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Professional learning in the business curriculum: engaging industry, academics and students

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Abstract

Professional Learning has become a feature of business curricula in universities around the world. The term "professional learning" (PL) is often used to encapsulate dimensions of educational programs that highlight contemporary industry issues explicitly linked to industry and professional bodies. PL encompasses the skills, qualities and attributes that are required by industry and the processes through which those skills are acquired. It encourages deep learning in relation to the student's future profession, and includes industry engagement, work-integrated learning and authentic learning environments. This paper describes a typology of approaches to PL derived from a national study of good practices in business faculties in Australian universities. It identifies the enablers and impediments to the successful adoption of PL, and discusses the challenges associated with industry engagement in PL for academics, students and business organisations.

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Professional Learning in the Business Curriculum: Engaging Industry, Academics and Students

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Abstract

Professional Learning has become a feature of business curricula in universities around the world. The term “professional learning” (PL) is often used to encapsulate dimensions of educational programs that highlight contemporary industry issues explicitly linked to industry and professional bodies. PL encompasses the skills, qualities and attributes that are required by industry and the processes through which those skills are acquired. It encourages deep learning in relation to the student’s future profession, and includes industry engagement,

work-integrated learning and authentic learning environments.

This paper describes a typology of approaches to PL derived from a national study of good practices in business faculties in Australian universities. It identifies the enablers and impediments to the successful adoption of PL, and discusses the challenges associated with industry engagement in PL for academics, students and business organisations.

Keywords: Professional learning, Work-integrated learning, Industry engagement

1. Background

The focus on the need for university graduates to be career and work ready has been well documented and much discussed in recent years (Bennett, 2006; Herrington & Herrington, 2006; Kiggins, Cambourne, & Ferry 2005). The attention paid to graduate capability and employability skills has led to the introduction of a variety of explicit measures to ensure that graduates' transition into professional life is supported by a range of preparatory initiatives embedded in the curriculum. Business, commerce and management courses in particular have been targeted for greater attention in this regard (Business Industry Higher Education Collaboration Council, 2007).

Several factors have been identified as contributing explicitly to the impetus to include professional learning (PL) in the business curriculum. These include external factors such as the globalisation of companies and international competition, the emergence of new technologies and communication methods (Moreland, 2005); severe skills shortages; and dissatisfaction with the employability of graduates due to a perception of underdeveloped generic skills, such as communication, teamwork, problem-solving and self-management skills (Franz, 2008). There has also been a heightened focus on expanding the notion of employability to include personal attributes in acknowledgement of the benefits of these to job satisfaction, productivity, skills transfer and adaptability, and achieving a good employee–job fit (Franz, 2008). Concurrently, the costs associated with obtaining a higher education as well as the way higher education is funded have resulted in a focus on the importance of graduate employability (Berman, 2008; Orrell, 2004); in Australia, the Graduate Destination Survey serves as a measure of the accountability required of universities to produce work-ready graduates (Orrell, 2004). As a result, embedding some form of work placement or work-integrated learning in degree courses has become a common practice.

There is general agreement that, “how Australian universities prepare their adult students and graduates for the world-of-work should be critically appraised.” (Smith *et al.*, 2009, p. 14) To improve the relevance of university study and to better prepare graduates for the world of work, many Australian universities have sought to engage industry in the development, delivery and evaluation of their curriculum. Although there are many costs associated with embedding PL within the curriculum, it has been argued that these are ultimately outweighed by the benefits (Harvey *et al.*, 1998).

Numerous benefits of using PL in education have been cited in the literature. Gibson *et al.* (2002) discuss the benefits to the students, saying that PL provides opportunities to enrich or learn generic and discipline-specific skills relevant to students' future professions by experiencing what it is actually like to work in a real business. These “real-life” experiences provide access to resources that would not be available in traditional-style learning environments as well as help students to establish a work history and professional network, with chances to gain references or future work. Harvey *et al.* (1998) also views these opportunities to apply theory and develop skills in the work context as a good platform for students to explore the suitability of their chosen field of work. Another benefit of PL for students is for personal development with characteristics such as confidence, maturity and motivation being further developed as a result of PL, according to Moreland (2005).

Benefits for universities have also been identified by Gibson *et al.* (2002). They found that degree programs that provide PL opportunities are more attractive to prospective students and therefore attract a higher intake. They also reported that PL is a straightforward way to make links with industry which can lead to consulting and collaborative opportunities and so strengthen institutional programs. Harvey *et al.* (1998) have also recognized that when PL is embedded into the curriculum graduate employability is increased, which is a good way to improve a university's Graduate Destination Survey results.

Notable benefits for industry have also been discussed in the literature. It has been reported that businesses and organizations benefit from being able to identify students who may be suitable future employees (Gibson *et al.*, 2002). They also can take advantage of developing links with academics, and this interaction can generate new ideas that can lead to projects that the business might not normally pursue (Harvey *et al.*, 1998). Lastly, there is the advantage for industries of being able to access resources associated with the university, including opportunities for cooperation and collaboration on other mutually beneficial projects (Gibson *et al.*, 2002).

Freudenberg, Brimble and Cameron (2009) provide further empirical evidence of some of the benefits for students at universities that have partnered with industry to systematically integrate professional skills into undergraduate degrees. In their paper, which details the procedures and impact of a newly designed professional development program, they evidence the development of students' generic capabilities, employment readiness and understanding of their future profession. With evidence based on self-reporting, participants in their study claimed greater confidence, skills and professional awareness after exposure to the program than students who did not undertake the program.

The need for further investigation of how business students learn skills and gain knowledge related to their profession has been identified in the literature (Freudenberg, Brimble, & Cameron, 2009), and within the Australian context a scoping study on business education also highlighted the need for further work on PL (Australian Business Deans Council, 2008). Our paper discusses some of the findings from an Australia-wide two-year project, developed to further explore the use of PL within business degree programs. It describes a typology (a classification of approaches to PL according to their characteristics) derived from a national study of good practices; identifies the enablers and impediments to the successful adoption of PL; and, finally, discusses the challenges associated with industry engagement in PL for academics, students and business organisations.

2. Description of the PL project

The project to explore how best to embed PL in the business curriculum was undertaken by a partnership between four Australian universities (Victoria University; RMIT; University of Technology, Sydney; and Wollongong University) with an approach comprising of a number of stages:

- An extensive literature review;
- Documented analysis and review of institutional and business faculty mission statements (of 38 Australian Business Deans Council [ABDC] faculties);
- A survey of business academics to produce an inventory of professional learning practice to facilitate the categorization of professional learning and the development of a professional learning typology;
- Focus groups and workshops with business academics engaged in professional learning;
- Development of professional learning case studies, using the inventory of practice collected in the survey of academics, to illustrate the breadth of practice and external engagement strategies for each category in the typology;
- Development of resources to guide practice based on the typology and case studies, including a series of good practice principles; a set of enablers and impediments that need to be considered when implementing professional learning activities; guidelines on teaching approaches to develop specific professional capabilities in students; and some assessment tips to support designing professional learning;
- Industry advisory group input and review of the framework to explore innovative approaches and to review key findings.

The initial literature review set the context and also provided the basis from which we derived our definition of "professional learning" (PL) as:

the development of professional capabilities through teaching and learning experiences and activities that integrate academic, discipline-specific and industry-referenced knowledge, skills and attitudes.

Our survey of business academics in Australian universities produced an inventory of current PL practices and this was used as the initial database from which to develop a typology of PL. The survey phase was followed by a series of focus groups and workshops with business academics engaged in PL, conducted at several universities across five States. These events assisted in the initial peer review of the work done up to that stage, as well as with refining the emerging typology and obtaining qualitative data on approaches to industry engagement. They also gave the opportunity for discussions with academic staff from across the country about what they perceived as enablers and impediments to PL.

The next stage entailed the development of detailed PL case studies using the inventory of practice collected in the survey of academics, in order to illustrate the breadth of practice and external engagement strategies for each category in the typology. Using a case-study approach allowed academic staff to describe their approaches to PL in their own language and provided a rich and comprehensive set of practices. Details of the resultant typology are given in Section 3. The PL case studies led to the development of:

- a series of good practice principles;
- a set of enablers and impediments that need to be considered when implementing PL activities;
- guidelines on teaching approaches to developing specific professional capabilities in students; and
- assessment tips to support designing PL.

Throughout the project an Industry Advisory Group provided input and reviewed the typology. The Group provided us with the means to explore innovative approaches to liaison between university and industry, and they also gave feedback on the enablers and impediments to PL that had been identified by academics.

Dissemination of the final outcomes of the project has occurred through a website; presentations and workshops; and a final report for the Australian Learning and Teaching Council (ALTC, at <http://www.altc.edu.au/>). The project produced a range of key outcomes and deliverables including: 1) a typology of PL with a series of over seventy case studies illustrating each type; and 2) descriptions of enablers and impediments for academics wishing to engage successfully in embedding PL into the curriculum. These and other resources can be accessed from www.embeddingprofessionallearning.com. Section 3 describes the typology, and Section 4 presents a discussion about enablers and impediments for PL.

3. Types of PL

Developing a typology of PL provided an approach to conceptualising and operationalising PL for business disciplines in higher education. Eight main types of PL were identified and it is worth noting that in practice these types are not mutually exclusive, as there can be considerable overlap between them in teaching approaches, learning activities and intended outcomes.

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| i. Industry case study | An actual business scenario or challenge faced by business, requiring students to apply analytical and problem-solving skills to explore solutions and/or critically evaluate those made by business executives. |
| ii. Industry simulation | Reality-based, experiential learning-centered approaches engaging students in real-time analysis and decision making in real-world situations within the safety of an educational environment. |
| iii. Industry practitioner delivery | Industry practitioners engage in the teaching program to deliver specialized lectures, present in seminar series, conduct professional development workshops or participate in assessment of student projects and presentations. |
| iv. Industry mentoring | Matching students with a professional role model to enhance skills (instrumental) and attributes (developmental); investigating career options (transition and pathways); increasing understanding of the benefits of coursework (knowing and doing); and exposure to different thinking and learning methods. |
| v. Industry study tour | Includes field trips, site visits and more lengthy tours. Industry study tours aim to create opportunities by travelling to industry-related places and situations, allowing students to apply theory, see theory in practice, ask questions of professionals in situ, compare and contrast different sites of work, and connect curriculum and learning to professional practice. |
| vi. Industry placement | Immerses students in a workplace related to their discipline or career goals. Ideally, industry placement combines both class-based learning and structured and supported workplace activity with opportunities to reflect on learning and seek timely feedback on performance. |
| vii. Industry competition | Industry competitions involve individual businesses organizing, judging, sponsoring or in some other way encouraging students (often in teams) to compete against each other to achieve a business-oriented goal in a short timeframe. Industry competitions |

include marketing strategies, management plans, business start-up ideas and online business games. Recognition and rewards are an important incentive in this category.

viii. Industry project

Industry projects include a broad range of activities and typically involve the sort of work undertaken in the workplace. Industry projects include the production of a workplace artifact (for example management plan, business report, market research) and management activities. As well as providing a forum to apply theory to a real-world work issue, projects develop students' project management skills, team skills, communication skills and problem-solving skills.

4. PL enablers and impediments

One of the outcomes from the project was the identification of a series of enablers (a factor that allows for the development or maintenance of PL) and impediments (a factor that would hinder PL). These were identified by academics in focus group discussions about developing and delivering PL in their own professional setting and through the detailed case studies which included enablers and impediments in the template.

The institutional context was considered to have a strong impact on PL. Some academics found that their universities and faculties encouraged and supported embedding PL in the curriculum, empowered them as teachers and enabled facilitation of PL activities. However, when the institution did not provide this level of support through an institutional framework, then delivering PL was difficult. These impediments included factors like the fact that policies and procedures can be cumbersome especially when engaging with external parties; these policies were also found to be time consuming and at times costly, for example gaining ethics approval or meeting insurance requirements for offsite activities. Another impediment that was discussed was that PL is often considered to be a low priority and without academic rigor and so did not receive support within the institution. This lack of support had consequences for practice, for example, lack of change-management processes to encourage and train academics to develop their teaching practices to accommodate PL.

The level of institutional support affects resources available for PL activities. Academics told us that PL is more successful when customized systems and dedicated resources to support the development and implementation of professional learning are in place. Where there are dedicated funds to support PL pedagogies, industry sponsors who provide cash or in-kind support are also perceived as important to support PL in the curriculum and it was noted that without this financial support PL was not always possible in some programs. However, resources are often limited for initiatives especially within large core subjects, and this lack of funding can limit or stifle implementation; for example, the license fees required for some programs and databases, or the financial impost on students on international study tours, can impose additional financial burdens.

The availability of appropriate learning spaces is also relevant to the issue of adequacy of resources. Those institutions that had invested in the design of dedicated work areas for particular types of PL found that this enabled activities such as simulations, competitions and projects. The lack of appropriately designed or equipped learning spaces to support PL reported in many universities made such activities more difficult to deliver.

The successful engagement of industry was another factor that was cited as impacting on embedding PL in the curriculum. Elements that can enable PL include enthusiastic support and cooperation from industry partners and sponsors. This is manifested by, for instance, encouraging alumni to participate in activities to support learning; by using the existing networks of academic staff to develop partnerships; and by developing strong links between the university and the community. Involving industry in the design of the PL experiences either by collaboration or through industry-led initiatives and using industry adjuncts to deliver lectures and seminars are also of benefit to delivering this style of learning.

However, engaging industry and maintaining such relationships can be problematic and, when unsuccessful, can impede PL. Some industry organisations perceive partnering and sponsoring activities to be an expensive time constraint and so can be reluctant to participate. They are also often doubtful as to the benefit to their organisation of engaging with an academic institution and voice concerns about the variable quality of individual students or teams that they work with. The PL process in Australia has tended to be limited to support from the top 100 organizations, thus neglecting the opportunities that could be offered by small to medium enterprises. It was also reported that many industry–university relationships are based on individual academic or industry contacts, which renders them more precarious when these staff move to different work situations.

Dedicated and passionate teachers who are able to dedicate time to improve the student learning experience and maximise opportunities for contextualised learning and industry engagement are important for PL to be effective.

Academics unfamiliar with PL teaching techniques can be deterred by the amount of time required to establish and administer PL compared to more traditional curriculum and pedagogy. This additional time required to develop curriculum and pedagogy, train staff and manage teamwork is not always fully recognised in workload allocations, and so difficulties in balancing other work requirements and priorities – particularly research – can lead to academic resistance to changing their work practices in regards to teaching.

Reward and recognition of effective teaching practice was found to encourage staff and students to be active in PL, according to the responses from the surveys and focus groups. University promotion policies that recognise evidence-based practice and innovative teaching will promote PL, as will developing student prizes and celebration events to recognize PL-related achievements. However, some academics do not perceive teaching innovations and industry engagement to be of benefit for career progression: they believe that the quality of their teaching is less influential in gaining promotion, and that research outputs are more highly valued for promotion purposes.

Learning cultures also will have an impact on PL. When students value PL experiences then there is enthusiasm for this style of experiential practice-based learning, with students taking rich knowledge and experiences from class. This can also lead to students taking the initiative in their PL, including active engagement in student associations that organize professional development and industry networking events. However, many students consider the extra effort required to participate fully in PL activities to be burdensome. These students take the attitude that satisfying the basic requirements of their course is sufficient, rather than striving to maximise their learning experiences through PL opportunities. This is reflected in the divergence between the expectations that some students have compared with what industry is expecting of graduates, with a considerable gap often found between these two parties. Students with unrealistic expectations of roles and responsibilities during industry-based experiential learning often struggle with the PL experience, with some students becoming not particularly good ambassadors for their university.

The design of assessments appropriate for PL will make a difference to the effectiveness of the learning experience. Assessment that aligns with the learning objectives in an authentic manner strengthens PL, as those students who are driven by the assessment tasks will value the learning more if they can see its relevance to their chosen discipline. Academics report struggling to design assessments that reflect real-life experience; if they are unsuccessful, this will result in students not always understanding the links between the PL and their assignments. The other feature that teaching staff reported as problematic was the marking and moderation of assessment when using external parties to give feedback on student PL work.

Other impediments identified included a crowded curriculum, with internationalisation, sustainability, inter-cultural competence and the like all vying for limited space within the curriculum. In some instances, academics themselves lacked recent industry experience and they found this to be a considerable obstacle. Academics with recent industry experience believed PL occupied a natural and logical place in business higher education. This experience (and the accompanying professional networks they often brought to the delivery of PL) considerably enhanced academics' capacity to design and deliver a PL curriculum. Also, there was agreement that PL required a different pedagogical approach and skill set compared to a more traditional lecture-tutorial model. An absence of such skills and reluctance to change long-standing teaching approaches and work practices were seen by academics as impediments to the expansion of PL beyond the real enthusiasts.

5. Industry engagement

As mentioned in the previous section, PL is often reliant on the same industry partners, easily exhausting the use of the Australian top 100 companies if universities limit themselves in their outreach and industry engagement activities. Therefore, when embarking on PL it is essential to consider developing sustainable engagement with large, medium and small companies. On reviewing the case studies it was evident that there were a series of common factors conducive to productively fostering productive industry engagement. These are:

1. Strong, long-term reciprocal partnerships with industry and relevant professional associations.

It is beneficial to emphasise the benefit of engagement for the industry, establishing the why, with whom and for what outcomes clearly through effective communication. Acknowledgement of the existence of a collaborative partnership is also important to give recognition of the contribution made by industry. Professional bodies and alumni are both good mechanisms for extending networks to support PL.

2. Student interaction.

The most effective PL occurs when students work directly with business clients. This experience provides an authentic setting with feedback from students that this form of PL is both relevant and current, whilst

industry partners appreciate the opportunity to engage with potential employees.

3. *Industry-developed learning experiences.*

Working with – or supporting – industry to develop new ideas for PL is an effective way to promote industry engagement. Encouraging industry partners to initiate activities (such as competitions), to sponsor events (for example projects), or to contribute to assessing or judging student outcomes will foster a sense of involvement and ownership of the process.

6. Discussion

Educating students in business and management subject areas needs careful consideration. It is difficult to portray how the business world typically looks or operates in textbooks and curriculum. Another impediment is that students who demonstrate good academic performance do not necessarily translate these achievements into effective performance in a business work environment. Graduates can be strong on technical skills but often find the “rough and tumble” of industry difficult to manage; therefore a successful transition from education to professional practice can be difficult and many students need additional support in achieving this. The role of universities in PL has two vital elements: to develop graduate attributes and capabilities; and to be responsive to the changing business environment (in addition to the university contribution to the creation of new knowledge and improved business practice). University education that includes PL experiences that expose students to professional environment and business practices, whether through cooperative education or business simulation or one of the other types of PL, is crucial to enabling an effective transition from education to employment and career. The opportunity for ongoing practice, critical review and reflection throughout the student learning experience enhances the effective transition from learner to professional practitioner.

An effective business curriculum needs to be integrated across subjects and with relevant assessments that contribute to student perceptions of their university studies as, “a time of growth and a learning experience with clearly defined and identifiable outcomes”, rather than a “hurdle”. The challenge is to help students understand possible outcomes during their course of study, as well as the links between their approach to education and their broader life experiences. Providing authentic learning experiences and positive role models is crucial to having an impact on student learning.

The student learning culture can be a particular challenge as many students do not fully engage in their education. In 2009, 78% of university students in Australia spent in excess of 8 hours per week in paid employment, often unrelated to their coursework, and many view learning and work as distinct and unconnected activities (AUSSE, 2009). As was learnt from the reported impediments connected with the learning culture, student perceptions and values about the purpose of university education – and the behavior that results – need to be challenged so that learners do not see university solely as a means to gain a qualification before entering and experiencing the professional domain. Education needs to be seen as integral to the life and career journey of students, a journey in which they are immersed as effective learners, with an awareness that industry is looking for recent graduates to demonstrate a breadth of experiences indicative of broad-ranging capabilities and interests. We need to better integrate academic work with the workplace and vice versa. We need to move away from a framework that compartmentalises life experiences – social, study, sport, work – and encourage students to connect the seemingly disparate parts of their lives. Making these connections will better enable new graduates to prepare successfully for their professional lives.

As employers of graduates, the business sector has a vested interest in the professional development of students as prospective employees. These are the next generation of professionals and business leaders. Collaborative approaches to curriculum development and student learning should be further explored via more sophisticated and clearly articulated university–industry engagement and partnerships. University–industry collaboration should ideally start right from the conceptual stage of program and curriculum development. At an operational level, a detailed implementation plan with clear tasks and responsibilities will assist in articulating the mutual responsibilities and obligations involved in developing and sustaining business professions. And fundamental to building and monitoring relationships is the identification of intended learning outcomes and benefits.

Nevertheless, universities and professional associations need to be realistic about what is achievable. Collaboration in whatever form – hosting student placements, assisting with program advisory committees, developing industry-based projects – is time consuming, and the costs associated with industry engagement should not be underestimated. This means that it is important for PL to be supported at all levels from institutional policies, to recognition of workload at the faculty level, to encouraging individual staff to engage, to actively motivating students to embark on “real-life” learning experiences.

Innovation and creativity, and the process of change that accompanies them, require guidance, encouragement and support from university leaders. Curriculum innovation that is informed by industry and the professions needs to be embedded in university practice, with explicit recognition and reward for academics involved in this process. There is a prevalent perception that innovative PL curriculum and industry engagement is not always valued and this undermines the sustainability of PL. Universities should model outstanding work and reward excellence in the area of PL – a challenge for all business educators into the future.

References

- Australian Business Deans Council (ABDC). (2008). Business as usual: a collaborative and inclusive investigation of existing resources, strengths, gaps and challenges to be addressed for sustainability in teaching and learning in Australian university business faculties. Carrick Institute for Teaching and Learning in Higher Education. [Online] Available: http://www.altc.edu.au/carrick/webdav/users/siteadmin/public/Grants_DBI_ABDC%20Freeman%20Business%20Final%20Report_March27_2008.pdf (November 15, 2008).
- Australian Survey of Student Engagement (AUSSE). (2009). Doing more for learning: enhancing engagement and outcomes. [Online] Available: http://ausse.acer.edu.au/images/docs/AUSSE_2009_Student_Engagement_Report.pdf (January 27, 2011).
- Bennett, S. (2006). Using related case studies to support authentic project activities, In A. Herrington, & J. Herrington (Eds.), *Authentic learning environments in higher education*. London: Information Science Publishing. pp.120–134.
- Berman, J. (2008). Connecting with industry: bridging the divide. *Journal of Higher Education Policy and Management*, 30(2), 165–174.
- Business Industry Higher Education Collaboration Council (BIHECC). (2007). Graduate employability skills. [Online] Available: http://www.dest.gov.au/sectors/higher_education/programmes_funding/programme_categories/key_priorities/documents/graduate_employability_skills_pdf.htm (October 17, 2007).
- Franz, J. M. (2008). A pedagogical model of higher education/industry engagement for enhancing employability and professional practice. In *Proceedings of Work Integrated Learning (WIL): transforming futures, practice... pedagogy...partnerships*, WIL Manly, Sydney, pp. 164–169.
- Freudenberg, B., Brimble, M., & Cameron, C. (2009). The building of a professional: creating greater career identity within a degree. *The International Journal of Learning*, 16(10). [Online] Available: <http://www.Learning-Journal.com> (February 2, 2010).
- Gibson, E., Brodie, S., Sharpe, S., Wong, D. K. Y., Deane, E., & Fraser, S. (2002). Towards the development of a work integrated learning unit. Conference paper presented at *Celebrating Teaching at Macquarie*, Sydney, Australia, November 28–29.
- Harvey, L., Geall, V., & Moon, S. (1998). Work experience: expanding opportunities for undergraduates. Centre for Research into Quality [Online] Available: <http://www0.bcu.ac.uk/crq/publications/we/zwecon.html> (February 11, 2010).
- Herrington, A., & Herrington J. (Eds.). (2006). *Authentic learning environments in higher education*. London: Information Science Publishing.
- Kiggins, J., Cambourne, B., & Ferry, B. (2005). Re-organising and integrating the knowledge bases of initial teacher education: the knowledge building community program. In G. Hoban (Ed.), *The missing links in teacher education: innovative approaches to designing teacher education programs*. Dordrecht, The Netherlands: Springer. pp. 75–94.
- Moreland, N. (2005). Work-related learning in higher education: learning and employability (Series 2). The Higher Education Academy. [Online] Available: <http://www.palatine.ac.uk/files/emp/1273.pdf> (February 15, 2010).
- Orrell, J. (2004). Work-integrated learning programmes: management and educational quality. *Proceedings of the Australian Universities Quality Forum 2004*. AUQA Occasional Publication. [Online] Available: <https://tls.vu.edu.au/vucollege/LiWC/resources/Orrell.pdf> (September 27, 2010).
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). Career development learning: maximizing the contribution of work-integrated learning to the student experience – final project report, June 2009. Wollongong, Australia: University of Wollongong, Careers Central, Academic Services Division.