

Jane Spowart

Faulty of Management

University of Johannesburg

South Africa

jspowart@uj.ac.za

Discussion paper

Abstract

Preparing future-fit leaders; the challenge of work integrated learning in the Faculty of Management in a comprehensive university.

In South Africa there is considerable discussion on the introduction of work-integrated learning (WIL) in university programmes. This would prepare graduates for the challenges of the world of work. It would also support students from diverse backgrounds to be knowledgeable and skilled, to be responsible citizens and have the ability to be employed (CHE, 2011).

The University of Johannesburg (UJ) is six years old. It is a comprehensive university; the result of the merger between a Technikon and a traditional university. Most vocational programmes in the former Technikon included compulsory work-integrated learning. In the traditional university this was not the case except in the professional programmes such as nursing and teaching. In the

Faculty of Management (FoM), one of nine faculties in the UJ, there is a fairly even mix of vocational and traditional programmes.

In the last three to four years, the FoM Departmental heads have been encouraged to integrate any form of work integrated learning into their programmes in order to prepare the students to be future-fit leaders for the world of work. This discussion paper will reflect on what has been achieved in the FoM by way of introducing WIL, primarily into the traditional programmes. Reference will also be made to the numerous reasons why there is resistance to this but on the other hand how others have taken up the challenge.

Key words: Comprehensive University, Faculty of Management, Work integrated learning, World of Work.

Introduction

In South Africa many of the Universities of Technology (UoT) (similar to a polytechnic) are introducing compulsory work-integrated learning (WIL) into university programmes. This would support all students, but particularly those from rural areas who have not been exposed to the economic centers in the country. Students from diverse backgrounds would be knowledgeable, responsible citizens and prepared for the challenges of the world of work by improving their employability skills (CHE, 2011; Fallows and Stevens, 2000). There is a serious need for skilled people in South Africa but many graduates are unable to find jobs.

The Ministry of Higher Education and Training is advised by the Council for Higher Education (CHE). The Higher Education Quality Committee (HEQC) is the division responsible to the CHE for quality assurance and promotion in higher education (CHE, 2011). The Council of

Higher Education describes WIL as “fostering university learning that is less didactic and more situated, participative and ‘real world ‘oriented” (CHE, 2011:4).

The University of Johannesburg (UJ) is a comprehensive university and six years old. It is the result of the merger in 2005 between the former Technikon Witwatersrand (TWR), the Rand Afrikaans University (RAU) a traditional Afrikaans university and the Soweto and East Rand campuses of Vista University. It’s unique academic architecture reflects a comprehensive range of learning programmes, leading to a variety of qualifications, from vocational (diplomas) and traditional academic (degrees) to professional and postgraduate (UJ website, 2012). Although the UJ merger is now several years ago, it has had an important impact on the Faculty of Management (FoM). The Faculty is one of the most complex in the UJ as in nearly all of the eight departments there is a range of offerings of both the vocational diplomas and traditional BCom/BA degrees, as well as post-graduate masters and PhD degrees. These offerings provide prospective students with opportunities to select from a wide range of programmes which can culminate in a doctorate, should all the necessary criteria for admission be met.

In the FoM, one of nine faculties in the UJ, there is a fairly even mix of vocational and traditional programmes. The Departments in the Faculty include Applied Information Studies, Business Management (including Entrepreneurship), Industrial Psychology and People Management, Information Knowledge Management, Marketing Management, Transport and Supply Chain Management and the School of Tourism and Hospitality. It should be noted that there are no finance, accounting or economic courses as these are housed in a sister Faculty of Financial and Economic Sciences due to there being approximately 10000 students in each faculty.

In the former Technikon programmes it was compulsory to have work-integrated learning (WIL) as a component of the curriculum. On the other hand most of the traditional degree programmes did not include any form of WIL or work-integrated learning except for those professional degree programmes such as law, education, medicine and nursing (Brown, 2010). There is no reason besides numerous challenges why traditional degree offerings in the FoM should not introduce a form of WIL, given the relatively wide CHE definition of this (CHE, 2011:4; South Africa, 2002). This definition states “WIL is used as an umbrella term to describe curricular, pedagogic and assessment practices across a range of academic disciplines that integrate formal learning and workplace concerns.” It goes on to “the integration of theory and practice in student learning can occur through a range of WIL approaches, apart from formal or informal work placements.”

Literature study

In South Africa, a developing country, the unemployment rate is 23.9% in the fourth quarter of 2011 (<http://www.tradingeconomics.com>, 2012). One way to address this is to develop students with good work ethics and suitable work attributes by fostering university learning that is not so didactic but rather based on the real world of work (CHE, 2011). It is thought that university graduates would be able to find employment but there are many who do not (Ntuli, 2007). The skills challenges that South Africans experience can be addressed by HEIs introducing a form of WIL into all curricula, similar to the Australian concept where WIL is seen as an opportunity to improve the work-readiness of all graduates, even in non-traditional programmes (McLennan & Keating, 2008). There are approximately 600 000 unemployed arts, humanities and social science university graduates at present in South Africa but the private sector has 800 000

vacancies in management, law, engineering, finance, medicine (Roberts, 2012). This mismatch could be due to the subject choices at school. It seems absurd that a country with a high unemployment rate has graduates without work, and that professionals need to be imported or attracted to the country.

This situation may arise from the fact that students lack employability skills and work-readiness, even though they may have the theoretical or technical skills required for the world of work (Crebert, Bates, Bell, Patrick & Cragolini, 2004; Hind, Moss & McKellan, 2007). Behavioural (soft) skills such as those achieved through curricula that embed critical outcomes such as communication skills, teamwork, organize and manage oneself, usually deliver more competent and employable graduates (Coll & Zegwaard, 2006; Hind et al., 2007; Maher & Graves, 2007).

Employers have indicated that students are often not prepared for the workplace and call on universities to produce more employable graduates (Barrie, 2006; Kember & Leung, 2005) by providing transferable skills that can be taken into the workplace (Smith, Clegg, Lawrence & Todd, 2007). Employers are expecting graduates to be work-ready and demanding a range of competencies and qualities of them (Yorke & Harvey, 2005). Educational institutions should be critical of their programme offerings and question if they are nurturing the appropriate competencies and consider how best to ensure these are developed (Kember & Leung, 2005).

In a competitive and challenging environment, graduates need to have a good attitude towards their own responsibility of ensuring their employability skills and potential for a successful career (Maher & Graves, 2007). WIL programmes have been used successfully for this purpose (Freudenberg, Brimble & Vyvyan, 2010) and can be used as a pathway for work-readiness (McLennan & Keating, 2008).

Students' subject matter knowledge is usually satisfactory (Crebert, et al., 2004; Hind., 2007) but by improving and developing their competencies such as interpersonal skills, teamwork, communication and problem solving skills, value will be added to their intellectual capabilities making them more employable (Freudenberg, et al., 2010; Hind et al., 2007; Maher & Graves, 2007). Sometimes, employers are critical of the shortcomings of graduates but this is not necessarily due to the inappropriateness of the curriculum but rather a matter of failure in the transfer process of theory to real world requirements in a job situation (Crebert, et al., 2004). The time spent in real life situations gives students the opportunity to apply abstract concepts learnt in the classroom and achieve effective learning by transferring this knowledge to the real world where practical application takes place. The University of Cincinnati reports that the popular belief that WIL links theory and practice by reinforcing things learned in the classroom within the context of work to be far more and that the effects go beyond the scope of the curriculum. Students are exposed to much more complex life situations than can ever be covered in the classroom (Cedercreutz & Cates, 2010). In Australia there have been clear recommendations to emphasise the role that WIL can play in advancing employability skills in higher education (McLennan & Keating, 2008).

Work-integrated learning refers to the linking of learning to the work role, provided by appropriate on- and off-job opportunities for training and learning. It is also referred to as a formalised educational programme supervised by the faculty of an educational institution, and takes place in a real work related environment (Wessels, 2005). As WIL programmes can vary so much, it is useful to use the term WIL as this refers to structured programmes that integrate theory and practical and not necessarily require actual work in the work place (McLennan & Keating, 2008).

The pressing need of having graduates work-ready increases the need for higher education institutions to expand the number of WIL opportunities (Harris, Jones & Coutts, 2010). The Australian higher education community has increasingly adopted WIL as a valid pedagogy in order to respond to the needs of employers for work ready graduates (Brown, 2010; McLennan & Keating, 2008). Higher Education institutions that have a reputation for providing students with a good basic theoretical and practical grounding together with WIL enhance the employability of their students (Reddan, 2008). Research has shown that the starting salaries of graduates have been influenced by their work experience obtained during the degree or diploma studies (Freudenberg et al., 2010).

WIL is a collaborative arrangement and is dependent on the meaningful interaction of the three role players: the employer (industry mentor) who provides training, the academic supervisor from the HEI and the student. All three parties play a role in the success of the training experience (Bell, (SD); Orrell, 2004; Stanley, 2005). Procedures for placement of students for WIL include the evaluation of the work place as suitable for the required training, the ability of the industry mentor to supervise the training, and the willingness of the industry staff to have a student for a period of learning. An industry mentor must take responsibility for the planning and implementation of the WIL programme, in consultation with the academic supervisor. The industry supervisor needs to guide and support the student, ensure that the activities are relevant and will add to learning while integrating the theory with the practical (Fleming and Eames, 2005).

Winch & Ingram (2002) refer to the opportunities created by WIL to learn on many levels by forming new networks, building new relationships, gaining new knowledge and to experience the

power of technology in a context of the working world. One of the greatest challenges in South Africa is to educate the youth, for them to have skills to enable them to find gainful employment. Many graduates cannot find work. Too many young people who should be in Further Education and Training (FET) colleges, in a learner ship or apprenticed, obtain places in higher education institutions. The result is that they take much longer to graduate or they drop out. If they were placed correctly and gained skills training including a form of WIL, these young people will be better prepared to enter the world of work.

Developing countries are challenged in being able to employ graduates that suit the company. The students often lack good business sense, and have limited work or real life experiences (Gamble, Patrick & Peach, 2010). It is frequently said that WIL programmes are used to develop students' competencies, and improve attitudes and behaviour (Freudenberg, et al., 2010). South Africa as a developing country is in need of attracting and retaining well skilled staff, especially graduates (Gamble, Patrick, & Peach, 2010). In a competitive and challenging environment, graduates need to have a good attitude towards their own responsibility of ensuring their employability skills and potential for a successful career (Maher & Graves, 2007).

When students are involved in project work that is 'real world', the result should have meaningful outcomes for both the organisation, the staff in both the organisation and at the institution (Harris et al., 2010), as well as the students who do the research and the student 'audience' who listen to the presentation.

The large numbers of business students place a huge expense on resources, both human, time and financially. The large numbers make it difficult to be responsible for the institution to place all their students. This forces the institution to rather rely on students to find their own placements

or make use of simulated exercises. The numbers will also make mentoring extremely time consuming and expensive (Hoskyn & Martin, 2011).

Consistent assessment is a concern, evaluating students in a similar way is not possible when students undertake various types of WIL which cannot be compared (Hoskyn & Martin, 2011). Mention is also made of good relationships being stretched when industry mentors are extended due to so many students being involved. In many cases, students are assessed on the submissions of portfolios, reflective diaries, assignments and reports rather than the actual work completed in the work environment. This allows for greater understanding between the HEI and business as well as building valuable bridges between the world of work and the world of academia (Hodges, 2011).

Good student assessment will involve industry mentors. A further problem that can be a barrier to implementation, depending on the policies in a university, is the requirement that assessment is done by a lecturer who holds a qualification equal to or one level higher than the assessment being evaluated. It is often found that the mentor actually does not comply with this requirement, but of course, their work experience should be considered as essentially useful and of benefit to the student.

Many lecturers just do not want to be involved in WIL (Rowe, 2011). They lack interest, the time or are expected to deliver on research activities rather than spending time on placing, visiting, and supporting students in the work place (Brown, 2011).

Discussion

The CHE (2011:16) makes suggestions when designing curricular that four main curricular modalities for WIL, although there are alternatives and hybrids, be considered for inclusion: work-directed theoretical learning, problem-based/oriented learning, project-based learning and workplace learning. What is meant by these terms?

- work-directed theoretical learning: theoretical subjects should be aligned with the practical or practice-based components bringing the theory and practice together in a meaningful way
- problem-based/oriented learning: this is rather a blended approach of pure problem-based learning where the inclusion of real world scenarios for problem-based activities, assignments, projects, and so on
- project-based learning: learning through the use of real projects located in the world of work or a simulation of these
- workplace learning: students are placed in the work environment for the purposes of learning.

Within these generic concepts, there is a range of different approaches and models (Brown, 2010). These can include those mentioned above as well as internships, work-integrated learning, field work, workplace research, and practicums amongst others.

In 2009, the FoM made an important commitment to increasing the involvement of a form of WIL in all undergraduate programmes in the Faculty. This can include sustainable community-engagement as well as service-learning projects by engaging with the local communities. It is recommended that whatever form, how big or how small a section of any module that some form of assessment takes place.

The Faculty took the decision to encourage the introduction of a form of WIL into each under graduate programme, whether a diploma or degree. This could include inviting guest lecturers, use of case studies, projects in conjunction with businesses, simulation of the work place, and actual practical applications on site such as preparing and serving meals to guests at the Hotel School. The departments were encouraged to arrange for all final year under graduate students to attend three workshops presented by the Careers Development division of Psychological and Career Development (PsyCaD) on career preparation, viz preparing your CV, interviewing skills and job search skills.

A brief overview follows of some of the more successful but diverse types of WIL that have either been introduced or sustained in programmes in the FoM:

In the School of Tourism and Hospitality (STH) the curricula of the National Diplomas (ND) of Tourism Management and Hospitality Management have always included WIL. The latter programme is considered the benchmark of WIL in the Faculty. Students spend six months in the industry. Placements are found for them, they are visited, mentored and assessed, and this takes place in the last semester before graduation. Students receive a small remuneration but opportunities for full time work often do result as a direct result of students being involved in WIL.

In the ND Small Business Management an interesting WIL concept is used. The students have a year to develop a small business in a local community without any financial inputs. They must realise a profit and report on the success of their projects. Unfortunately the success of students after the compulsory six months has not been recorded and tracked but will be in future. Some of

these small business projects may be considered service-learning (SL) when the student delivers an outcome in a community environment.

The BCom Honours Marketing Management students have a six month internship following the year of on-campus modules extending this to an eighteen month programme. This has been very successful but it has extended the length of the programme beyond the twelve months, which may disadvantage students time-wise but all students are offered employment as a direct result of this training.

The Direct Sales Association (DSA) of SA is the industry partner with the Department of Marketing Management. The ND Marketing Management students have to do practical sales as part of their Personal Selling module. The students are introduced to the products at a project day where they interact with the suppliers who exhibit the range of products. The students are set a financial turnover target to pass the module. Each week the sales persons from the various companies are on campus to offer training and question-and-answer sessions to assist the students. The students receive an incentive of a percentage as a commission. The total sales turnover during 2011 for the project was R3.3 Million (approx \$412 500) in 2011 amongst 810 students. A total of R760 000 (\$95000) as commission was paid back to the students. The UJ team has been internationally awarded twice for the success of the project and instrumental in rolling this out in other UoTs. .

Although WIL is not a prerequisite to obtain the Diploma in Information Technology, the final year students participate in projects where the top teams present to industry judges. In 2011 two of the diploma 3rd year projects were chosen to participate at the local finals, known as the Microsoft Imagine Cup. It is the world's premier student technology competition. Eligible

students had to use their imagination and passion to create a technology solution that addresses the Imagine Cup 2012 theme: “Imagine a world where technology helps solve the toughest problems”. In ten years, the Imagine Cup has grown to be a truly global competition focused on finding solutions to real-world problems. Since 2003, over 1.4 million students have participated in this competition with 358,000 students representing 183 countries and regions registering for the Imagine Cup 2011 competition.

The BCom Information Knowledge Management programme includes projects done in conjunction with industry. At the beginning of the academic year the lecturers and invited industry members decide on projects which the students then have to research. At the end of the semester, the students are judged by the lecturers, shortlisted and the finalists must then present to a panel of business experts. The students must dress in business attire for the presentations. This is a learning activity to teach them to dress correctly for an interview in the real world of work. The panel then selects the top three teams. Students who need to present these projects improve their oral presentation skills. They receive prizes and are acknowledged within the Department.

Work-integrated learning is not necessarily the perfect idea for degree programmes (Lester & Costley, 2010). WIL has not been on the radar of traditional university programmes nor has it been at the fore-front of industry players as student learning is not their core business (Harris et al., 2010). However, the Faculty of Management is preparing future-fit graduates. One of the Faculty’s thrusts is to strengthen and enhance quality interactions between industry partners and the university, nurture new partnerships while sustaining those already in place. WIL can provide opportunities to develop working partnerships that are mutually respectful of the capabilities and

developmental potential of both partner organisations and student body (Gamble, et al., 2010; Harris, et al., 2010).

Feedback from Departments as to their reluctance to increase WIL includes major challenges such as the difficulties of finding appropriate placements for so many students (Brown, 2010), it is time-consuming, the lack of sufficient resources to support visits, academic work overload and administratively managing a WIL programme (Freudenberg, et al., 2010; Harris, et al., 2010) are cited as reasons why Departments do not embrace the concept. With the intense focus on improving staff qualifications and increasing research outputs, staff does not have the inclination to expend energy on including WIL in their programmes, even though there are distinct benefits for students.

In order to have successful implementation, it is necessary that an institution-wide position on WIL is supported by policy (Brown, 2010). In the UJ it has been difficult to convince senior management that serious consideration should be given to the inclusion of WIL in all undergraduate programmes. In student meetings, their request is for this type of 'real-world' learning (Brown, 2010; Harris et al., 2010) as they realise the advantage of working in industry prior to graduation, with the possibility of obtaining work employment immediately on completion of their studies.

Conclusions and implications

Living in such a diverse cultural society, graduates from South Africa should have an advantage for employment in international organisations if they use their skills to cope with change (Gamble, et al., 2010). The general agreement is that WIL should be incorporated into degree

programmes in order to ensure students gain generic, employability skills such as communication, teamwork, problem-solving, initiative, planning and organizing, self-management and technology learning (Brown, 2010; Freudenberg, Brimble, & Cameron. 2010.)

Research undertaken by Freudenberg et al., (2010) realised that WIL has had a positive impact on students' learning, the presence of industry representatives together with their involvement in projects and presentations, motivates students to work harder and prepare work of a better standard (Freudenberg et al., 2010). Involved academics will experience interaction with industry making them aware of the current business environment as well as having better engaged students, improved success rates and a sense of satisfaction due to the employability and employment of students.

With the wide variety of programmes offered in the Faculty of Management, it will not be possible to 'dictate' as to what type of WIL should be integrated into the curriculum but it should be left to the decision of the experts in the field. The large number of students in the business field of studies causes additional pressures to the encouragement of introducing this on a wide scale (Hoskyn & Martin, 2011). However it is essential that higher education be responsible to provide its graduates with the skills to operate professionally within the business environment (Vignali & Hodgson, 2007).

Another benefit of WIL programmes is the possibility of enhancing and providing a sustainable competitive advantage that is a vital part of the academic strategy (Cedercreutz & Cates, 2010) and the educational standing of the institution. The success of any programme is dependant on the attitudes of the parties involved, in particular the academic staff and the students (Rowe 2011). Students in the USA (Rowe, 2011) have been known to select the university that they

attend on the strength of the WIL programmes, providing the opportunity to gain work experience and resulting in job offers. However, criticism is leveled at the lecturers who lack knowledge and skills needed in the workplace (Rowe, 2011). Lack of appropriate jobs is a major problem as well as the staff who lack interest, lack time or even the ability to seek out placements for the students.

There are many challenges, but the opportunities that can be learnt from other higher education institutions when WIL is embedded into curricula (Brown, 2011) should be studied. Other challenges include finding suitable WIL opportunities, maintaining partnerships with business, especially when mentors resign and move on elsewhere. It is also a positive opportunity to include research initiatives into the WIL component, especially where WIL is included in post-graduate programmes. This will add a scholarly edge to the programmes (Brown, 2011). WIL requires academics who are not accustomed to this form of pedagogy to adapt to a different teaching and learning context, especially those who work in a traditional university environment (McLennan & Keating, 2008). Training for staff that is new to this should be supported by academic development programmes and should be recognised and rewarded for their contribution of their work in this area. Convincing staff to add this to their already busy schedules is a battle.

There is some evidence of UoTs and comprehensive universities experiencing mission drift from the diplomas toward offering more degree programmes due to the perceived recognition of graduating with a degree, rather than with a diploma (Higher Education and Training, 2012). This could lead to a greater number of students not being exposed to WIL with the obvious consequences, if the degree programmes do not have WIL integrated into the curricula. WIL

integrates campus life with business and civic community in a very effective way (Cedercreutz & Cates, 2010). This would impact on the development of future-fit graduates, could provide a definite edge to the FoM being chosen as the preferred provider of students for their further studies.

Bibliography

Barrie, S.C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51: 215-241.

Bell, B. (SD). WIL for one, WIL for all; an Australian case study. Griffiths University

Brown, N. (2010). WIL[ling] to share: an institutional conversation to guide policy and practice in work-integrated learning. *Higher Education Research & Development*, 29(5): 507-518.

Cedercreutz, K. & Cates, C. (2010). Cooperative education at the University of Cincinnati: A strategic asset in evolution. *AAC & U peer review*, Fall: 20-23.

Coll, R. & Zegwaard, K.E. (2006). Perceptions of desirable graduate competencies for science and technology new graduates. *Research in Science & Technological Education*, 24(1): 29-58.

Council on Higher Education (CHE). (2011). Work-Integrated learning: *Good Practice Guide*, *HE Monitor* No. 12, August, 2011.

Crebert, G., Bates, M., Bell, B., Patrick, C-J. & Cragolini, V. (2004). Ivory tower to Concrete Jungle Revisited. *Journal of Education and Work*, 17(1): 47-70.

Fallows, S. & Steven, C. (2000). Building employability skills in the higher education curriculum: a university-wide initiative. *Education & Training*, 42(2): 75-82.

- Fleming, J. & Eames, C. (2005). Student Learning in Relation to the Structure of the Cooperative Experience. *Asia-Pacific Journal of Cooperative Education*, 6(2): 26-31.
- Freudenberg, B., Brimble, M. & Cameron C. (2010). Where there is a WIL there is a way. *Higher Education Research & Development*, 29(5): 575-588.
- Freudenberg, B., Brimble, M. & Vyvyan, V. (2010). The Penny drops: Can Work Integrated Learning Improve Students' learning? *e-Journal of Business education & Scholarship of Teaching*, 4(1): 42-61.
- Gamble, N., Patrick, C.J. & Peach, D. (2010). Internationalising work-integrated learning: creating global citizens to meet the economic crisis and the skills shortage. *Higher Education Research & Development*, 29(5): 535-546.
- Harris, L., Jones, M. & Coutts, S. (2010). Partnerships and learning communities in work-integrated learning: designing a community services student placements program. *Higher Education Research & Development*, 29(5): 547-559.
- Higher Education and Training (2012). *Green Paper for Post-School Education and Training*. Republic of South Africa.
- Hind, D., Moss, S. & McKellan, S. (2007). Innovative Assessment Strategies for developing Employability Skills in the Tourism and Entertainment Management Curriculum at Leeds Metropolitan University. *Paper presented at the 2007 EuroCHRIE Conference*, Leeds, UK.
- Hodges, D. (2011). Assessment of student learning in cooperative education. In Coll, R. K. & Zegwaard, K. E. (Eds.) *International handbook for cooperative and work-integrated education*. 2nd ed. Lowell, M.A., World Association for Cooperative Education: 53-62.

- Hoskyn, K & Martin, A. (2011). Cooperative and work-integrated education in Business. In Coll, R. K. & Zegwaard, K. E. (Eds.). *International handbook for cooperative and work-integrated education*. 2nd ed. Lowell, M.A., World Association for Cooperative Education: 173-178.
- <http://www.tradingeconomics.com/south-africa/unemployment-rate> accessed 11 February 2012
- Kember, D. & Leung, D.Y.P. (2005). The Influence of the Teaching and Learning Environment on the Development of Generic Capabilities needed for a Knowledge-based Society. *Learning Environments Research*, 8: 245-266.
- Lester, S. & Costley, C. (2010). Work-based learning at higher education level: value, practice and critique. *Studies in Higher Education*, 35(5): 561-575.
- Maher, A. & Graves, S. (2007). Making students more employable: can higher education deliver? *Paper presented at the 2007 EuroCHRIE Conference*, Leeds, UK.
- McLennan, B. & Keating, S. (2008). Work-integrated Learning (WIL) in Australian universities: the challenges of mainstreaming *WIL*. *ALTC NAGCAS National Symposium*, June 2008, Melbourne.
- Ntuli, D. (2007). Graduates fail by degrees. *Business Times Careers*, April 1.
- Orrell, J. (2004). Work-integrated Learning programmes: Management and Educational Quality. *Proceedings of the Australian Universities Quality Forum*.
- Reddan, G. (2008). The benefits of job-search seminars and mock interviews in a work experience course. *Asia-Pacific Journal of Cooperative Education*, 9(2): 113-127.
- Roberts, J. (2012). Little desire to work in SA. *Business Times*, 11th January.
- Rowe, P.M. (2011). Cooperative and work-integrated education in graduate programmes. In Coll, R. K. & Zegwaard, K. E. (Eds.). *International handbook for cooperative and work-*

- integrated education*. 2nd ed. Lowell, M.A., World Association for Cooperative Education: 331-335.
- Smith, K., Clegg, S., Lawrence, E. & Todd, M.J. (2007). The challenges of reflection: students learning from work placements. *Innovations in Education and teaching International*, 44(2): 131 -141.
- South Africa. (2002). New academic policy for programmes and qualifications in higher education. Pretoria, South Africa: Government printer.
- Stanley, M. (2005). Co-operative Education: an effective educational strategy. *Journal for New Generation Sciences*, 3(2): 105-115.
- Vignali, G. & Hodgson, I. (2007). Real World Learning-Enhanced Employability. *Paper presented at the 2007 EuroCHRIE Conference*, Leeds, UK.
- Wessels, M. (2005). *Experiential Learning*. Juta and Co. Lansdowne, South Africa.
- Winch, A. & Ingram, H. (2002). Re-defining the focus of workplace learning. *International Journal of Contemporary Hospitality Management*, 14(7): 361-367.
- Yorke, M. & Harvey, L. (2005). Graduate Attributes and Their Development. *New Directions for Institutional Research*, 128: 41-58.