Quality curriculum and career development: using an evidence-based approach to embed career development learning in the curriculum

SONIA FERNS

Curtin University

JULIE HOWELL

Curtin University

LAUREN TAYLOR

Curtin University

ANN KOSOVICH

Curtin University

Universities are increasingly accountable to government agencies, industry bodies and students for the quality and content of the courses (programs) on offer. Underpinning the overarching concept of what constitutes a quality course are questions pertaining to the role of universities and competing agendas of research and teaching. The effectiveness of universities in equipping graduates for employment is also hotly debated in many sectors of the educational and corporate world. As a result, discussions on incorporating career development learning into curricula have gained momentum. Curtin University completed a three year strategic project at the end of 2009, Curriculum 2010 (C2010). The project involved several key tasks, the largest being the Comprehensive Course Review of every course at the University. Tools were developed to support teaching staff and ensure an evidence based approach to this process. The process of comprehensive course review required a cultural shift within the university and a rethinking of the features of a quality course and what a graduate should know and be able to do upon completion. One of these tools, the curriculum map, recorded core elements of the curriculum such as learning outcomes, assessments, the weighting, timing and value of assessments and the level of thinking using Bloom's Taxonomy. During the course of the project, links were made with many sectors of the university including The Careers Centre. As staff from The Office of Assessment Teaching and Learning and The Careers Centre began to collaborate, it became apparent that the curriculum map could be easily modified to indicate where career development learning was occurring in the curriculum and thus maximise opportunities to embed career development learning in the course experience. Within Higher Education the knowledge and skills associated with career development learning has been achieved typically through the delivery of career services by 'stand alone' Careers Centres or on an informal basis through Faculties and extra curricula activities, as a value added support service. While Career Centres have formed a part of the University infrastructure for the past 15 years, it is challenging to have system wide impact when the Careers Centre is isolated from academic faculties across the University. To be effective in the provision of resources and support to assist students and graduates nurture well rounded career development skills, it is imperative that higher education institutions incorporate career development learning into courses by working collaboratively with Teaching and Learning Centres. This paper documents a case study showing how the curriculum map was used to highlight where career development learning was occurring and how the gaps were identified. Suggestions for working with staff are explored and ideas for further research and modifications to the process are determined. This paper highlights the advantages of establishing networks and partnerships within the University to facilitate sustainable and systemic best practice through the sharing of resources, expertise and processes This paper will highlight an evidence based approach for incorporating and assessing career development learning in the curriculum through the use of a curriculum map which generates a visual representation of where career development learning is addressed across a course and identifies gaps in the curriculum.

Keywords: Curriculum mapping, career development, partnerships, assessment

Introduction

Universities are increasingly accountable to government agencies, industry bodies and students for the quality and content of the courses (programs) on offer. Underpinning the overarching concept of what constitutes a quality course are questions pertaining to the role of universities and competing agendas of research and teaching. The effectiveness of universities in equipping graduates for employment is also hotly debated in many sectors of the educational and corporate world (Lees, 2002). As a result, discussions on incorporating career development learning into curricula have gained momentum (Watts & Butcher, 2008; Holmes, 2001). This topic generates questions about the role of universities and how they conduct business. Careers advice and preparation in relation to employment is critical in a university context since employment is recognised as a key exit outcome for students.

Using a case study approach, this paper outlines where career development learning occurs in the curriculum of two large undergraduate programs. A description of the process is included which highlights the benefits of the Careers Centre and the Teaching and Learning arm of the university working collaboratively to optimise outcomes for both sectors. The paper also describes the tools and resources used to engage staff. Ultimately, through the process of investigating where career development learning is occurring across a program of study and participating in robust conversations, the concept of preparing students for the workplace is given increased consideration by teaching staff.

Background

Employers, government and professional bodies have consistently urged universities to better prepare graduates for the workforce (Precision Consultancy, 2007). Work ready attributes, also known as graduate attributes or employability skills, are now a key element of most university courses. While they may vary in precise wording, essentially these attributes focus on skills such as teamwork, communication and problem solving; skills considered to be essential for success as an employee. The challenge lies with universities to ensure a well rounded and comprehensive course experience for students culminating in work ready graduates (Watts, 2008). A strong education system ensures citizens are resilient, informed, adaptable and confident to manage the consequences of the new global economy with all its opportunities and threats (Review of Australian Higher Education, 2008). This suggests a university education is far more than mere knowledge and technical know-how; it is about equipping students with strategies and skills that facilitate success and survival in a competitive and demanding environment. Watts,(2008) considers career development learning as a means of acquiring competencies that facilitate lifelong and sustainable employment. This encompasses not only employability skills but also the skills to manage a career (Smith et al, 2009).

A curriculum model where careers service works closely with teaching departments is paramount to a well rounded course. Foskett and Johnston (2006) emphasize that for effective careers development, it is crucial that career practitioners and curriculum developers work collaboratively. Yorke and Knight (2006) believe such an approach will enhance the curriculum by incorporating the development of employability and career management skills into courses. These authors believe that as career development learning becomes widely embedded as part of core curriculum it may have considerable implications for the structural position of careers services within

institutions. Strategic positioning of career practitioners and Curriculum Developers will enhance synergies and facilitate collaborative working opportunities with teaching staff to create meaningful and relevant curriculum for students, culminating in work ready graduates.

According to Lees (2002) the issue of whether employability skills (and therefore career development learning) should be embedded in the curriculum or a bolt-on supplement is at the core of the employability debate. Currently in Australia both modes are employed (Smith et al, 2009); however, there is strong argument for embedding and integrating these skills across the curriculum (Lees, 2002; Yorke & Yorke 2007; McIlveen et al, 2008). Foskett and Johnston (2006), outline five possible structures which range from offering discrete units to embedding employability skills throughout the curriculum. However, all models are underscored by the need for career practitioners and curriculum developers to be working closely together.

Law (2005) argues that careers education is not suitable as a stand-alone academic subject, and the integrating of careers development in curriculum should be a priority. Similarly, recommendations provided by DEEWR (2008) state that employability skills should be explicitly identified in all university curricula. Career development learning has greatest impact when embedded throughout the curriculum but there are a number of obstacles to achieving this, including a lack of resources and infrastructure, and that of overcoming resistance to the idea. According to Yorke and Knight (2004) there is a considerable amount of overlap between the aim of supporting good learning and that of enhancing employability. By creating clear and concise learning outcomes supplemented with quality learning experiences, embedding employability and career development skills should follow.

Career development is an essential component of the curriculum. Students, graduates, employers and Government are critical stakeholders who clearly want a university education to contribute to developing employable, self-managing individuals. Morley (2001) believes higher education is designed to serve social-equity goals by increasing access for disadvantaged groups. According to Morley, attention also needs to be paid to enhancing their subsequent success in the labour market. Career development learning offers an additional dimension to institutional strategies designed to foster the employability of students. It makes the value of such strategies transparent to students and strengthens the sustainability of their benefits. The Quality Assurance Agency for Higher Education (2010) states that higher education institutions should prepare students not only 'for a successful transition to employment' but also 'for effective management of their career thereafter'.

Scott (2008) stated that students expected personal and vocational relevance and coherence in what is being studied and assessed and the capacity to be appropriately employed on graduation. Ultimately how can universities meet this expectation? Much has been written about the need to build employability skills into the curriculum but little on how to actually achieve this. As discussed by Smith et al (2009) the extent to which career development learning is embedded in higher education curriculum is unclear and the evidence of the efficacy of curricular interventions in relation to this theme are limited (McIlveen et al, 2008; Bimrose, Barnes & Brown 2005).

Based on the Australian Blueprint for Career Development (See Appendix 1), Curtin University has incorporated the mapping of career development learning competencies into the curriculum map. The curriculum map is designed as an Excel document which generates visual representations of various elements of the curriculum. Figure 1 provides an example of data from the curriculum map presented in graphical format. The chart in Figure 1 is generated from data on an Excel spreadsheet and demonstrates the spread of Graduate Attributes across a 3 year undergraduate degree program. Visual representation of different curriculum elements such as the example in Figure 1, provide the

stimulus for discussions with teaching staff through identification of strengths and deficiencies in the curriculum.

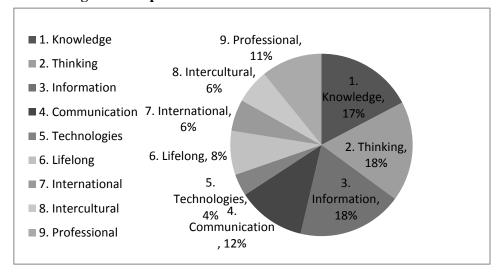


Figure 1. Emphasis of Graduate Attributes across a course

Comprehensive Course Review

Curriculum 2010 (C2010), a strategic 3 year project at Curtin University in Western Australia, culminated in December 2009. A key task of the project was for all viable courses at the University to undergo Comprehensive Course Review. This process aimed to ensure all courses at Curtin are consistent in shape, structure and standard; and have clearly articulated and intellectually challenging unit learning outcomes with assessment tasks designed to enable students to show their achievement of those outcomes (Oliver et al, 2007; Oliver et al, 2007). To achieve the outcomes of the C2010 project and ensure an evidence based approach to engage teaching staff, the curriculum map was developed and enhanced through-out the life of the project.

Curtin has adopted the triple-i curriculum which emphasises three key areas of the curriculum: industry (graduate employability); international, Indigenous and intercultural (global citizenship); and interdisciplinary (rich educational choices). Embedding these components into the curriculum is challenging and requires a plethora of expertise. Hence, in the review of existing curriculum and the development of new curriculum a collaborative approach was deemed essential. Such an approach maximises available resources within the University. The Careers Centre, with industry contacts and expertise in developing work ready skills, is an obvious representative to have around the table at critical stages of the review process. Credibility of the process is strengthened for the Careers Centre through the partnership with the Teaching and Learning centre (Watts & Butcher, 2008).

Definitions

The Australian Blueprint for Career Development is a framework for designing, implementing and evaluating career development programs. The Blueprint identifies the skills, attitudes and knowledge that individuals need to make sound choices and to effectively manage their careers. (http://www.blueprint.edu.au/index.php/framework/) See Appendix 1 for further details.

Career Development Learning (CDL) describes curriculum content where attention is paid to helping groups of individuals to make educational, training and occupational choices and to develop the competencies to manage their careers (OECD, 2004).

Common Ground

Much of what universities have to offer is implemented through their curriculum (Watts et al,1996) . It is in relation to this wider curriculum that the importance of career strategies and programmes are frequently measured. Particularly challenging for the Careers Centre is the need to continually re-negotiate within a wider agenda, the position of worth (or lack of) that CDL is perceived to hold within the university (Holmes, 2001). Advancing CDL requires ongoing attention to the curriculum agenda.

The emerging collaborative relationship with the Office of Assessment Teaching and Learning at Curtin has facilitated the process of beginning to embed CDL into the curriculum of Curtin courses. The aim is to move the Centre's involvement in the curricula beyond the occasional workshop to intensive involvement in curriculum development and design.

A key outcome of the partnership is the acceleration in which the Careers Centre has become part of the support in delivering employability skills and career management skills into the curriculum. The Australian Blueprint for Career Development and the curriculum mapping tool provides Curtin with a mechanism for demonstrating where and how CDL occurs in the curriculum. This process becomes more manageable and achievable through use of the Curriculum Mapping tool developed for the purpose of Comprehensive Course Review at Curtin. However, it is the support in developing and implementing strong pedagogical practice in the delivery of CDL where the Careers Centre at Curtin attaches considerable importance to the working relationship with the Office of Assessment Teaching and Learning.

Case Studies

Two large undergraduate degree programs which had previously completed the Comprehensive Course Review process through the C2010 project were selected for the case studies. The Heads of School, Directors of Teaching and Learning for both Schools and Course Coordinators were consulted about the process and agreement sought. All relevant personnel agreed to take part in the case study.

Figure 2 provides an excerpt from a curriculum map showing the curriculum information for one unit. This template is used to collate the information for all units in the course.

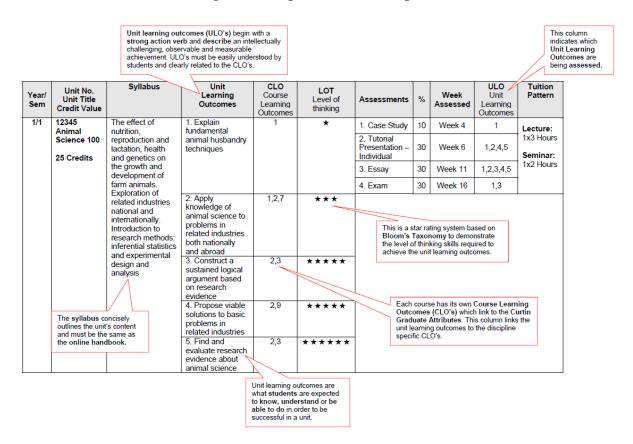


Figure 2: Sample curriculum map

The Comprehensive Course Review process had been completed and curriculum maps for both courses formally approved. The curriculum maps provided a readily available source of curriculum data for career practitioners to work with teaching staff to map the frequency and level of CDL in the curriculum.

Case Study 1

Course Profile

Case Study 1 was based on a large undergraduate specialist program. Table 1 shows the profile of the course. The data conveys the nature of the student cohort which typically studies this course. The course experiences high demand with an increase evident from 2009 to 2010. Approximately 41% of the total student count is international. While the average Tertiary Entrance Rank (TER) on entry has decreased marginally, it remains a competitive course requiring a high score to gain admission.

Table 1: Course profile course A

Table 1: Course pron		2010 1700
Case Study 1 - First Preferences	2009	2010 YTD
School Leavers	82	86
Non School Leavers	79	103
Total First Preferences	161	189
Case Study 1 - Average TER	2009	2010 YTD
School Leavers	93.1	91.0
Non School Leavers	93.8	91.6
All Students	93.5	91.3
Case Study 1 - Course Commencing Students	2009	2010 YTD
1-Domestic Cwth	90	101
4-IFP Onshore	50	49
Total Commencing Students	140	150
Case Study 1 - Course Total Students	2009	2010 YTD
1-Domestic Cwth	408	385
4-IFP Onshore	211	212
Total Students	619	597
Case Study 1 - Course Commencing EFTSL	2009	2010 YTD
1-Cwth Supported	76.2	94.5
3-Int Fee - Onshr	47.4	46.2
Total Commencing EFTSL	123.7	140.8
Case Study 1 - Course Total EFTSL	2009	2010 YTD
1-Cwth Supported	366.2	355.4
3-Int Fee - Onshr	198.4	200.3
Total EFTSL	564.6	555.8

Prior to beginning the mapping of CDL in the curriculum, an analysis of Course Experience Questionaire (CEQ) qualitative data was undertaken using CEQuery data analysis software. CEQ comments from 2007 and 2008 were collated and organised into subdomains. The visualisation in Figure 3 shows frequency of CEQ comments related to best aspects in each domain. The thicker lines and larger circles represent a higher occurrence of comments relating to that particular domain.

Ocod third/fourth year learning experience (5)

Adequate preparation for profession (7)

University life and friendship (4)

Useful practical experience/work placement (16)

Figure 3: Visualisation best aspects CEQ comments course A

From Figure 3 it is evident that graduates are very complimentary about their teachers. There is also a clear emphasis on the value of practical experience or a work placement. Figure 4 below indicates frequency of domains which graduates believed required improvement.

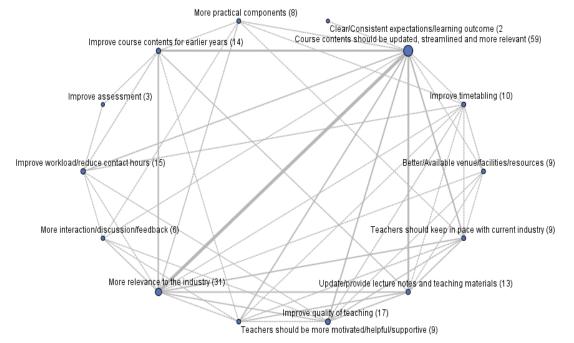


Figure 4 Visualisation of needs improvement CEQ comments course B

This data was used to ascertain that graduates perceived the course would be enhanced with a greater emphasis on career development and preparation for the work place.

Using the completed curriculum map, the syllabus and learning outcomes for each unit were analysed to identify key words and themes with links to the Blueprint competencies. These links were then scrutinised in detail to identify two facets of the Blueprint's framework. The competencies addressed were recorded and categorised according to the four stage learning taxonomy. This analysis provided a benchmark of where and how career development was already embedded in the curriculum and an overview of the competencies that were not addressed or were addressed in limited capacity.

Through discussion with teaching staff, ideas were generated about where information, observations and activities relating to specific competencies could be further strengthened by aligning them to the learning outcomes and assessment. Linking the career development competencies to assessment demonstrates competence at the higher taxonomy levels of 'personalise' or 'act', rather than the more passive learning activities at the 'acquire' taxonomy level.

Once the curriculum mapping of the CDL competencies was complete, the data was entered onto the Excel curriculum map and visuals were created providing a graphical representation of where and how the competencies were addressed across the whole course (program). This is shown in Figure 5.

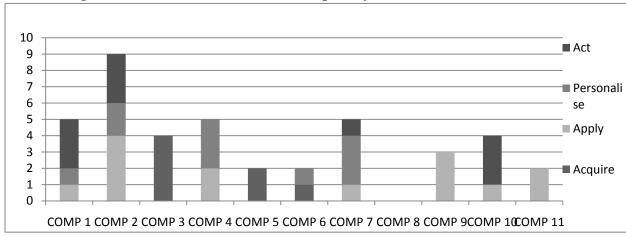


Figure 5 Number of times an ABCD competency is addressed in course A

The graph in Figure 5 shows that while most competencies were addressed, there is no evidence of competency 8. This graph illustrates the number of times a competency was addressed with the colour representing the developmental level of the competency. The graph shows an emphasis on competency 2 and while competency 3 has been addressed on 4 occasions, it is in the lower order of development being in the 'acquire' category. The colour breakdown suggests there is reasonable spread of the developmental phases of 'acquire', 'apply', 'personalise' and 'act'.

Where, how and to what level CDL is addressed in the curriculum is dependent on the nature of the discipline. The visual representation of this data instigates robust conversation among teaching staff and often initiates innovative ideas for enhancing the curriculum and incorporating CDL in a meaningful and relevant manner.

Findings

Graduates reported the practical experiences in the course useful and acknowledged the importance of industry expertise and preparation through-out their educational experience. The key domain identified as needing improvement was related to more relevance to industry and career. The visualisation generated from the mapping exercise shows that competency 8 'Make career enhancing decisions' has not been addressed and competency 3 'Change and grow throughout life' has been addressed but only at the lower taxonomy level of 'acquire'. The graph illustrates that while there is a reasonable spread of the Blueprint competencies across the course, it seems there is an emphasis on the lower level skills. Teaching staff need to explore ways of addressing the competencies at a more complex level.

Case Study 2

Course B is also a highly specialised professional undergraduate degree. The course profile in Table 2 shows the preferences, enrolment figures and TER scores over a 2 year period. Data indicates that demand for this course increased in 2010; however, enrolment of commencing students declined marginally. The average TER has remained steady and total course enrolments have grown.

Table 2: Course profile course B

Table 2: Course profile c		
Case Study 2 - First Preferences	2009	2010 YTD
School Leavers	83	115
Non School Leavers	79	120
Total First Preferences	162	235
Case Study 2 - Average TER	2009	2010 YTD
School Leavers	79.5	81.1
Non School Leavers	85.7	83.9
All Students	82.6	82.5
Case Study 2 - Course Commencing Students	2009	2010 YTD
1-Domestic Cwth	206	180
4-IFP Onshore	20	17
Total Commencing Students	226	197
Case Study 2 - Course Total Students	2009	2010 YTD
1-Domestic Cwth	514	547
2-Domestic Fee	0	0
4-IFP Onshore	48	46
Total Students	562	593
Case Study 2 - Course Commencing EFTSL	2009	2010 YTD
1-Cwth Supported	151.7	157.1
3-Int Fee - Onshr	15.4	15.6
Total Commencing EFTSL	167.1	172.8
Case Study 2 - Course Total EFTSL	2009	2010 YTD
1-Cwth Supported	387.7	443.6
2-Domestic Full Fee	0.9	0.5
3-Int Fee - Onshr	40.4	36.3
Total EFTSL	428.9	480.4

Prior to mapping CDL in the curriculum, an analysis of Course Experience Questionaire (CEQ) qualitative data was undertaken using the CEQuery data analysis software. CEQ best aspects and needs improvement comments from 2007 and 2008 were collated and organised into subdomains. Figure 6 shows the visualisation of this data for best aspects and Figure 7 presents the analysis for needs improvement.

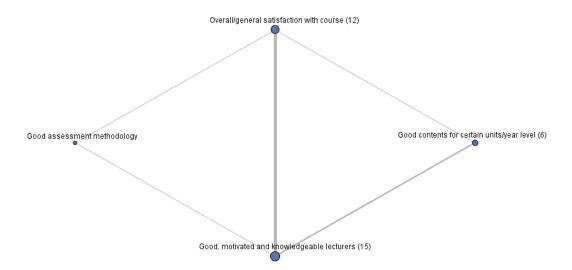


Figure 6: Visualisation best aspects CEQ comments course B

Despite the small number of comments relating to best aspects, the analysis in Figure 6 illustrates that the comments concentrated in 4 key domains. Students felt their learning experience was greatly enhanced by the good, enthusiastic and helpful staff members. Students also voiced their overall satisfaction with the course.

Figure 7 shows students' comments relating to areas needing improvement of Course B centred mainly on the need to have more practical components, specifically the need for more work experience/placement. There was also varied feedback on the improvement of course content.

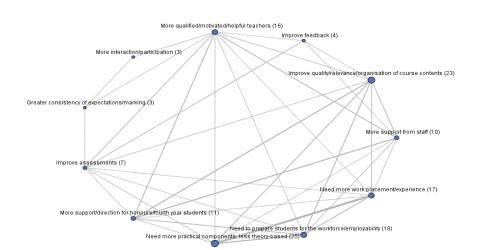


Figure 7 Visualisation of needs improvement CEQ comments course B

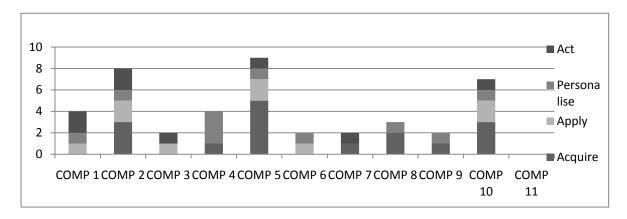


Figure 8 Number of times an ABCD competency is addressed in course B

Figure 7 illustrates the number of times a competency was addressed with the colour representing the development level of the competency. The graph in Figure 8 demonstrates that all but competency 11 is addressed.

Findings

Graduates indentified the need for more practical components to be built into the course. This domain showed strong links to the issue of course relevance. As evident from Figure 8, across the curriculum of the course, there was an emphasis on competency 2, 5 and 10. Each of these competencies belongs to a different area of the Blueprint: 'Personal Management, 'Learning and Work Exploration' and 'Career Building'. This spread is positive but perhaps greater prominence needs to be given to incorporating the higher taxonomy levels of 'apply' and 'act'. Competency 11, 'Understand, engage in and manage the career building process' appears to be absent from the curriculum.

Engaging Staff

Through participation in the curriculum mapping exercise and interacting with the visual representations of the data, teaching staff tended to be more engaged with the process and keen to contribute in a constructive and meaningful way. This process was multi-purpose in its intention: it allowed for the Careers Centre to gain a deeper understanding of the learning outcomes, unit content and delivery methodologies; it provided the opportunity for the Careers Centre to explain possible ideas for addressing the gaps and suggest ways to strengthen the curriculum; it provided meaning and relevant professional development for teaching staff; it assisted in relationship building between the Careers Centre and Faculty staff; and it nurtured a greater understanding of the role of the Careers Centre and how they support teaching areas. Building of these relationships are paramount in the effectiveness of delivery of careers in the curriculum and creating further opportunities for collaborative teaching and learning with the ultimate aim of enhancing the student experience.

Future Developments

To ensure these tools and learning practices remain relevant and pedagogically sound, it is imperative to incorporate further research and benchmarking activities. Applying what has been learnt through conducting the two case studies, mapping CDL in the curriculum will be integrated into the Comprehensive Course Review process across the Institution. Incorporating CDL into assessment will be a focus as part of the university's systemic approach to improving assessment practices. The inclusion of Curtin's iPortfolio as a mechanism for assessing CDL will be explored. Furthermore, an ALTC Fellowship is currently underway: *B*enchmarking Partnerships for Graduate Employability (see http://web.me.com/beverleyoliver1/benchmarking/About.html). The curriculum map and the evidence based practices it enables are being promoted globally with an intention to benchmark.

Conclusion

The success of this initiative is reliant on established working relationships, familiarity with the curriculum review process and an understanding of curriculum design protocols. While the process itself is a form of professional development, a willingness to participate and recognition of the importance of CDL is imperative. It is essential for leaders of the teaching area such as Heads of School and Deans Teaching and Learning to act as champions and assist in driving the engagement of staff. The process of mapping CDL in the curriculum serves multiple purposes. It provides visual evidence of strategically important elements of the curriculum and a means of relaying accountability to accrediting bodies, government agencies and other auditing organisations.

Curriculum development in careers education is a major priority (Watts, 1996) to ensure graduates are well positioned to manage challenging and demanding careers in a rapidly changing and global world. Career centres are poised to make a stronger contribution to the graduate employability agenda (DEEWR, 2008). Through engaging in curriculum development activities and working directly with teaching staff, Careers at Curtin are on the cusp of making a significant impact in this arena.

References

- Australian Government. (2008). *Review of Australian Higher Education Final Report*. Commonwealth of Australia. www.deewr.gov.au/he.review.finalreport.
- Australian Learning and Teaching Council. (2009). Teaching Fellowship: Facilitating national benchmarking of achievement of graduate attributes and employability skills at course level, from http://www.altc.edu.au/altc-teaching-fellow-beverley-oliver
- Bimrose, H., Barnes, S., & Brown, J. (2005). A systematic literature review of research into career-related interventions for higher education. Warwick Institute for Employment and Research.
- Australian Blueprint for Career Development. http://www.blueprint.edu.au/index.php/framework/ Accessed on 22 may 2010.
- Department of Education, Employment and Workplace Relations. (2008). Review of career development services in Australian tertiary institutions.
- Foskett, R., & Johnston, B (2006). Curriculum development and career decision-making in higher education: Credit-bearing careers education. Final Report. University of Southampton.

- Holmes, L. (2001). Reconsidering graduate employability: the 'graduate identity' approach. *Quality in Higher Education*. 7(2): 111-119.
- Law, B. (2005). Careers education in a curriculum. In A. Watts, Law. B, Kileen. J, Kidd. & J, Hawthorn, R. *Rethinking careers education and guidance: Theory, policy and practice.* (pp 210-232). London: Routledge.
- Lees, D. (2002). Graduate employability literature review. LTSN Generic Centre.
- McIlveen, P., Brooks, S., Lichtenburg, A., Smith, M., Torjul, P., & Tyler, J. (2008). Career development learning & work-integrated learning in Australian higher education: A discussion paper. National Association of Graduate Careers Advisory Services Australia.
- McKenzie, M., and Howell, J. (2005). "A snapshot of Australian university career services." *Australian Journal of Career Development* 14(2): 6-14.
- Morley., (2001). Producing new workers: Quality, equality and employability in higher education. *Quality in Higher Education*. 7(2). 130-138.
- Organisation for Economic Co-operation and Development (OECD). (2004), Career Guidance and Public Policy: Bridging the Gap. http://www.oecd.org/dataoecd/33/45/34050171.pdf
- Oliver, B., Jones. S., Ferns, S., & Tucker, B. (2007). *Mapping curricula: ensuring work-ready graduates by mapping course learning outcomes and higher order thinking skills*. Paper presented at the Evaluation and Assessment Conference. Brisbane. 2007.
- Oliver, B., Tucker, B., Jones. S., & Ferns, S. (2007). Are our students work ready?: Graduate and employer feedback for comprehensive course review. Paper presented at the Evaluation and Assessment Conference. Brisbane. 2007.
- Precision Consulting. (2007). *Graduate eTuckermployability skills*. Business, Industry and Higher Education Collaboration Council. Melbourne.
- Quality Assurance Agency. (2010). Code of practice for the assurance of academic quality and standards in higher education. Section 8 Career education, information, advice & guidance. www.qaa.ac.uk
- Scott, G. (2008). University student engagement and satisfaction with learning and teaching, University of Western Sydney.
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009) *Career development learning: Maximising the contribution of work-integrated learning to the student experience*. Final Project Report on behalf of National Association of Graduate Careers Advisory Services. University of Wollongong.
- Watts, A.G. (2008). 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., & Butcher, V. (2008). Break-out or break-up: Implications of institutional employability strategies for the role and structure of university careers services. Cambridge.
- Watts, A.G., Law, B., Killeen, J., Kidd, J., & Hawthorn, R, (1996). *Rethinking careers education and guidance: theory, policy and practice.* New York. Routledge.
- Yorke, M., & Knight, P. (2004). Learning, curriculum and employability in higher education .New York: RoutledgeFalmer.
- Yorke, M., & Knight, P. (2006). *Embeddging employability into the curriculum*. Heslington, York: The Higher Education Academy.
- Yorke, M., & Knight. P. (2007). Evidence informed pedagogy and the enhancement of student employability. *Teaching in Higher Education*. 12(2). 157-170.

Appendix 1 - THE FRAMEWORK: The Competencies - 4 Phases

Competencies	Phase I	Phase II	Phase III	Phase IV		
Area A: Personal Management						
	self concept while discovering its	1.2 Build a positive self concept and understand its influence on life and work	1.3 Develop abilities to maintain a positive self concept	1.4 Improve abilities to maintain a positive self concept		
	2.1 Develop abilities for building positive relationships in life		2.3 Develop abilities for building positive relationships in life and work	2.4 Improve abilities for building positive relationships in life and work		
3 Change and grow Throughout life	3.1 Discover that change and growth are part of life	3.2 Learn to respond to change and growth	3.3 Learn to respond to change that affects your well-being	3.4 Develop strategies for responding positively to life and work changes		
Area B: Learning and	l Work Exploration					
lifelong learning		4.2 Link life-long learning to personal career aspirations	4.3 Link lifelong learning to the career building process	4.4 Participate in continuous learning supportive of career goals		
	5.1 Understand the nature of career information	5.2 Locate and use career information	5.3 Locate and evaluate a range of career information sources	5.4 Use career information effectively in the management of your career		
relationship between	6.1 Discover how work contributes to individuals' lives	6.2 Understand how work contributes to the community	how societal needs and economic conditions influence the nature and structure of work	6.4 Incorporate your understanding of changing economic, social and employment conditions into your career planning		

Area C: Career Building

7 Secure / create and 7.1 Explore effective 7.2 Develop qualities maintain work ways of working to seek and obtain/create work	abilities to seek,	to seek, obtain/create
8 Make career 8.1 Explore and 8.2 Link decision-enhancing decisions improve decision-making to career making building	8.3 Engage in career decision-making	8.4 Incorporate realism into your career decision-making
9 Maintain balanced 9.1 Explore and 9.2 Explore and life and work roles understand interrelationship life roles of interrelationship between life and work roles	•	
10 Understand the 10.1 Discover the 10.2 Explore non-changing nature of nature of gendered traditional life and life and work roles work options		gender bias and stereotypes in your
Understand, 11.1 Explore the 11.2 Understand and engage in and underlying concepts experience the career manage the career of the career building building process building process	of your career	11.4 Manage your career building process