on to the bespoke (Watts, 2006): extra-curricular activity; unit-level activity; program-level activity; and within discipline and trans-discipline graduate attributes. There is considerable scope to conduct research into students' perspectives of career development learning and work-integrated learning in higher education, and to explore how their approaches to learning can inform pedagogical practices. Concomitantly, there is scope to explore how university staff deliver career development learning and work-integrated learning in terms of pedagogical frameworks, particularly to determine factors which contribute to the most efficient and effective approaches to delivery, alignment with key learning criteria (e.g., graduate attributes), and assessment.

11.11.2. Employer Interface and Engagement

A significant finding of this project is that—and notwithstanding the diversity and excellent already in evident in the field—there is evidence that most organisations which have participated in a work-integrated learning program with a university are seeking support and resources for how they can better implement work-integrated learning in their organisation. This firstly raises the issue of how universities and employers can better interact with one another. It secondly highlights a need for material support and resources on the site of work-integrated learning. The proposal by Universities Australia (Universities Australia, 2008) highlights this issue with respect to funding various positions within universities which are responsible for the management of work-integrated learning, operationally and academically. It also highlights funding in relation to students' needs. Aside from the logistical and operational matters of enhanced interaction, there remains scope to explore the pedagogical resources needed in the workplace by supervisors.

11.11.3. Quality Standards

Despite the diversity and quality of programs which effectively blend career development learning and work-integrated learning in Australian higher education, consultation with stakeholders throughout this project revealed a need to develop a quality system for their delivery. The development of a nationally-agreed quality system for the design, delivery, and evaluation of career development learning and work-integrated learning would likely prove valuable to Career Services, universities, host organisations, and government. The fundamentals of the quality system described in this report present an interesting point of departure for such research.

12. Appendix A: Project Methodology

12.1. Literature Review

The project entailed a review of literature of career development learning and work-integrated learning. Furthermore, it required the preparation of pre-reading documents for delegates who attended the national symposium on career development and work-integrated learning, including the discussion paper prepared by the authors (McIlveen et al., 2008) and the papers provided by the key note speakers (S. Barrie, 2008; Kenworthy-U'Ren, 2008; McLennan, 2008; Watts, 2008a). The literature review comprising the authors' discussion paper has been integrated into the main body of this report. Whilst the focus of the literature review was in relation to career development learning and work-integrated learning in Australia, it was necessary to draw upon international literature on work-integrated learning, particularly from studies in the UK. A comprehensive list of references is included in this report.

12.2. Project Website

A project website was used as an information dissemination resource, housing project details and the downloadable documents for the national symposium and for public use (e.g., symposium discussion paper and key note papers). A new website has been created as the online resource for all project materials (www.nagcas.org.au/ALTC).

12.3. Group Studies

Two group-based research studies, predominantly engaging universities' career development practitioners, were used initially to scope stakeholders' views on the definitions and features of work-integrated learning. The two research methods deployed were nominal group technique and idea-writing (Moore, 1987). The first group used the nominal group technique to commence the exploration and the second used idea-writing to expand upon the material generated by the first. These groups were held at the annual conference of NAGCAS at the University of Wollongong in November 2007.

12.4. Online Surveys

Career Services, academics, employers, and international representatives completed online questionnaires pertaining to their estimations of the extent to which the work-integrated learning programs under their control or to which they contributed, operationalised a pedagogical framework of career development learning. The DOTS framework (Watts, 1977, 2006) was proposed and tested for alignment to the career development learning intrinsic to the work-integrated learning programs delivered by respondents. These surveys also collected qualitative data on their programs' content, structure, and delivery.

12.5. Interviews and Case Studies

Following on from the online survey, programs that were identified to have included some elements of career development learning were selected for follow-up interviews. The interviews gathered more information about the program details, tools and documentation, and the inclusion of career development learning competencies. A selection of work-integrated learning programs which operationalised—to varying degrees—key features of career development learning were recorded and analysed as case studies, to serve as exemplars or models for practice. Examples appear in this report and in the accompanying manual.

A variety of programs were included such as: programs within the curriculum/course; generic programs; for academic credit or not for credit; volunteer programs; formal programs such as internships; national and international programs; mentor/coaching programs; service-learning etc. Programs selected for follow-up aimed to represent: a range of models (work placement, work experience/vacation work, practicum, industry project, internships, co-operative education); a variety of disciplines, work-integrated learning in the curriculum or as an "add-on" program; based in metropolitan and regional locations.

Standardized follow up questions were prepared and this template was used to maintain consistency of gathered information. Project information flyers, contact details and informed consent forms were provided to interview respondents. Members of the project team conducted follow-up interviews which were mainly conducted face-to-face sessions. Some

telephone interviews were necessary, to overcome practical barriers of distance and time commitments (of interviewers and respondents). Interview information was used to develop career development - work integrated learning case studies of "diverse practice" that provided a stimulus to further discussion in the national symposium activities.

12.6. National Symposium

A national action research symposium was held in Melbourne, June 2008, and was entitled *National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience*. The symposium included invited participants from national stakeholders as well as some international representatives. One hundred and sixty eight participants contributed to discussions at the symposium. All universities were represented in some way with university administration, academics from various disciplines, career service personnel, employers, professional association representatives and students were involved in dialogue, small group discussions and structured activities. Symposium participants were asked to prepare by reading the symposium discussion papers and keynote presentation papers.

12.6.1. Symposium Presenters

Four key note presenters were invited to present on aspects of career development and work integrated learning. They also prepared a pre-reading paper for participants. They were:

- Belinda McLennan, then Pro Vice-Chancellor Teaching and Learning (Victoria University);
- Associate Professor Simon Barrie (University of Sydney), Associate Director of the Institute for Teaching and Learning;
- Dr. Amy Kenworthy-U'Ren (Bond University), an international expert in the field of community engagement and service-learning; and
- Professor Tony Watts, foundation director of the National Institute for Careers Education and Counselling (NICEC), and international policy consultant on career guidance and career development, based in Cambridge, UK.

In addition the following were invited to contribute as facilitators in the Symposium program:

- Dr Elizabeth McDonald (Australian Learning and Teaching Council) acted as the host;
- Professor Richard Johnstone (Executive Director of the Australian Learning and Teaching Council), provided a closing summary and address; and
- Dr Glenn Withers AO, (Chief Executive Officer, Universities Australia) spoke briefly about the Universities Australia paper on internships.

12.6.2. Symposium Activities

At the symposium tables were organised in groups of 8 with a mixture of university academics, career service personnel, students and industry/community representatives with a few representative from professional associations. The group activities involved structured small group discussions that requested delegates to consider and note their reactions to three activities. Identification of key themes from the speaker presentations and initial discussion lead to development of a career development learning model that could be used in work integrated learning. Consideration of the case studies enabled their use to test and refine the development of the career development learning model that could be used in work integrated learning. Each group reported back to the main forum on their key findings. The final activity entailed delegates working in groups to propose an ideal or "Blue Sky" model for the implementation or structure of work integrated learning.

All notes and posters prepared by groups were gathered and compiled to identify themes and directions for future action. Symposium leaders and project team members met the following day to consider the main themes and outcomes and to propose the future direction for the action research.

A media release was prepared and Professor Watts also prepared a symposium summary paper.

12.6.3. Symposium Outcomes

Symposium delegates made recommendations with respect to the need for: principles; common cross sector understanding of definitions and language terminology; ongoing communication channels and forums for all stakeholders; a visual model establishing relationships and links between career development and work integrated learning; further opportunities to gather industry/community and student stakeholder experiences and perspectives. A striking thematic outcome of the symposium was that the student, and his or her perspective on learning, should be the centre of work-integrated learning.

Furthermore, it was concluded that career development learning contributes to a student's engagement with higher education; therefore, there is a clear nexus of learning potential between career development learning and work-integrated learning.

12.7. Students and Employers Forum

A recommendation emanating from the National Symposium was to hold a subsequent forum targeting students and employers as stakeholders. In October 2008 a forum consisting of 30 university students and 25 employers was held in Melbourne. Participating students were drawn from a variety of disciplines and institutions (metro and suburban Melbourne, and regional Victoria). Employers represented a spectrum of individual industry and professional associations. The full-day event was preceded by keynote presentations given by the project team and employers. Semi-structured discussion groups were used to generate participants' thoughts and appraisals of various aspects of career development learning and work-integrated learning, such as describing the type of resources needed by students and employers. The groups were used to validate the conceptual models of the two-way mirror, principles for practice, and terminology matrix.

12.8. Dissemination and Concurrent Validation

Throughout the life of the project the research process involved progressive dissemination of findings to stakeholders groups, and the steering committee, not only to fulfill the responsibility of communicating with the field, but additionally to "test" our results and emerging ideas by seeking stakeholder feedback and opinion. This process contributed to the validation of the results, such as determining DOTS as an appropriate framework and seeking refinements of the principles for practice.

12.8.1. Events

Project team members presented or participated in the following public events as part of the research processes or to share findings:

- Australian Collaborative Education Network Forum
- World Association for Cooperative Education Conference (WACE) in Manly, NSW (October 2008)
- Universities Australia Forum on Internships, Canberra (July 2008)
- National Association of Graduate Careers Adviser Services (NAGCAS)/Graduate Careers Australia (GCA) conference in Sydney (November 2008)
- Professions Australia Forum, Canberra (October 2008)
- Innovative Research Universities Forum in Brisbane (October 2008)
- Australian Association of Graduate Employers (AAGE) Conference in Melbourne (November 2008)
- Forum on graduate employability and related issues in UK, November 2008

12.8.2. Media

The project was promoted via a number of major press outlets. A series of communiqué was distributed to the media, relevant stakeholders, national symposium delegates, and was attached to the project website.

12.8.3. Sector Magazines

In addition to broadcast media, short news items were included in the magazines *Graduate Careers Australia Grapevine* and the *Australian Career Services Newsletter*. The National Association of Graduate Careers Advisory Services members have been kept informed through its members state and territory communication systems.

In addition, a number of journal articles are in the process of preparation and submission.

13. Appendix B:

Models of Work-integrated Learning

There are a number of approaches to enacting work-integrated learning in higher education (Patrick et al., 2008), ranging from a minimalist engagement through to degrees that are fully awarded on the basis of work-based learning (e.g., Garrick & Kirkpatrick, 1998; Hunt, 2000). Whilst recognizing the diversity within Australia, the following list of models presented by Griffith University (Griffith University, nd) provides a useful framework of prototypes for considering pedagogical approaches to work-integrated learning and their respective features.

Work placement

A three-way relationship between the student, the university and an organisation, where the organisation places a student in industry during the degree program (paid and/or unpaid) to:

- Develop links between theory and practice;
- Experience life within an organisation outside the university;
- Develop professional competencies;
- Undertake a specific task or project;
- Contribute specialist or generalist skills to the organisation's day-to-day operations;
- Gain knowledge of workplace practice by shadowing/observing senior staff members within the organisation;
- Include a mentor/supervisor.
- Learning Outcomes: Usually negotiated by the student with the academic/industry supervisors.
- Assessment: The whole work placement or a component may be assessed.

Work Experience/Vacation Work

- Paid or unpaid extra-curricular work;
- Usually takes place in industry or profession related to student's program but may relate to student's part-time work, which is not related to their program;
- Helps student to develop skills which will assist employability;
- May be requirement of some professional degrees.
- Learning Outcomes: Not generally defined.
- Assessment: Usually not formally assessed.

Practicum

- Paid or unpaid work placement;
- Students learn professional skills and knowledge;
- Specific time period.
- Learning Outcomes: General expectations of some learning outcomes.
- Assessment: Usually assessed in a formal or informal manner.

Clinical Placement

- Usually unpaid placement in health and veterinary science disciplines;
- One-to-one or team supervision by qualified professional;
- Based on student using professional skills;
- Highly structured program.
- Learning Outcomes: Specific learning outcomes required.
- Assessment: Usually formally assessed.

Internship

- Paid work placement;
- Usually one year in length;

- Student is a full employee of the organisation.
- Learning Outcomes: Usually not tightly specified.
- Assessment: Not usually assessed, but a report may contribute to credit points towards the degree program.
- Sandwich Course

Paid Work Placements

- Additional time in industry, which adds to length of degree program;
- May be continuous block of work placement, e.g., 12 months;
- May be series of shorter placements, i.e., 4 months per year for duration of degree program.
- Learning Outcomes: May be no specific learning outcomes defined.
- Assessment: May or may not be assessed.

Co-operative Education

- Usually paid work placements;
- Usually more than one placement during student's degree program;
- May be based on specific project or more general work experience.
- Learning Outcomes: Usually well defined.
- Assessment: Usually assessed, especially if project-based

Industry Project

- Usually unpaid;
- Usually short-term;
- Based on achieving outcomes for a specific project;
- May be individual student or student team;
- May be done at organisation's work place, or done at university.
- Learning Outcomes: Well defined.
- Assessment: Formally assessed.

Cadetship/Traineeship

- Paid placement;
- Employing organisation offers cadetship/traineeship on competitive basis to students;
- Student given time release to attend lectures.
- Learning Outcomes: Not defined.
- Assessment: Not assessed by university.

Mentoring

The aforementioned list does not include formal mentoring programmes, which also can be used for work-integrated learning, and is often provided in workplace settings for novices (e.g. student nurses being provided with a preceptor nurse). Mentoring provides an opportunity for the sharing and development of work related skills and experience, the development of personal, academic and work related goals, and career development, which might not otherwise be realised through learning by trial and error. Mentoring can range in practice, from a formal structured program through to an informal relationship, including peer support, such as that provided by more experience coworker. Similarly, mentoring can occur as a one to one relationship, in small groups, face to face or via the web. Informal or formal mentoring can also occur on work placements, internships or practicums. University students can be involved as mentors: providing support, advice or guidance to others or can participate as the mentee. Mentoring has also been effectively developed to include students with a disability in the *Willing and Able Mentoring* Program (2009), and earlier iterations, operated by a number of universities.

Examples of Disciplines' Approaches

Universities and various academic disciplines take quite different approaches to embedding industry experience into degree programs. Some have numerous compulsory activities whereas others have elective activities, and all with various durations and positions in the degrees (e.g., up to 12 weeks). The summary produced by Universities Australia (2008), shown in Table 3, provides a snapshot of the diversity.

Table 3: Examples of University Internship Style Programs

Fields of Study	Work Experience Form / Approach
Health (medicine, nursing, allied health)	University-arranged formal placements in hospitals and other clinical providers are an integral part of these degree programs.
Education	University-arranged classroom practicums and supervised projects (e.g. curriculum development) are standard.
Law	Short-term internships with legal firms are available in a number of jurisdictions. Requirements are in place for Articles and Legal Workshops. Some specialised internships are also available – for example in relation to Native Title studies.
Politics and public policy	Short-term, university-arranged internships in State and Commonwealth political or parliamentary offices and government agencies have been established.
Engineering	Engineering students are commonly required to obtain 12 weeks of industrial experience over the course of their degree program and report on their experience. They are encouraged and supported by faculties and/or careers services in so doing.
Clinical Psychology	Short-term, university-arranged internships with counselling services are common.
Visual / Performing Arts	Student-arranged work experience with relevant artistic companies, with mentorship a common focus, is widespread.
Public Relations / Marketing	Student-arranged work experience with private companies is growing, where the student is treated in most respects as an employee.
Science	University-arranged cadetships and summer vacation paid work experience with suitable private companies or government departments and agencies are available in many universities.
Development assistance	Placements with development assistance agencies are available in connection with some development studies courses. The Commonwealth Government funds approximately 400 placements in the Asia-Pacific region through the Australian Youth Ambassadors for Development program.

Adapted with permission from: Universities Australia (2008, p.2).

This suggests is that rather than anticipating that rich learning experiences will arise through student participation in work-related activities, organisation and structuring of those experiences, including organising the provision of expert guidance in the workplace, is required to secure effective learning outcomes.

14. Appendix C: Reflections Upon National Symposium

The following paper was delivered by Professor Tony Watts (2008b), taking a role of rapporteur at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne, 19 June 2008. This paper summarizes the major themes and principles drawn from the symposium.

I have been asked to provide some reflections based on listening to the feedback from the working groups following the morning sessions and on floating round some of the groups and listening to their discussions.

Two general reflections to start with: One is the importance of the presence of employers and students at this event. There are not enough here to make it possible for them to be represented in all the groups. But where they are present, the discourse is different, and richer. Getting them to attend events such as this is never easy: at one level it is not their 'business', as it is for the careers and academic staff who are present. And involving them in the discussions changes the language we use. But we need to involve both employers and students in the design of the programmes we are discussing in this symposium, and we need strong processes to do so.

Second, I sense a feeling that now is the time for serious progress to be made on some of the issues we are discussing here. A new Commonwealth government, with political congruence with all the State governments; a number of potentially converging reports, including that from this project; and a tight labour market which is focusing attention and energies on the issues we are discussing here: all provide a huge opportunity. Work-integrated learning is clearly on the policy agenda. But is it broad enough to encompass the issues we are discussing? Or do we need to re-frame it in some way to take full advantage of the opportunity?

Certainly work-integrated learning is a powerful model of learning. And certainly there is scope to expand it. But it is relatively expensive: hence the case for government support, at least for the brokerage and support processes involved. And the scope for expansion, while extensive, is still constrained. Most of the case-studies presented to us represent niches where this form of learning makes total sense. But the university sector covers an immense diversity of institutions, of disciplines and learning structures within institutions, and of students. To some of these work-integrated learning is highly applicable; but to others, less so.

An example mentioned in one of the groups was anthropology. Certainly it is possible to conceive of work placements in anthropology. But they will be limited. And they will be irrelevant to the work careers of most students studying anthropology. Career development learning draws attention to, and enables us to address, the issues which this raises.

In an important sense, what career development learning does is to bring the student perspective centrally into the design of programmes. Work-integrated learning programmes can be designed by academics and employers, with students viewed as the recipients and beneficiaries of what they design together. Career development learning brings students more actively into the process.

This opens up a number of issues.

First, it suggests the importance of multiple experiences of workplaces. One experience is not enough. Students need to be introduced to a range of work contexts, from which they can gain a broader view of the possibilities open to them. It was suggested in one group, for example, that within an accountancy course there would be merit in placements not only in an accountancy firm but also in a small enterprise and in a community organisation (within a service-learning model). Another group pointed out the merits of those on teacher training courses having experience of work outside teaching.

There is potentially some tension with employer interests here. One of the major hooks for employers in a tight labour market is making early contact with a potential recruit, and engaging in a cost-effective form of pre-selection. But the labour market is a market, and such placements represent a try-out on both sides. Universities have a duty of care here: they are not running a dating agency.

Second, it indicates the importance of involving students actively in selecting their placements or other work-related experiences, and taking account of their career plans as well as the academic requirements of the course. Career development learning can support this involvement.

Third, it points to the merits of validating a wider range of experiences, including those not constructed by academics. This includes what students have already done or are already doing: a growing number of students are entering university not immediately after school but after substantial periods of work; most students engage in part-time work for earning rather than learning purposes alongside their studies; and account also needs to be taken of the development of graduate attributes through other student activities, including volunteering, student societies, and sports.

Fourth, this wider frame needs to be incorporated into reflection processes. Reflection is the key to effective experiential learning: it is the process that converts experience into learning. This is true in relation to academic learning, but also in relation to career development learning.

Fifth, attention is needed to ways of giving such experiences value in terms of the currency of higher education, which is assessment and accreditation. Students tend to be very instrumental and utilitarian: what is not assessed and accredited is unlikely to be valued. The issue, then, is how to build attention to graduate attributes, and ways of supporting their development – including career development learning – into assessment and accreditation processes. This can be addressed as part of the degree itself, or through an additional award, linked to efforts to clarify what it means to be a graduate of a particular institution rather than of another.

Finally, graduate attributes need to be reflected in more intentional design of constructed learning experiences, within a frame which recognises and values a broader range of learning experiences, rather than assuming that their development will be the accidental outcome of conventional teaching processes.

The core elements of our discussions seem to me to be three-fold:

- The elevation of the status of learning and teaching within universities.
- Seeking partnerships with employers and other community resources in constructing learning experiences: this is the essence both of work-integrated learning and of service-learning.
- Involving students actively in such learning experiences, and including explicit attention to processes designed to inform, support and enrich their aspirations and goals: this is the essence of career development learning, and it is what such learning distinctively brings to the table.

15. Appendix D: Guiding Principles for Career Development Services & Information Products

The following adaptation of the Guiding Principles provides a platform upon which to deliver career development learning. In this report we have not focused upon the principles apropos of information products. Readers are advised to consult the complete document (Career Industry Council of Australia, 2007) which contains the full composition of each principle and resources which can be used to evaluate programs (e.g., checklists). In this adaptation of the guiding principles for delivery, we have differentiated between students, the direct focus of career development learning programs, and users, who may be the recipients of indirect consultation services (e.g., academics who receive input from career development practitioners for the design of their courses).

Principle 1: Promote awareness of the service and service goals

This principle is intended to promote awareness of the career development learning and its goals, in order to ensure accessibility of information about the service.

Principle 2: Ensure student/user entitlement

This principle is intended to place students or users of the service at the centre of the service through the active promotion to the student of their rights, entitlements, and avenues of redress and/or complaint.

Principle 3: Users/students have access to career information and are assisted in their understanding of that information

This principle is intended to ensure service providers actively promote the importance of career information literacy to their students.

Principle 4: Create channels for generating/incorporating student/user feedback

This principle is intended to encourage continuous dialogue between the expertise of the professional and the experience of the student/user. The channels for generating and incorporating student/user feedback will vary according to the service provided. This feedback should be used to ensure that the nature and quality of the service being delivered is commensurate with the rights, entitlements and expectations of the

Student/user (as outlined in Guiding Principles 1 and 2).

Principle 5: Differentiate service provision to accommodate diversity

This principle is intended to ensure that service providers are capable of delivering services in multiple modes, formats and settings (that is, outside of the conventional consultation model); have the ability to engage creatively with difference; and can actively accommodate the needs of diverse student groups.

Principle 6: Collaborate with other facilitators of career development

This principle is intended to encourage service providers to form links with other sources of career education and advice for students/users, both formal and informal. This will serve to create greater consistency and coherence across the range of sites instances where career development activities occur.

Principle 7: Provide staff with sufficient support to deliver a quality service

This principle is intended to ensure career practitioners are provided with sufficient professional support and resources to perform their work to a quality standard. This means having a systems approach to staff management, encompassing:

- induction
- supervision
- provision of resources
- mentoring and development
- performance review
- job transition / promotion

- access to external support networks, and
- clear definition of boundaries and appropriate methods for referral.

Principle 8: Monitor outcomes of service provision

This principle is intended to guarantee that the monitoring process is transparent to all those involved (staff, clients, management, employing agency, etc); that it takes into account all of the previous assessment criteria as performance indicators; and demonstrates the extent to which each of these criteria have been met. The findings of such a process should then serve as a basis for improving the service. The monitoring system itself needs to be subject to sufficient professional oversight to ensure that quality is being properly measured, and that the findings of these measurements are being effectively re-incorporated into the structure of practice.

16. References

- Access Economics. (2006). *The economic benefits of career development services: Scoping study by Access Economics Pty Ltd for The Career Industry Council of Australia*.
- ACNielsen Research Services. (2000). *Employer satisfaction with graduate skills. Research report*. Canberra: Commonwealth of Australia. Department of Education, Training and Youth Affairs.
- Amundson, N. (2005). The potential impact of global changes in work for career theory and practice. *International Journal for Educational and Vocational Guidance*, 5, 91-99.
- Archer, W., & Davison, J. (2008). *Graduate employability: What do employers think and want?* London: The Council for Industry and Higher Education.
- Australian Bureau of Statistics. (2004). Higher education graduates in the labour market. *Australian Social Trends* Retrieved 5 July, 2005, from <http://www.abs.gov.au/Ausstats/abs@.nsf/94713ad445ff1425ca2568200192af2/e1a27d207c960e79ca256e9e00286295!OpenDocument>
- Australian Chamber of Commerce and Industry & Business Council of Australia. (2002). *Employability Skills for the Future*. Canberra: Department of Education, Science & Training.
- Australian Council for Educational Research. (2002). *Employability skills for Australian industry: Literature review and framework development. Report to Business Council of Australia and Australian Chamber of Commerce and Industry*. Canberra: Commonwealth Department of Education, Science & Training.
- Barrie, S. (2008, 19 June). *Some ideas about graduate attributes, career development learning and WIL: A preliminary discussion paper*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne.
- Barrie, S. C. (2004). A research-based approach to generic graduate attributes policy. *Higher Education Research & Development*, 23(3), 261-275.
- Barrie, S. C., & Prosser, M. (2004). Editorial. Generic graduate attributes: citizens for an uncertain future. *Higher Education Research & Development*, 23(3), 243-246.
- 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.
- Bennett, N., Dunne, E., & Carre, C. (2000). *Skills development in higher education and employment*. Buckingham: The Society for Research into Higher Education and Open University Press.
- Bennett, R. (2002). Employers' demand for personal transferable skills in graduates: A content analysis of 1000 jobs advertisements and an associated empirical study. *Journal of Vocational Education and Training*, 54(4), 457-475.
- Betz, N. E., Klein, K., & Taylor, K. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4, 47-57.
- Bimrose, J., & Barnes, S. (2006). Is career guidance effective? Evidence from a longitudinal study in England. *Australian Journal of Career Development*, 15(2), 19-25.
- 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.
- Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education: Discussion paper*. Canberra: Commonwealth of Australia.
- Braunstein, L. A., & Loken, M. K. (2004). Benefits of cooperative education for employers. In R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 237-245). Boston, MA: World Association for Cooperative Education.
- Brown, S. D., & Lent, R. W. (Eds.). (2005). *Career development and counseling: Putting theory and research to work*. Hoboken, NJ: John Wiley & Sons.

- Brown, S. D., & Ryan Krane, N. E. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 740-766). New York: John Wiley & Sons.
- Career Industry Council of Australia. (2006). *Professional standards for Australian career development practitioners*. Carlton: Author.
- Career Industry Council of Australia. (2007). Guiding principles for career development services & information products. Retrieved 5 December, 2009, from <http://www.cica.org.au>
- Coll, R. K., & Eames, C. (2000). The role of placement co-ordinator: An alternative model. *Asia Pacific Journal of Cooperative Education*, 1(1), 9-14.
- Collin, A. (2000). Epic and novel: The rhetoric of career. In A. Collin & R. A. Young (Eds.), *The future of career* (pp. 163-177). Cambridge, UK: Cambridge University Press.
- Confederation of British Industry. (2009). Future fit: Preparing graduates for the world of work. Retrieved 1 March, 2009, from <http://www.universitiesuk.ac.uk/Publications/Documents/FutureFit.PDF>
- Council of the European Union. (2009). *Council Resolution on better integrating lifelong guidance into lifelong learning strategies*. Brussels: Author.
- Crebert, G., Bates, M., Bell, B., Patrick, C.-J., & Cragolini, V. (2004a). Developing generic skills at university, during work placement and in employment: graduates' perceptions. *Higher Education Research & Development*, 23(2), 147-165.
- Crebert, G., Bates, M., Bell, B., Patrick, C.-J., & Cragolini, V. (2004b). Ivory tower to concrete jungle revisited. *Journal of Education and Work*, 17(1), 47-70.
- Curtis, D., & McKenzie, P. (2001). *Employability skills for Australian industry: Literature review and framework development*. Canberra: Commonwealth Department of Education Science & Training.
- Department of Education Employment & Workplace Relations. (2008). Review of career development services in tertiary institutions. Retrieved 19 May, 2008, from <http://www.deewr.gov.au/>
- Diemer, M. A. (2009). Pathways to occupational attainment among poor youth of color: The role of sociopolitical development. *The Counseling Psychologist*, 37(1), 6-35.
- Diemer, M. A., & Ali, S. A. (in press). Integrating social class into vocational psychology: Theory and practice implications. *Journal of Career Assessment*.
- Diemer, M. A., & Blustein, D. L. (2006). Critical consciousness and career development among urban youth. *Journal of Vocational Behavior*, 68(2), 220-232.
- Diemer, M. A., & Blustein, D. L. (2007). Vocational hope and vocational identity: Urban adolescents' career development. *Journal of Career Assessment*, 15(1), 98-118.
- Diemer, M. A., & Hsieh, C.-a. (2008). Sociopolitical development and vocational expectations among lower socioeconomic status of adolescents of color. *Career Development Quarterly*, 56(3), 257-267.
- Dressler, S., & Keeling, A. E. (2004). Student benefits of cooperative education. In R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 217-236). Boston, MA: World Association for Cooperative Education.
- Eames, C., & Cates, C. (2004). Theories of learning in cooperative education. In R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 37-47). Boston, MA: World Association for Cooperative Education.
- Eraut, M. (2007). Learning from other people in the workplace. *Oxford Review of Education - Special Issue*, 33(4), 403-422.
- Field, L. (2001). *Industry speaks: Skill requirements of leading Australian workplaces*. Canberra: Commonwealth Department of Education Science & Training.
- Folsom, B., & Reardon, R. (2003). College career courses: Design and accountability. *Journal of Career Assessment*, 11(4), 421-450.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14-38.

- Garrick, J., & Kirkpatrick, D. (1998). Workplace-based learning degrees: A new business venture, or a new critical business? *Higher Education Research & Development*, 17(2), 171-182.
- Gilbert, R., Balatti, J., Turner, P., & Whitehouse, P. (2004). The generic skills debate in research higher degrees. *Higher Education Research & Development*, 23(3), 375-388.
- Graduate Careers Australia. (2005). *Graduate destinations 2004: The report of the Graduate Destination Survey*. Parkville: Author.
- Graduate Careers Australia. (2006). *Graduate destinations 2005: The report of the Graduate Destination Survey*. Parkville: Author.
- Graduate Careers Australia. (2007a). *Graduate destinations 2006: The report of the Graduate Destinations Survey*. Parkville: Author.
- Graduate Careers Australia. (2007b). *Snapshot: University & Beyond 2007*. Melbourne: Author.
- Graduate Careers Australia. (2008). *Snapshot: University & Beyond 2008*. Melbourne: Author.
- Griffith University. (nd). Professional skills toolkit. Retrieved 1 May, 2008, from http://www.griffith.edu.au/text/centre/gihe/griffith_graduate/toolkit/professional/teach03.htm
- Groenewald, T. (2004). Towards a definition for cooperative education. In R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 17-25). Boston, MA: World Association for Cooperative Education.
- Guichard, J. (2001). A century of career education: Review and perspectives. *International Journal for Educational and Vocational Guidance*, 1, 155-176.
- Hager, P. (1995). Competency standards - a help or a hindrance? An Australian perspective. *The Vocational Aspect of Education*, 47(2), 141-151.
- Hansen, E. (2006). *Career guidance. A resource handbook for low- and middle-income countries*. Geneva: International Labour Office.
- Hansen, S. S. (2003). Career counselors as advocates and change agents for equality. *Career Development Quarterly*, 52(1), 43-53.
- Harris, M. (2001). Developing modern higher education careers services. Retrieved 11 November, 2004, from <http://www.dfes.gov.uk/hecareersservicereview/report.shtml>
- Harris, M., Guthrie, H., Hobart, B., & Lundberg, D. (1995). *Competency-based education and training. Between a rock and a whirlpool*. South Yarra: Macmillan Publishers Australia.
- Hartung, P. J., & Blustein, D. L. (2002). Reason, intuition, and social justice: Elaborating on Parsons' career decision-making model. *Journal of Counseling & Development*, 80, 41-47.
- Harvey, L. (1999). New realities: the relationship between higher education and employment. Retrieved 30 June, 2005, from <http://www.shu.ac.uk/research/cre/publications/eair99.pdf>
- Harvey, L., Locke, W., & Morey, A. (2002). *Enhancing employability, recognising diversity: Making links between higher education and the world of work*. London: Universities UK and CSU.
- Harvey, L., Moon, S., & Geall, V. (1997). *Graduates' work: Organisational change and students' attributes*. Birmingham, UK: Centre for Research into Quality.
- Herr, E. L. (2003). The future of career counseling as an instrument of public policy. *The Career Development Quarterly*, 52, 8-17.
- Herr, E. L., Cramer, S. H., & Niles, S. G. (2004). *Career guidance and counseling through the lifespan*. (6th ed.). Boston: Pearson.
- Herrmann, K., Hannon, P., Cox, J., Ternouth, P., & Crowley, T. (2008). Developing entrepreneurial graduates: Putting entrepreneurship at the centre of higher education [Electronic Version]. Retrieved 12 February 2009 from <http://www.cihe-uk.com/docs/events/0809DEGReport.pdf>.
- High Fliers Research. (2007). *The AAGE graduate recruitment survey 2007*. Melbourne: Australian Association of Graduate Employers Ltd.

- High Fliers Research. (2008). *The AAGE employer survey 2008*. Melbourne: Australian Association of Graduate Employers Ltd.
- Higher Education Academy. (2006). *Student employability profiles*. Heslington: Author.
- Holland, J. L., Magoon, T. M., & Spokane, A. R. (1981). Counseling psychology: career interventions, research and theory. *Annual Review of Psychology*, *32*, 279-305.
- Hoyt, K. B. (2005). *Career education: History and future*. Tulsa, OK: National Career Development Association.
- Hughes, D., Bosley, S., Bowes, L., & Bysse, S. (2002). *The economic benefits of guidance*. Derby: Centre for Guidance Studies, University of Derby.
- Hunt, L. (2000). *Work based learning in British universities: International study program report*. Perth: Edith Cowan University.
- Irving, B. A. (2005). Social justice: A context for career education and guidance. In B. A. Irving & B. Malik (Eds.), *Critical reflections on career education and guidance: Promoting social justice within a global community* (pp. 10-24). London: RoutledgeFarmer.
- Jancauskas, E., Atchinson, M., Murphy, G., & Rose, P. (1999). Unleashing the potential of work-integrated learning through professionally trained academic and industry supervisors. Retrieved 25 April, 2008, from http://waceinc.org/pdf/Erin_Jancauskas_6_14_00.pdf
- Kahn, J. H., Nauta, M. M., Gailbreath, R. D., Tipps, J., & Chartrand, J. M. (2002). The utility of career and personality assessment in predicting academic progress. *Journal of Career Assessment*, *10*(1), 3-23.
- Kenworthy-U'Ren, A. (2008, 19 June). *Service-learning and career development learning: A synergistic coupling*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne.
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior*, *65*(1), 112-133.
- Kirschner, T., Hoffman, M. A., & Hill, C. E. (1994). Case Study of the process and outcome of career counseling. *Journal of Counseling Psychology*, *41*(2), 216-226.
- Kolb, D. A. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice Hall.
- Leggett, M., Kinnear, A., & Boyce, B. (2004). Student and staff perceptions of the importance of generic skills in science. *Higher Education Research & Development*, *23*(3), 297-312.
- Little, B., & Harvey, L. (2006). *Learning through work placements and beyond*: Higher Education Careers Services Unit and The Higher Education Academy.
- Liu, W. M., & Ali, S. A. (2005). Addressing social class and classism in vocational theory and practice: Extending the emancipatory communitarian approach. *The Counseling Psychologist*, *33*(2), 189-196.
- Long, M., & Hayden, M. (2001). *Paying their way: A survey of Australian undergraduate university student finances 2000*. Canberra: Australian Vice-Chancellors' Committee.
- Maguire, M. (2004). Measuring the outcomes of career guidance. *International Journal for Educational and Vocational Guidance*, *4*(2-3), 179-192.
- Martin, E. (1996). *The effectiveness of different models of work-based university education*. Canberra: Australian Government Publishing Service.
- Martin, E. (1998). Conceptions of workplace university education. *Higher Education Research & Development*, *17*(2), 191-205.
- McCowan, C., & McKenzie, M. (1997). *The guide to career education. For careers personnel working in Australian schools and colleges*. North Sydney: New Hobsons Press.
- McIlveen, P. (2007). Career development and the skills-shortage: A lesson from Charles Dickens. *Australian Journal of Career Development*, *16*(1), 13-19.
- McIlveen, P. (in press). Editorial: Career development and the social inclusion agenda. *Australian Journal of Career Development*.

- McIlveen, P., Brooks, S., Lichtenberg, A., Smith, M., Torjul, P., & Tyler, J. (2008, 19 June). *Career development learning & work-integrated learning: A discussion paper*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne.
- McIlveen, P., Everton, B., & Clarke, J. (2005). A university career service and social justice. *Australian Journal of Career Development, 14*(2), 63-71.
- McInnis, C., & Hartley, R. (2002). *Managing study and work: The impact of full-time study and paid work on the undergraduate experience in Australian universities*. Canberra: Department of Education, Science and Training.
- McKenzie, P., & Wurzburg, G. (1997). Lifelong learning and employability. *The OECD Observer, 209*, 13-17.
- McLeish, A. (2002). *Employability skills for Australian small and medium sized enterprises*. Canberra: Commonwealth Department of Education Science & Training.
- McLennan, B. (2008, 19 June). *Work-integrated learning (WIL) in Australian universities: The challenges of mainstreaming WIL*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne.
- McMahon, M., Patton, W., & Tatham, P. (2003). *Managing life learning and work in the 21st Century*. Subiaco: Miles Morgan.
- McMahon, M., & Tatham, P. (2001). *Career more than just a job*. Canberra: DETYA.
- Michael, T. B. (2004). The career development influence of family of origin: Considerations of race/ethnic group membership and class. *The Counseling Psychologist, 32*(4), 587-595.
- Miles Morgan Australia. (2003). Australian blueprint for career development. Retrieved 21 December, 2004, from http://www.dest.gov.au/directory/publications/australian_blueprint.pdf
- Miles Morgan Australia. (2006). *Australian blueprint for career development: Trial version May 2006*: Commonwealth of Australia.
- Miles Morgan Australia. (2008). Australian career development studies. Retrieved 2 March, 2009, from <http://www.career.edu.au>
- Milne, P. (2008, 3-5 December). *A Model for work integrated learning: Optimizing student learning outcomes*. Paper presented at the World Association for Cooperative Education Conference, Sydney.
- Moore, C. M. (1987). *Group techniques for idea building*. Newbury Park, CA: Sage Publications.
- Moreau, M.-P., & Leathwood, C. (2006). Graduates' employment and the discourse of employability: A critical analysis. *Journal of Education and Work, 19*(4), 305-324.
- Moreland, N. (2005). *Work-related learning in higher education*. Heslington, York: The Higher Education Academy.
- Morgan, C. J., & Hart, G. R. (1977). *Career education in Australia*. Cambridge, UK: CRAC/Hobsons Press.
- National Commission for Co-operative Education. (1999). *Cooperative education: Institutional profiles of integrated learning*. Boston, MA: Author.
- National Society for Experiential Education. (1998). Eight principles of good practice for all experiential learning activities. Retrieved 12 February, 2009, from http://www.nsee.org/about_us.htm#sop
- National Steering Committee for Career Development Guidelines and Standards. (2004). Canadian National Steering Committee for Career Development Guidelines and Standards [Electronic Version]. Retrieved 2 March 2009 from <http://www.career-dev-guidelines.org>.
- Nicholson, A., & Cushman, L. (2000). Developing successful employees: perceptions of industry leaders and academicians. *Education + Training, 42*(6), 366-371.
- Niles, S. G. (Ed.). (2002). *Adult career development. Concepts, issues and practices*. Tulsa, OK: National Career Development Association.
- O'Brien, J. (1990). Universities, technology and academic work: A reconsideration of the Murray Committee on Australian Universities (1957) in the light of Dawkins (1987-1988). *Journal of Tertiary Educational Administration, 12*(1), 255-272.
- O'Brien, K. M. (2001). The legacy of Parsons: Career counselors and vocational psychologists as agents of social change. *Career Development Quarterly, 50*(1), 66-76.

- Oliver, L. W., & Spokane, A. R. (1988). Career-intervention outcome: What contributes to client gain? *Journal of Counseling Psychology, 35*(4), 447-462.
- Organisation for Economic Cooperation and Development. (2002). OECD review of career guidance policies. Australia country note. Retrieved 6 November, 2004, from <http://ezproxy.usq.edu.au/login?url=http://www.oecd.org/dataoecd/17/47/1948341.pdf>
- Organisation for Economic Cooperation and Development. (2004a). *Career guidance and public policy: Bridging the gap*. Paris: Author.
- Organisation for Economic Cooperation and Development. (2004b). *Career guidance: A handbook for policy makers*. Paris: Author.
- Packard, B. W.-L., & Babineau, M. E. (2009). From drafter to engineer, doctor to nurse: An examination of career compromise as renegotiated by working-class adults over time. *Journal of Career Development, 35*(3), 207-227.
- Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [work-integrated learning] report: A national scoping study*. Retrieved 12 February 2009, from <http://www.acen.edu.au>.
- Patton, W. (2005). Coming of Age? Overview of career guidance policy and practice in Australia. *International Journal for Educational and Vocational Guidance, 5*(2), 217-227.
- Patton, W., & McMahon, M. (2001). Implementing career development learning programs. In W. Patton & M. McMahon (Eds.), *Career development programs. Preparation for lifelong career decision making* (pp. 10-21). Melbourne: ACER Press.
- Patton, W., & McMahon, M. (2006). *Career development and systems theory: Connecting theory and practice*. Rotterdam: Sense Publishers.
- Pedagogy for Employability Group. (2006). *Pedagogy for employability*. Heslington, York: The Higher Education Academy.
- PhillipsKPA. (2005). *Quality of structured workplace learning*. Canberra: Australian Government Department of Education, Science and Training.
- Pickering, J. W., & Vacc, N. A. (1984). Effectiveness of career development interventions for college students: A review of published research. *Vocational Guidance Quarterly, 32*(3), 431-437.
- 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., & Livanos, 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 1 March, 2009, from <http://www2.warwick.ac.uk/fac/soc/ier/news/wfreport0408.pdf>
- Reeders, E. (2000). Scholarly practice in work-based learning: Fitting the glass slipper. *Higher Education Research & Development, 19*(2), 205-220.
- Reeve, F., & Gallacher, J. (2005). Employer-university 'partnerships': A key problem for work-based learning programmes? *Journal of Education and Work, 18*(2), 219-233.
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior, 73*(1), 1-12.
- Schultheiss, D. E. P. (2006). The interface of work and family life. *Professional Psychology: Research and Practice, 37*(4), 334-341.
- Scott, A. B., & Ciani, K. D. (2008). Effects of an undergraduate career class on men's and women's career decision-making self-efficacy and vocational identity. *Journal of Career Development, 34*(3), 263-285.
- Sexton, T. L., Whiston, S. C., Bleuer, J. C., & Walz, G. R. (1997). *Integrating outcome research into counselling practice and training*. Alexandria, VA: American Counselling Association.
- Sheldon, P., & Thornthwaite, L. (2005). Employability skills and vocational education and training policy in Australia: An analysis of employer association agendas. *Asia Pacific Journal of Human Resources, 43*(3), 404-425.
- Sinclair, K. E. (1997). Workforce competencies of college graduates. In H. F. O'Neil (Ed.), *Workforce readiness: Competencies and assessment* (pp. 103-120). Mahwah, NJ: Lawrence Erlbaum Associates.

- Sovilla, E. S., & Varty, J. W. (2004). Cooperative education in the USA, past and present: Some lessons learned. In R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp. 3-16). Boston, MA: World Association for Cooperative Education.
- Storey, J. A. (2000). 'Fracture lines' in the career environment. In A. Collin & R. A. Young (Eds.), *The future of career* (pp. 21-36). Cambridge, UK: Cambridge University Press.
- Swanson, J. L. (1995). The process and outcome of career counseling. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology: Theory, research, and practice*. (2nd ed., pp. 217-259). Mahwah, NJ: Lawrence Erlbaum Associates.
- Thite, M. (2001). Help us but help yourself: the paradox of contemporary career management. *Career Development International*, 6(6), 312-317.
- Trigwell, K., & Reid, A. (1998). Introduction: Work-based learning and the students' perspective. *Higher Education Research & Development*, 17(2), 141-154.
- United Nations Educational Scientific and Cultural Organisation. (1998). *Handbook on career counselling. A practical manual for developing, implementing and assessing career counselling services in higher education settings*. Paris: Author.
- Universities Australia. (2008). *A national internship scheme: Enhancing the skills and work-readiness of Australian university graduates*. Canberra: Author.
- Watts, A. G. (1977). Careers education in higher education: Principles and practice. *British Journal of Guidance & Counselling*, 5, 167-184.
- Watts, A. G. (1997). *Strategic directions for careers services in higher education. NICEC Project Report*. Cambridge: CRAC.
- Watts, A. G. (1999a). The economic and social benefits of guidance. *Educational and Vocational Guidance Bulletin*, 63, 12-19.
- Watts, A. G. (1999b). *Reshaping career development for the 21st century*. Derby: Centre for Guidance Studies, University of Derby.
- Watts, A. G. (2000). Career development and public policy. *Journal of Employment Counseling*, 37, 62-75.
- Watts, A. G. (2002). Career guidance and public policy: Global issues and challenges. *International Conference of the International Association for Education and Vocational Guidance*. Retrieved 6 November, 2004, from <http://www.oecd.org/dataoecd/27/41/2494491.pdf>
- Watts, A. G. (2006). *Career development learning and employability*. Heslington, York: The Higher Education Academy.
- Watts, A. G. (2008a, 19 June). *Career development learning and work-integrated learning: A conceptual perspective from the UK*. 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. (2008b, 19 June). *Career development learning and work-integrated learning: Some synthesising reflections*. 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. (nd). Why career development matters. London: Careers England.
- Watts, A. G., & Dent, G. (2006). The 'P' word: Productivity in the delivery of career guidance services. *British Journal of Guidance & Counselling*, 34(2), 177-189.
- 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 31 December, 2005, from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079984605/PublicPolicy_CareerDev.pdf
- Watts, A. G., & Sultana, R. G. (2004). Career guidance policies in 37 countries: Contrasts and common themes. *International Journal for Educational and Vocational Guidance*, 105-122.
- Watts, A. G., Sweet, R., Haines, C., & McMahon, M. (2006). International symposium on career development and public policy: Synthesis of country papers. *Australian Journal of Career Development*, 15(3), 33-44.

- Weisz, M., & Smith, S. (2005). *Critical changes for successful cooperative education*. Paper presented at the HERDSA Conference 2005, Sydney.
- Whiston, S. C., & Keller, B. K. (2004). The influences of the family of origin on career development: A review and analysis. *The Counseling Psychologist, 32*(4), 493-568.
- Whiston, S. C., Sexton, T. L., & Lasoff, D. L. (1998). Career-intervention outcome: A replication and extension of Oliver and Spokane (1988). *Journal of Counseling Psychology, 45*, 150-165.
- Willet, J. (1999). *Careers education quality framework*. Canberra: Department of Education, Training and Youth Affairs.
- Willing and Able Mentoring. (2009). Willing and Able Mentoring. Retrieved 16 February, 2009, from <http://www.graduatecareers.com.au/content/view/full/318>
- Yorke, M. (2006a). *Employability in higher education: What it is - what it is not*. Heslington, York: The Higher Education Academy.
- Yorke, M. (Ed.). (2006b). *Learning & employability series 1 and 2*. Heslington, York: The Higher Education Academy.
- Yorke, M., & Knight, P. T. (2006). *Embedding employability into the curriculum*. Heslington, York: The Higher Education Academy.

