Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies

Beverley Oliver

b.oliver@deakin.edu.au

Deakin University

Abstract

Employability features more prominently on the agenda of higher education institutions when the economy falters or changes: the majority of students, and their families, expect a degree to deliver a career pathway as well as an education. This paper explores some of the trends and predictions in the rapidly changing world of work and proposes a re-worked definition of employability (based on Yorke’s widely-accepted definition from 2006): that employability means that students and graduates can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community and the economy. Likewise, work-integrated learning requires sharper definition than an ‘umbrella term’. This paper proposes that work-integrated learning includes a range of learning tasks that either resemble those expected of working graduates in their early careers, or are proximal to the workplaces or spaces, physical or digital, where professional work occurs. Determining the appropriate spread of tasks across a degree is best done by mapping assessments, ensuring there are more high level tasks in the latter years so that students are prompted to focus on the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community and the economy.

Keywords: Graduate employability, work-integrated learning, graduate employment, disruption, higher education

Introduction: The changing nature of work and employment in the twenty-first century

The early twenty-first century has seen the emergence of massively disrupted economies and business models, often spurred by technological innovations (Deloitte, 2012; Christensen, 2013). This is predicted to increasingly displace existing jobs. Analysis from the United Kingdom predicts that up to 54 per cent of finance and insurance jobs could be displaced in the next twenty years (Frey & Osborne, 2015). Similarly, there is a view that the European labour market is likely to see substantial disruption and change, with increased polarisation and more demand for high skilled employees through a continued shift from manufacturing to services (Dolphin 2015). The 2015 CEDA report claims that Australia is on the cusp of a new but very different industrial revolution (Committee for Economic Development of Australia, 2015): technology is going to dramatically reshape our workforce in coming years and the nation’s ability to rapidly adapt to technological change, and even more importantly, innovate, will be paramount for job creation and our future economic success (p.6). More specifically, the report predicts that almost five million jobs face a high
probability of being replaced in the next decade or two while a further 18.4 per cent of the workforce has a medium probability of having their roles eliminated (p.6) because computers will reshape the labour market in two key ways: they will directly substitute for labour, disrupt the way work is conducted, expand competition and reduce the costs to consumers – but they will also reduce the income of workers; and jobs with low levels of social interaction, creativity, mobility and dexterity are particularly vulnerable (p.6). Some suggest that the safeguard is that everyone should learn to code a computer, while others suggest that we need more nuanced literacies as either digital citizens who use the internet, process simple word documents and find information online; digital workers who can use more sophisticated tools directly related to a particular occupation; or digital makers who can build digital technology (UK Digital Skills Taskforce, 2014). Others focus more on creativity as a safeguard against computerisability insisting that Arts should be included in key skills (STEAM instead of STEM: Science, Technology, Engineering, Arts and Mathematics) skills and more to the need for STEAM (Bakhshi, Frey, & Osborne, 2015; Bakhshi & Windsor, 2015) or emphasise entrepreneurial, scientific and emotional skills (Dolphin, 2015).

Whatever the future holds, there are signs that patterns of work are already changing with more people choosing self-employment, short term and part-time work. Phillips claims that there has been a 45 per cent increase in self-employment in Europe in the past decade, with similar trends elsewhere, increasingly among older, high skill professionals (Phillips, 2015). There has been a continuous rise in part-time work (fewer than 35 hours per week) in Australia since the 1970s, reaching over 30 per cent of all employment in 2014. While this might be attributable to several factors including economic downturn, only a minority take part-time work because they cannot obtain full-time work: Lewis cites evidence from the Australian Bureau of Statistics suggesting that almost 70 per cent are happy with the part-time hours they work (females 75%; males 50%), and only 30 per cent of those males wish to work full-time (Lewis, 2015). Work choices are also likely to be strongly influenced by the rise of crowdsourcing and the sharing economy. Brabham (2013) defines crowdsourcing as an online, distributed problem-solving and production model that leverages the collective intelligence of online communities to serve specific organizational goals (p. xix) and delineates four categories: knowledge discovery and management; broadcast search; peer-vetted creative production; and distributed-human intelligence tasking all of which can provide opportunities for volunteering and for paid employment. Many terms describe the sharing economy: ‘collaborative consumption’, ‘commercial sharing systems’, ‘co-production’, ‘co-creation’, ‘prosumption’ and ‘access-based consumption’. Entities as diverse as Uber, Airbnb, Zipcar, Wikipedia, YouTube, Flickr, Facebook, Freecycle and Twitter participate in the sharing economy through temporary internet-enabled access to non-ownership models of utilising consumer goods and services (Belk, 2014).

Comprehensive and longitudinal studies are yet to emerge on the effects of these phenomena on graduate employment patterns, but anecdotes abound: Charlton recounts his experience of interviewing his Uber driver, and reflects on the excess of graduates (often debt-laden), the scarcity of graduate jobs, and the opportunities provided for 'gigs rather than careers' for short-term, casual and sporadic employment (often for more than one employer at a time) through the sharing economy (Charlton 2015). Recent reports suggest the trend will continue: in 2015, Australians reported increased time spent watching television and video online (17.2 hours a week) and 14-25 year olds view more streamed content (31%) than traditional broadcast (26%) in modern connected families that have, on average, two television sets, two laptops, two tablets and two smartphones (and after just over two years in the market, fitness bands are already owned by 13% of households). Many such devices are used to access social media: in 2015, 80 per cent of survey respondents used social media, up from 65 per cent in 2012 (59% on a daily basis; 23% more than three times per day) (Alcorn, Buchanan, Smith, & Gregory, 2015). It is difficult to disentangle volunteering from social media and the sharing economy – social media enables contribution for no
monetary gain (Wilson, 2000). In Twitter, for example, participants can be social activists, or share new research, artefacts, witticisms and solutions, or ask questions for no agreed or immediate monetary gain. Therefore, while work patterns are changing, lifestyle behaviours associated with media and sharing blur the lines even further between life and work.

In disrupted economies, what is graduate employment?

In the disrupted economy, employment no longer necessarily means winning or keeping for the long term a traditional, full-time position in a company, organisation, small business or institution. Even so, universities frequently promise through their recruitment to prepare ‘work ready’ graduates. For many years, governments have regularly measured and reported the capacity of higher education providers to produce graduates for labour markets – or more precisely, graduates’ abilities to secure full-time and part-time employment, or commence further study. In Australia, the Graduate Destination Survey (GDS) is the principal national dataset that reports the outcomes of Australian resident bachelor degree graduates, focusing on employment status, further study status, job search methods and broad type of work. National data in 2014 showed a deterioration in the short-term employment prospects of new graduates compared with 2013 (response rate was 59.3%). Of those either in, or seeking full-time employment:

- about 66 per cent were in full-time employment,
- about 20 per cent had part-time or casual work and continued to seek full-time employment, and
- about 12 per cent were not working and still seeking full-time employment (Graduate Careers Australia, 2014).

Experts suggest that the short-term graduate labour market has been deteriorating for some years and is unlikely to reverse; at the same time, student intake and course completions are increasing. Graduates often take more time to get jobs; however, their longer term prospects are relatively positive (Norton & Cherastidtham, 2014). Even though these data are alarming for many, it remains to be seen how national reporting will cope with shifting employment patterns if students and graduates increasingly favour part-time or self-employment, freelancing in simultaneous contacts, before they enrol in higher education, during their course, and beyond graduation: graduates enter and leave Australia, change careers from the one they originally trained for, exit the labour force temporarily or permanently, and work varying numbers of hours per week (p. 67).

Although economists and governments are likely to continue (as they should) to measure and report the amount of paid work undertaken by citizens, higher education providers educate their prospective and current students, their staff and industry alliances, and governing bodies, to understand the changing nature of work, and to consider employment more broadly.

In disrupted economies, what is graduate employability?

This paper proposes that ‘being employed’ in the twenty-first century increasingly means not just ‘working full-time or part-time’ but ‘finding and creating meaningful paid and unpaid work that benefits employees themselves, the workforce, the community and the economy’. This paper also contends that employment and employability, although often conflated, are separate concepts. Essentially, employment is about being employed, and employability is about being employable, regardless of the prevailing economic circumstances. Like the term ‘employment’, some rethinking is required in terms of how to define ‘employability’ in the disrupted economy.

Definitions and models abound on just what graduate employability is and how it might be conceived (Yorke, 2004; Little, 2006; Pool & Sewell, 2007). It is both complex and contested (UK Commission for Employment and Skills, 2009; Hinchliffe & Jolly, 2011; Sin & Neave, 2014; Smith, Fern, & Russell, 2014). Some describe it as a blend of understanding, skilful practices, efficacy beliefs (or legitimate self-confidence) and reflectiveness (or metacognition) (Little, 2006). Stephenson’s concept of capability is more encompassing: employability is best described as the ‘capability’ of becoming an effective operator in the world (whether in an employment or other social setting): capable people have confidence in their ability to take effective and appropriate action, explain what they are seeking to achieve, live and work effectively with others, and continue to learn from their experiences, both as individuals and in association with others, in a diverse and changing society (Stephenson, 1998). Most agree that employability has little to do with labour markets and employment, or by extension, with judging institutional performance. Rather, employability is about enabled graduates. Knight and Yorke summarise five common descriptions of employability, ranging from getting a graduate job to the outcome of skilful career planning and interview technique. Their USEM approach to employability suggests that employability is a combination of:

- Understanding of subject discipline(s);
- Skilful practices in context (the capacity to apply understanding judiciously);
- Efficacy beliefs, students’ self-theories and personal qualities – the extent to which students feel that they might ‘be able to make a difference’; and
- Metacognition, encompassing self-awareness regarding the student’s learning; the capacity to reflect on, in and for action; and self-regulation (Knight & Yorke, 2006).

It is generally agreed that employability derives from complex learning, and is a concept of wider range than those of ‘core’ and ‘key’ skills, the transferability of which is often assumed (Yorke, 2006). Harvey clearly asserts that employability is not a product but a process of learning, and that achievement is complex, interconnected, and not a simple matter of ticking off achievement by graduation. Much of the learning, he claims, occurs in the professional context, well after graduation: At root, employability is about learning, not least learning how to learn. Employability is not a product but a process of learning for life. It is not about training for a job; rather it is about empowering learners as critical reflective citizens (Harvey, 2003). Building on this body of literature and general thrust, perhaps the most widely-accepted definition of employability (Yorke, 2006) contends that:

Employability means that students acquire the skills, understandings and personal attributes that make them more likely to secure employment and be successful in their chosen occupations to the benefit of themselves, the workforce, the community and the economy (p.8).

In the light of the challenges associated with the disrupted economy, briefly described above, this paper proposes that it might be timely to adapt Yorke’s 2006 definition as follows (four proposed adaptations are underlined, and the rationale for each adaption follows):

Employability means that students and graduates can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community and the economy.

Rationale for each adaptation:

1. **Students and graduates**: the inclusion of graduates is intended to signify that those who engage in higher education are often already working – either in casual and temporary positions, or in established careers. Postgraduate and undergraduate
intakes in many universities are a mix of school leavers, and younger and older mature age students, many of whom come to university courses with extensive professional experience, and many part-time students presumably continue to hold professional positions while they study. Full-time students often maintain high levels of employment while they study.

2. **Discern, acquire, adapt and continually enhance**: Yorke’s use of ‘acquire’ could suggest a one-off achievement or it might imply acquisition of ‘skills, understandings and personal attributes’ that students do not have on entry into higher education. The inclusion of other verbs (‘discern’, ‘adapt’ and ‘continually enhance’) is intended to signify that emphases may shift as the disrupted economy continues to evolve, emphasising the need for lifelong learning.

3. **Find and create meaningful paid and unpaid work**: Yorke’s use of the verb secure might perhaps bear reconsideration in a world where employment seems less secure, but more importantly, the proposed changes emphasise the option to not just find work, but to create work for self and others. ‘Meaningful’ work is intended to signify the type of work a graduate or higher education student would hope to find or create, and the inclusion of ‘paid or unpaid’ acknowledges the changing landscape of work and participation in the sharing economy. This is also the intention behind the removal of ‘chosen occupations’, suggesting that meaningful work is not necessarily tied to standard positions in established fields and professions. It also takes less account of graduates of generic degrees who may work in various fields, or occupations that are likely to disappear.

**If employment and employability are changing, what is work-integrated learning?**

Graduate employment, employability and work-integrated learning (usually abbreviated as WIL) often keep close company in higher education discourse. While the first two are often conflated, they have been variously defined over the years. This paper argues that work-integrated learning is an ill-defined concept in the Australian higher education sector, and this makes judging progress, quality and effectiveness extremely difficult. This paper proposes a definition of work-integrated learning which aims to resolve this issue. But first, some background: the 2008 National WIL Project aimed to capture an emerging picture of WIL across Australia and identify ways of improving associated student learning experiences (Patrick et al., 2008) without defining WIL, settling instead for work-integrated learning as an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum (p.9) and listing terms in common use at that time (including, for example, practicum, professional practice, internship, workplace learning, industry-based learning, project-based learning, cooperative education, fieldwork education, service learning, real world learning, university engaged learning, experiential learning, clinical placements, work experience, clinical practice, doctoral supervision with industry partners, and work-based learning). The 2008 list of terms exemplified a level of confusion and competing ideas. In 2010, the term ‘work integrated learning experience’ is defined as time students spend learning in the workplace as part of the work integrated learning component of their formal programme of study. Also referred to as placement (Cooper, Orrell, & Bowden, 2010, p. xiii). The 2011 Good Practice Report (Orrell, 2011) acknowledges that work-integrated learning is a chameleon term with a problem of definition (p. 5) and in that report it is delineated as the intentional integration of theory and practice knowledge, and a WIL program provides the means to enable this integration and may, or may not, include a placement in a workplace, or a community or civic arena (emphasis added, p.1). The 2014 Statement of Intent (ACEN, 2014) reiterates WIL as:
an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum,

and goes on to add:

As a community we already understand the crucial value of WIL - often described as internships, placements or practicums (p.2).

Exactly who belongs to ‘the community’ is unclear, but a 2014 report (PhillipsKPA, 2014) identifies the problem with language and the business community: of the 264 responses from Australian businesses, almost half indicated they were not familiar with the term ‘work-integrated learning’. The March 2015 National Strategy on Work Integrated Learning in University Education acknowledges the problem: referring to the ‘umbrella term’, one of the strategy’s first actions is to agree a common language and interpretation of WIL (what it is and is not) which is readily understood by all participants (1.1.c). The definition proposed in this paper attempts to contribute to that undertaking.

In the previous examples, there appear to be some underpinning assumptions. For example, ‘work’ occurs in ‘workplaces’ that are different from university learning environments, physical or digital, even though there has been an increase in hot-desking and teleworking, and research suggests that mobile devices have made working at home and on transport more pervasive. More concerning is that work-integrated learning is code for a placement, an internship, or some sort of experience in a physical workplace. Providing such an experience for every undergraduate student in Australia would be an impossible task – particularly in clinical settings, but also when very large cohorts of international and domestic students in courses such as accounting might outnumber the local firms and companies who might have the time and resources to supervise them. Such a focus also ignores the learning opportunities afforded by assessments that are based on simulations and role-play, both physical and digital, which have been found to be highly effective – and in some cases, even more effective than internships and placements. Current usage also assumes that high value will always be gained by physical presence in a workplace (and by extension, a workplace that aligns with the student’s intended profession). If employability, as proposed in this paper, means that students and graduates can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work, then experience in a traditional workplace might not necessarily mirror the student’s likely destination in the evolving world of work. In an era when self-employed and entrepreneurial people can invent a solution of interest and acquisition by large digital behemoths, appropriate ‘placement’ might include encouraging students to create their own ‘startup’ company, rather than experience a traditional workplace. In addition, simply being in a workplace where one observes or does menial tasks, is unlikely to make a significant difference to employability.

The definition of work-integrated learning proposed in this paper recognises that effective learning for employability can occur:

• within or beyond the formal curriculum;
• in work that is related or unrelated to one’s course;
• in actual or simulated experiences;
• in physical or digital workplaces and spaces; and/or
• in paid or unpaid employment.

Two constant and underpinning principles for effectiveness of assessed tasks that relate to employability are: authenticity (how closely a task resembles professional level challenges)
and proximity (how closely the context resembles a professional environment). The proposed definition reads:

Work integrated learning occurs at various levels across a range of tasks that are **authentic** (the task resembles those required in professional life) or **proximal** (the setting resembles professional contexts).

As shown in Figure 1, tasks can be mapped along two axes (degrees of authenticity and proximity) to show:

1. **High level WIL** (top right quadrant) – students engage in tasks closely resembling those required in professional life, in settings that are or very close to a real professional context
2. **Moderate level WIL** (top left quadrant) – students engage in tasks closely resembling those required in professional life, but only in simulated professional contexts
3. **Low level WIL** (bottom right quadrant) – students are in or very close to a real professional context, but their tasks do not closely resemble those required in professional life
4. **Not WIL** (bottom left quadrant) – students engage in tasks that do not resemble tasks required in professional life, and in settings that do resemble professional contexts.

Clearly, tasks cannot be mapped with a high level of accuracy, because in every case ‘it depends’ on exactly what the student is asked to do, hence the shades of red to give a broad indication of levels of work-integrated learning (with the white zone intended to capture tasks that are not work-integrated learning). The example tasks are intended as just that, with the rider that further detail would be required to be really sure of the level of work-integrated learning associated with such a task.

![Figure 1: Levels of Work-integrated Learning according to Degrees of Authenticity and Proximity](image_url)

At first glance, it might be tempting to presume that the collective experiences in a course (degree or program) should cluster in the top right quadrant (high level WIL). But this would depend on the course context – namely, discipline, the likely professional destination, and the resourcing and availability of placements. The most optimal spread of experiences and tasks is probably best judged by those most familiar with the course, its learning outcomes and the likely professional destinations of its graduates. Realistically, a balance across all zones is likely to be best, including the bottom left quadrant, where much current assessment practice is likely to cluster. These experiences would not be categorised as work-integrated learning according to the definition proposed here. This goes some way towards one of the aims of the National Strategy to agree a common language and interpretation of WIL – including what it is and equally importantly, what it is not (emphasis added).

**Conclusion**

Governments and communities have high expectations of universities as providers of graduates who are employable, and employed – but the world of work is changing rapidly. This paper explores some of the trends and predictions in those changes and offers a re-worked definition of what it means to be employable. Refining Yorke’s 2006 definition, this paper proposes that employability means that students and graduates can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community and the economy. Work-integrated learning is often offered as the solution to employability and employment – and the sector acknowledges it requires definition beyond an ‘umbrella term’. This paper proposes that work-integrated learning, is a means to an end (employability) rather than an end in itself. The definition proposed in this paper posits that work-integrated learning includes a range of learning task that resemble tasks expected of employed graduates in their early careers, or proximal to the workplaces or spaces, physical or digital, where professional work occurs. The range of tasks considered work-integrated learning may be High (closely resembling tasks required in professional life, in settings that closely resemble professional contexts; Moderate (closely resembling tasks required in professional life, but in simulated professional contexts); or Low (tasks take place in real professional contexts but are not as requiring as those required in professional life). Determining the appropriate spread of tasks across a degree is best done by mapping assessments – ideally, those tasks considered to be moderate or high are best placed in all years of a degree programme, and probably with an increasing level. High level tasks in the final year or semesters is most likely to prompt the student to focus on the evidence that they are developing the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community and the economy.

References


