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## Work-Integrated Learning: The new professional apprenticeship?

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### Introduction

Three decades after the Dawkins (1988) reforms ushered in the massification of higher education in Australia, some social groupings, notably rural and regional students, remain underrepresented in higher-education participation. This article highlights the regional and social imbalances in higher-education participation and the failures of the current university model to effectively address this gap. It considers the potential of a modified apprenticeship model integrated into the university experience to do so. Using an integrative literature-review method (Torraco, 2016) the article will review, critique, and synthesise a range of representative literature on the topics of rural and regional participation in higher education and work-integrated learning to find a new perspective on the engagement of historically underrepresented students in Australian universities.

This article will outline the Australian model of higher education and rural and regional students' underrepresentation in higher education despite targeted programs. In the context of the identified need to link concrete outcomes to university participation, the article expands on the modern approach to work-integrated learning in the university context, then considers the capacities of current work-integrated learning to address affective concerns of regional and rural students in participating effectively in higher education. It then considers the historical role of apprenticeships as they have functioned in professional disciplines such as law and accounting.

It is theorised that the pedagogical benefits of immersion models such as apprenticeships may be successful in addressing certain identified affective concerns for rural and regional students. In this way this article is consistent with recent policy statements that identify a demand for innovative courses and delivery modes, including "offerings that integrate or bridge the gap between VET and higher education courses, such as apprenticeship degrees and higher education qualifications focused more on practical learning and technical and professional skills development" (DESE, 2019). However, it specifically advocates this approach in the disciplines of law and accounting, as the retention of students enrolled in high-prestige degrees in rural and regional settings contributes to overcoming the affective concerns of students from rural backgrounds by creating visible aspirational pathways into professional occupations. It argues that the benefits of an apprenticeship model for this underrepresented group justify further research in the form of a pilot study. This is consistent with current policy relating to the employability of graduates; however, overcoming the institutional and regulatory impediments to implementing such a model would require significant work.

#### Context

Government measures in many countries have been specifically designed to increase participation in higher education. In Australia significant growth occurred as a result of the implementation of the Dawkins (1988) reforms in 1989, which were intended to improve access to higher education and, by extension, student success. The growth of the university system from the 1980s (Dobson, 2003, p. 30) reflected similar growth in comparable Western countries. Between 1988 and 1992 full-time attendance at tertiary institutions grew by 52% (Clark, 1996, p. 10). By 2016 the number of enrolled students was reported at 1,457,209 (DET, 2016). Along with growth in student numbers, the conversion of second-tier Colleges of Advanced Education into universities, or the process of forced mergers with universities, resulted in a greater number of university campuses in rural cities. The primary justification for these reforms was the need for a highly educated workforce to facilitate national productivity (DEETYA, 1998). A range of devices has been introduced to widen participation, including capping fees and providing additional places for underprivileged students; other measures have also been used to support these devices, such as providing study visas for full-

fee-paying international students (Jacob & Gokbel, 2018). The provision of government funding and policy support with the aim of increasing workforce skills has resulted in ongoing pressure on universities to measure their graduates' employment outcomes in terms of the number in full-time employment related to their course within four months of completing their degree (QILT, 2020), and to continue to implement measures to increase their graduates' employability.

The increase in participation in higher education means that higher-education providers are inevitably dealing with students from non-traditional backgrounds, including those from low socio-economic and non-English-speaking backgrounds as well as disabled, regional, remote, and indigenous students (Gale & Parker, 2013). Indeed, Walton and Carrillo-Higueras (2019) note that universities are required to take an "active role" in increasing the representation of these groups in higher education.

The federal government has prioritised several groups identified as under-represented in Australian higher education (DEET, 1990), and although there is overlap between categories, students from rural and isolated areas and students from low socio-economic areas are heavily represented (Dobson & Birrell, 1997). After the rapid growth in the system after 1989, improvement in the proportion of students from these groups has been marginal (Dobson, 2003, p. 56; Australian Bureau of Statistics [ABS], 2013). Burnheim and Harvey (2016) note that the "university participation rate of regional and remote students has shown no improvement since 1990. Of all the equity challenges ... regionality has proved the hardest to confront" (p. 143). DESE (2019) notes that the gap in participation remains as high as 40%. From a societal perspective this is challenging, as there is a recognised need for a skilled workforce in rural areas (Alston & Kent, 2003; Gunasekara, 2004).

### Method

Torraco (2016, p. 405) describes an integrative literature review as a form of research that reviews representative literature, critiques it, and synthesises it in an integrated way to generate new perspectives on the topic. The choice of literature reviewed for this paper was guided by three research questions:

- 1. Is underrepresentation in university participation by rural and regional students is exacerbated in prestige degrees?
- 2. Does scaffolding of learning through work integrated learning contributes to retention of rural and regional students?
- 3. Would the apprenticeship model improve university participation by rural and regional students in prestige degrees?

Data was collected using online databases such as JSTOR, ProQuest, Emerald Full Text, and Google Scholar. Keywords used in searching for existing research literature were *work-integrated learning*, apprenticeship, rural and regional, university participation, scaffolding learning, and legal education. Variants on search terms were also included (for instance, WIL, higher-education participation, low-SES). Search limits were set for 2016–2020 to find the most recent research, and qualifiers such as "Australia" were deployed to focus the search extent. References from articles and other resources found in these searches were used to create a list of literature to review. Representative literature was selected based on the centrality of the concept to the research and read in depth. Links between themes were identified and explored and presented in a conventional discursive synthesis based on the research questions.

## Rural and Regional Participation in Elite University Courses

Despite implementation of equity programs, Australian rural and regional students' rate of participation in higher education has remained stagnant since 1990 (Burnheim & Harvey, 2016, p. 143), and they remain an underrepresented group. As a cohort, rural and regional students are less likely to achieve entry into a high-prestige university, or to university at all (Burnheim & Harvey, 2016, p. 146). This is particularly marked for degree courses in law and business fields such as accounting (Burnheim & Harvey, 2016, p. 148). The situation is even worse for students from isolated communities (James, 2001). Various strategies have been deployed to address this issue, including increasing the visibility of universities through awareness programs, distance education, programs for alternative entry or credit transfer, and assistance with the costs of accommodation (Burnheim & Harvey, 2016, p. 158).

Norton (2012) and Burnheim and Harvey (2016, p. 159) argue that the greatest barrier to students from a non-traditional background is school performance: students choose their career and university options according to what they consider to be realistic, but those from rural backgrounds have consistently fewer options, because they, along with students from low socio-economic status (SES) backgrounds, have consistently lower academic achievement, and thus fewer options because their high-school examination scores are lower, their subject selection is more limited, and their schools select staff from a smaller pool of potential teachers (Trinidad et al., 2010; Burnheim & Harvey, 2016, p. 153). Norton (2012) notes the persistence of large gaps in academic achievement related to SES (Norton, 2012, p. 13, as cited in Australian Curriculum, Assessment and Reporting Authority 2011). Burnheim and Harvey (2016) identify "striking" differences in regional communities in the rate of year 12 attainment in the 20-29 age range (Burnheim & Harvey, 2016, p. 152).

Whilst lower school retention rates are a factor in lower participation in higher education, this accounts for less than half of the disparity (James, 2001, p. 457), leading to suggestions that other factors may include cost (Alston & Kent, 2003), particularly arising from travel, accommodation, and higher opportunity costs, and a lack of confidence that the investment would pay for itself in terms of post-university wages (Burnheim & Harvey, 2016, p. 157). This may make some of the more recently created regional and lower-prestige universities more attractive (Gunasekara, 2004). However, whilst regional campuses of urban institutions have a significant role in ameliorating issues of access to higher education (Wirihana et al., 2017), high-prestige degrees such as law and medicine are seldom offered, or not offered in their entirety, at regional campuses. School-level results and the prestige of the university are relevant to employers, particularly in the fields of medicine, law, and accounting (Blackmore et al., 2016); highly motivated students may thus prefer to move to metropolitan universities rather than complete their degrees at local campuses with a shorter history and a perceived lower status. Other factors influencing completion rates include the occupational status of parents, as the probability of school completion increases when parents have higher-status occupations (Homel, et al., 2012). The distribution of higher-status occupations tends to favour metropolitan centres.

The attraction and retention of rural graduates in high-prestige disciplines such as law is of ongoing concern in Australian regions (Kennedy et al., 2016). Students from rural backgrounds are justified in perceiving that rural and regional practices are less attractive, and thus fail to retain younger lawyers (Kennedy et al., 2016). From a societal perspective, limitations on participation in the legal profession have the potential to be even more problematic than similar limitations in other professions. As Erlanger (1980) notes, "lawyers have an elite social status in the eyes of the public ... have exceptionally high incomes ... and are closer to the levers of power (both governmental and

corporate) than the members of any other occupation" (p. 884). Measures that increase participation in the legal profession by students from underrepresented backgrounds have the potential, therefore, to give those from such backgrounds a stronger voice.

Analyses of data indicate that admission to legal practise can certainly be restricted by socio-economic status. Erlanger (1980) indicates that in the United States, entry into the legal profession tends to be dominated by the elite: Virtually all lawyers have undergraduate degrees, and even among college graduates, lawyers constitute an elite group in terms of social background. For example, lawyers' fathers have higher SES than the fathers of other professionals as a group" (Erlanger, 1980, p. 885). However, the data indicates that a farming background has an even lower correlation with legal qualification than SES.

A similar degree of demarcation exists in Australia. Chapman (1997, p. 741) notes that in the 1980s children of fathers with professional or managerial occupations enjoyed a fourfold greater chance of higher-education enrolment than other children. More recent figures note that, despite recent reforms designed to close the gap, children of managers and professionals are three times more likely to attend university than the children of labourers or machinery operators (Norton, 2012, p. 13). Students whose parents are in professional occupations benefit from social capital, having access to "privileged knowledge, resources, and information attained through social networks" (Soria & Stebbleton, 2012, p. 675). This social capital enables informed decision-making relating to higher education (Soria & Stebbleton, 2012, p. 675).

Moreover, attracting and retaining students from non-traditional backgrounds can become a problem, because institutional fit, including the sense of belonging at a particular institution and the student's belief in their own academic aptitude, are critical to the formation of a student's intention to leave (Soria & Stebleton, 2012; Bean, 2005), and may also be critical to the formation of a student's intention to undertake higher education – including their decision to undertake a course in a high-prestige domain such as law – in the first place.

### **Work-integrated learning**

There are many definitions of work-integrated learning, but the essential aspect of the concept is the placement of a student in a professional environment, either paid or unpaid, that integrates their learning at university with the practices and culture of the workplace (Smith, 2012). In the university sector, work-integrated learning can take a number of forms ranging from a short-term, part-time placement over summer through to a "sandwich year" in which the student completes a minimum of a half to a full year in full-time employment, generally after their first two years of studies, in their area of specialisation (Brooks & Youngson, 2016). In some instances, the students will continue to work part-time for their "sandwich year" employer and transition to full-time employment at the end of their degree program.

Ideally, work-integrated learning requires the integration of disciplinary knowledge (Smith & Worsfold, 2015; Smith, 2012). Where this is the case it is possible to mitigate the effects of systemic disadvantage by mediated immersion in the professional environment. To date, however, work-integrated learning is typically intended to progress employability outcomes. It is of policy interest as a way of increasing the employability or "work-readiness" of graduates in an increasingly competitive market (Small et al., 2018). Universities' orientation towards the employment needs of industry is motivated by metrics such as the federally funded *Graduate Outcomes Survey* (QILT, 2020). Also relevant has been the *Integrated Learning in University Education* developed in collaboration with Universities Australia, the Australian Chamber of Commerce and Industry,

AiGroup, the Business Council of Australia, and the Australian Collaborative Education Network Limited (Universities Australia, et al., 2015). This strategy identified that strong partnerships are imperative to assist in meeting the challenges and opportunities raised by the rapidly changing global economy. Governments have increased both hard and soft regulatory forms to require the creation of "job-ready" graduates, and universities respond to government and student market requirements by integrating employability metrics into their suite of reported outcomes. The university sector has become a mechanism for governments to deliver employability imperatives. In response, the higher education sector is increasing, or seeking to increase, student employability through work-integrated learning (Jackson & Collings, 2018); this has moved beyond traditional placement programs required in education, nursing, and engineering to become a common and advertised feature in law, accounting, and other professional subjects.

The National Strategy on Work Integrated Learning in University Education, (2015, p. 3) proposes eight key areas:

- 1. Provide national leadership to expand Work Integrated Learning (WIL)
- 2. Clarify government policy and regulatory settings to enable and support growth in WIL
- 3. Build support among students, universities, employers across all sectors and governments to increase participation in WIL
- 4. Ensure the investment in WIL is well targeted and enables sustainable, high quality experiences, stakeholder participation and growth
- 5. Develop university resources, processes and systems to grow WIL and engage business and community partners
- 6. Build capacity for more employers to participate in WIL
- 7. Address equity and access issues to enable students to participate in WIL
- 8. Increase WIL opportunities for international students and for domestic students to study offshore.

Under the Australian Government Tertiary Education Quality and Standards Agency (TEQSA, 2017, guidance note 1.2), the intent of the Higher Education Standards (HES) framework is "to ensure that work-integrated learning is an effective and positive learning experience which is a seamless and integral part of a course of study". Those working in an "employment relationship" (Fair Work Ombudsman, 2019) must be paid for their work. Students undertaking a placement must be in a vocational placement or remunerated with the minimum wage and meet the requirements of the National Employment Standards and of any applicable awards or agreements (Fair Work Ombudsman, 2019). The placement is intended to assist the development of career-ready graduates, not to provide free labour (Universities Australia, 2019).

Studies indicate that, whereas employability or workplace skills may be increased by the integration of work-integrated learning, higher rates of graduate employment may not necessary follow, due to factors such as changing perceptions of what graduate roles involve and employers' constant raising of expectations about students' preparedness for full-time employment (Jackson & Collings, 2018). Although current research does not prove a link between employment outcomes and work-integrated learning per se, programs integrating learning and work can improve "non-technical skills, professional networking and exposure to the expectations and requirements of [a student's] intended career pathway" (Jackson & Collings, 2018, p. 420). Internationally, the Employment Policy Department (Stewart et al., 2018), focusing on students in paid employment, concluded that paid placements have better employment prospects than unpaid (Stewart et al., 2018). Other variables included the length of time a student spent on work-integrated learning, whether the student used

their own initiative in finding work-integrated learning and other indicators of student self-management (Jackson & Collings, 2018, p.420).

The policy focus of work-integrated learning as a mechanism for improving graduate employability distracts from its potential role as a mechanism for improving the participation of rural and regional students in higher education. It is the contention of this article that work-integrated learning should be considered from the point of view of scaffolding - not only from the context of student learning once they have undertaken a degree, but also as a mechanism to bridge student enrolment and facilitate retention in a degree. Scaffolding is frequently used in education theory (Pea, 2004), but its earliest appearances in the literature refer to a naturally occurring interaction, socio-culturally grounded, that enables assisted learning in the context of a problem-solving task. In modern university curriculum development, scaffolding is typically used at the level of development of cognitive tools. Assessing the learner's needs to enable them to perform increasingly complex cognitive tasks is fundamental to the modern curriculum, particularly from the perspective of what Reiser (2004) calls the structuring aspects of scaffolding: task structuring is intended to guide learners "through key components and [support] their planning and performance" (p. 273). One of the features of scaffolding is the capacity of the teacher to control the environment so that students are not dealing with a task for which they are not yet prepared, but this control continues only "until the learner is capable of performing independently after the support is removed" (Puntambekar & Hubscher, 2005, p. 2). The gradual withdrawal of explicit support from the student is integral to experiential learning.

This is relatively simple to conceptualise in terms of academic content. Some concepts and theories are natural precursors to others; acquisition of some skills requires the prior acquisition of others. However, this does not do full justice to the scaffolding concept. It also involves content problematising, which "shape[s] students' performance and understanding of the task in terms of key disciplinary content and strategies" (Reiser, 2004, p. 273). The problematising of content becomes seamless in work-integrated learning, and this, in turn, scaffolds the academic part of the curriculum. This is particularly important in the case of students who, due to their cultural context, have little grounding in the language and conventions that are used to present abstract professional problems, or in the commercial concepts assumed by legal or business problems. In other words, experiential learning becomes a scaffold to other parts of the curriculum.

Ramsden (1992) identifies three conceptions of teaching: teaching as telling, as organising, and as making learning possible. The role of the teacher in making learning possible is "to attempt to understand and to rectify students' misconceptions by discovering, through constant vigilance and monitoring, the 'critical barriers to student learning'" (Bond & Le Brun, 1996, as cited in Ramsden, 1992, p. 114). Development of a deep approach to learning (Ramsden, 1992) requires that education foster non-superficial understanding. In the legal context the student must understand the material within the internal structure of the curriculum, but also comprehend the social context in which that material exists (Goldring, 1995, p. 108). Learning as the abstraction of meaning, as an interpretative process aimed at the understanding of reality (Saljo, 1979), and as a means for personal change (Marton et al., 1993) involve a transformative process in which the student is an active participant. Bond and LeBrun (1996, p. 7) note that this transformative process enables knowledge gained from experience to transform into understanding.

Adoption of approaches to learning at level four or above is scaffolded by aspects of experiential learning including enculturation in the language of commerce, norms of conduct, the hierarchy of supervision, and professional rules and restraints. Critically for rural students, experiential learning contributes to confidence-building and development of cultural fit within the institution and the

profession, potentially increasing resilience and university retention. Experiential learning also serves more-traditional learning outcomes, such as contextualisation of problems within commercial and social contexts and across categories of knowledge, application of principles within practical constraints, and transformative understanding of knowledge as a social and cultural construct.

The scaffolding advantages of work-integrated learning are useful for all students, but they are particularly important in overcoming the barriers to learning occurring in students from underrepresented backgrounds. Students from rural and regional backgrounds are not habituated to the cultural constraints of higher education, nor to the social and cultural contexts of the disciplines into which they would, if undertaking a course, be entering. Lack of social capital and institutional fit and a sense of not belonging can be conceptualised as institutionalised barriers to learning that could be overcome with the effective use of scaffolding. Research reiterates that "law students do not enter the legal classroom as empty slates upon which we write the language and processes of law" (Bond & Le Brun, 1996, p. 3). Students learn in the context of their own social experience; thus, students from a professional social background are advantaged by the deeply engrained knowledge arising from countless small interactions and conversations that scaffold the learning of law in its societal context (Bond & Le Brun, 1996, p. 3). For other students, however, their socioeconomic or cultural background can become an impediment to learning, as they may be approaching some of the issues abstractly, in a vacuum (McAninch, 1986, p. 426): partly because of their lack of exposure to scaffolding concepts (and perhaps, as a result, their inability to perceive that they lack those scaffolding concepts), and partly because of their own recognition that they are not approaching their learning from the same basis as their more-privileged students. Teaching staff may not appreciate some students' lack of a nuanced understanding of many basic concepts and are thus unable to address them.

Dispositional characteristics may also constitute a barrier to learning. Lack of autonomy, a dispositional tendency of both law students and lawyers (Tani & Vines, 2009), can become particularly significant where students from non-traditional backgrounds perceive themselves to be less adept at negotiating the complex new environment in which they find themselves. They may perceive themselves to lack domain competence and "global, contextual or task-related self-efficacy" (Fazey & Fazey, 2001, p. 346), and these perceptions can influence behaviours, including choice behaviours: "Individuals' beliefs about their abilities mediate motivational predispositions to engage in achievement behaviours, affecting cognitive and selection processes" (Fazey & Fazey, 2001, p. 346).

In the education of students for professional degrees, such as law, a family background in the profession is an important source of social and contextual information as well as a repository of social capital. In language-based problem-solving, students are expected to deal with a range of concepts encoded in unfamiliar linguistic and situational formats. More importantly to the student from a rural background, an "urban-centric bias" that implicitly denies the practice potential of rural and regional communities (Kennedy et al., 2016, p. 3) dominates Australian legal education.

Studies have demonstrated a link between academic performance and "interest and aptitude" as the basis for enrolment in a professional degree (Larcombe et al., 2008, p. 119). For students with little or no exposure to the context of professional practice this is likely to become an impediment to learning. Familiarity with threshold concepts that are initially challenging, but which scaffold learning, is a significant enabler for improved professional practice (Meyer & Land, 2003). Alienation, itself a significant barrier to learning, may be the result of failure to grasp threshold concepts (Lustbadel, 1998). Moreover, this issue has a significant equity component. MacKinnon and Manathunga (2003) have considered the implications of omitting alternate cultural perspectives

in the context of assessment as a form of institutionalised "discrimination against students from non-dominant backgrounds [which] privileges students from dominant groups" (p. 132). Work-integrated learning assists the student to overcome these barriers to learning, increasing the sense of cultural fit and possibly improving their potential for success in their studies.

The work-ready focus of work-integrated learning tends to undermine its potential as a scaffolding concept. Workplace experience in law and accounting is highly valued by employers and students alike. Research has found that students who have undertaken a placement have a significant advantage over their peers when applying for employment after university (Brooks & Youngson, 2016). However, work-integrated learning is generally not mandated by the discipline in the university context (Jackson & Collings, 2018); rather, supervised placement is a disciplinary requirement of students' pre-admission to the profession. This differs from courses such as teaching, nursing, and engineering, in which work placements are an inherent requirement of the accredited degree. The narrative in relation to work-integrated learning tends to emphasise the development of employability skills or work-ready graduates. The strategic focus for governments is the economic goal of creating a skilled workforce. Where work-integrated learning placements are not part of an accredited course, they are flexible for both universities and students if they provide an effective learning environment that is positive for the student and employer (TEQSA, 2019). One of the consequences of the employability focus of work-integrated learning is that it tends to occur later in an academic program. It therefore has diminished scaffolding potential and cannot address the affective concerns of students who feel that they are not a cultural fit for the university program.

In university-based higher education, the process of disassociating aspects of learning from one another continues; one review of legal education, for instance, describes it as the neglect of the "professional identity in favour of the cognitive apprenticeship" (Terry, 2009, p. 242). Work-integrated learning is a potential response to this issue as "a pedagogical device" that is "centred on the development of professional identity and values" (Terry, 2009, p. 243).

It is possible that work-integrated learning can be usefully deployed as a scaffolding device that will address the issues of rural and regional participation in higher education. In some cases, students continue working with a firm for a large part of their degree. This form of work-integrated learning is conceptually similar to the traditional model of apprenticeship. The added benefit of this model is that it assists the graduate supply chain in particular geographical areas (notably regional areas). In areas with unmet demand for graduates, employers taking on students in a work-integrated learning role have the benefit of trialling potential employees without a long-term commitment (Elijido-Ten & Kloot, 2015). Successful students are employed part-time in their intended profession during the first half of their course; In this way, work-integrated learning can be an additional advantage to employers by increasing the opportunity to find "good staff" (Elijido-Ten & Kloot, 2015, p. 209) by obtaining early access to students. Students can also present a lower cost to the business and provide labour at key demand periods of the business (Elijido-Ten & Kloot, 2015). In professions with post-university admission requirements, a student may be limited in their unsupervised work, but can nevertheless carry out significant tasks. For instance, a law student may perform paralegal work, such as routine conveyancing and file administration, which makes them a valuable employee whilst also training them in the firm's systems. These models of work-integrated learning, which are often student- or firm-initiated, are so like the apprenticeship model that it is natural to consider reintroducing a form of apprenticeship.

## **The Apprenticeship Model**

Work-integrated learning has the potential to overcome some of the systemic disadvantages that limit the engagement of rural and regional students in universities. However, the current model of work-integrated learning primarily as a technique to build the employability of graduates will not necessarily achieve affective goals. The National Regional Rural and Remote Tertiary Education Strategy (DESE, 2019) briefly mentions apprenticeships as a potential bridge to higher education for regional students, although the context suggests that the strategy is not primarily focusing on high-prestige courses. Other jurisdictions (Richard, 2012) have reintroduced apprenticeships in law.

The apprenticeship model, which was the precursor to modern forms of university-based law teaching, represented the sort of guided participation in joint action to achieve shared aims that characterises scaffolding techniques (Pea, 2004, p. 431). Four thousand years ago, the Babylonian Code of Hammurabi described an apprenticeship model, and evidence from ancient Egypt, Greece, and Rome demonstrates that apprenticeships were used to pass on knowledge and skills, predominantly in skilled crafts such as nail smithing, weaving, and hairdressing (Knight, 2012; Westerman, 1914). More-recent apprenticeships have taken various forms: guild apprenticeships from the 12<sup>th</sup> century to 1563, statutory apprenticeships from 1563 to 1814, and the multiple forms adopted from 1814 to the present (Snell, 1996). The National Regional, Rural and Remote Tertiary Education Strategy noted the concept of apprenticeship degrees as having the potential to "integrate or bridge the gap between VET and higher education courses" (DESE, 2019, p. 21).

Traditionally, an apprenticeship was an arrangement between a master and the apprentice over several years, and while in the form that crystallised in England around the 1500s it was regulated, it was also potentially exploitative. The *Statute of Artificers* (1562) and later statutes that were influential in Australian law at settlement enabled a power imbalance favouring the master, including the capacity to imprison apprentices who broke contracts and to require long periods of apprenticeship at a high cost to the apprentice (Wallis, 2012). The modern parallel for an apprenticeship in 19th-century London, Wallis asserts, is mass higher education, rather than the more commonly considered "blue-collar apprenticeship" (Wallis, 2012, p. 794). There are now significantly more students undertaking higher education in Australia: more than 1.5 million domestic students in 2017, compared with only 267,385 apprentices in 2018 (Australian Government, 2019). Snell (1996) notes that apprenticeships in Britain "involved training in a range of skills, behaviour and knowledge beyond the immediate ones relative to a particular trade: for example, religious doctrine, personal morality, literacy, numeracy and account-keeping" (pp. 304–5).

The repeal of the apprenticeship clauses in the *Statute of Apprentices* in 1814 reflected, to a large degree, the growing industrialisation of England; it also reflected the contemporary attitude of *laissez faire* over the previous regulation of the labour market. The articulation of apprenticeship as a power relationship, or as a form of economic protectionism favouring guilds or trade organisations, however, diminishes the totality of the apprenticeship model, which was a cultural institution "used to enforce an extensive conception of social order, control and loyalty" (Snell, 1996, p. 305). Over time, historians and scholars have given some aspects of the apprenticeship system significant weight. In particular, the servitude of the apprentice, the highly regulated environment and the restrictions on trade inherent in some versions of the historical apprenticeship led to reform and eventual abandonment of the traditional model.

Australia adopted Great Britain's method of apprenticeship at the time of settlement in 1788, whereby "the skills of master craftsmen were passed on from one generation to the next" (Knight, 2012, p. 9) and there were benefits to both the employer and employee. This scheme was state-based until 1973, when the National Apprenticeship Assistance Scheme (NAAS) was introduced. This alleviated the issue of resident Australians who undertook an apprenticeship falling under state rules whilst post-World War II immigrants who possessed needed skills were federally regulated by the National Office of Overseas Skills Recognition (Knight, 2012). These changes culminated in 1974 with the system known as "technical and further education" (TAFE), which exists today (Knight, 2012). Traditional apprenticeships in contemporary Australia involve a student working in full-time employment and completing studies in the evening or in a block at TAFE (Billett, 2016).

Germany is renowned for its apprenticeship model, which is replicated across much of Europe (Deissinger & Gonon, 2016). The framework set out in the *German Vocational Training Act*, introduced in 1969 and renewed in 2005 (Deissinger & Gonon, 2016), has been successful due to the nature of the German manufacturing industry, but is now coming under pressure from academisation tendencies (Deissinger & Gonon, 2016). France has also introduced business-school apprenticeships, whereby students in higher education undertake an apprenticeship with a company for 24 months as well as academic training (Daly, 2017). This process provides adequate time for the experienced person to transfer skills, generally outside school. In England and Wales, a shortage of apprenticeships was reviewed and addressed in 2012 by the implementation of a new apprenticeship model. Richard (2012) defined an apprenticeship as "a form of education that is based in the workplace" and "attached to a real job" (p. 31). Pursuant to these recommendations, law apprenticeships were introduced in 2016 and were predominantly workplace-based, with regular teaching sessions at a university (Fletcher, 2018).

Apprenticeships have significant policy dimensions for the delivery of employment outcomes and have accordingly been a component of labour policy in Australia for many years. Less consideration has been given to pedagogical aspects of training under the apprenticeship model, particularly in the modern context of mass enrolment in university courses. The discourse surrounding apprenticeships in Australia similarly fails to articulate the wider conception of apprenticeships as providing an extensive range of cultural benefits. Pedagogically, early systems of apprenticeships were founded on interdependent and active engagement in the work of the master as a mode of learning. This engagement is more than "learning on the job" (Billett, 2016, p. 614); rather it involves learners discovering by themselves rather than reliance on explicit actions from educators who mediate learning (Billett, 2016). Independence, interdependence, and engagement reflect the complex processes of student-centred learning, rather than the differentiated teaching and learning of cognitive skills.

### Conclusion

This article contributes to the literature and understanding of the place of apprenticeships in higher education as a potential measure to address historical underrepresentation of rural and regional students in higher education. It does this by examining the impediments to successful participation in higher education, the way in which work-integrated learning is focused on employment outcomes, and the potential of work-integrated learning to scaffold the learning of students and address the affective concerns of historically underrepresented groups. It then considers the possibility that the apprenticeship model might be usefully deployed to increase these groups' participation in higher education. It does this by reviewing the history of the apprenticeship and the pedagogical model applying to apprenticeships in professional contexts. This is followed by a detailed review of the significant implications of the disadvantage to regional and remote students in higher education and

how work-integrated learning opportunities that allow students to immerse themselves in a professional environment can mitigate the effects of systemic disadvantage and greatly assist with employability. Through this review an evaluation of whether a "third way" – an apprenticeship fully integrated into university studies – is appropriate to higher education.

The detailed review undertaken in this article reveals that work-integrated learning has become a widespread addition to higher education and has the potential to provide employability skills that traditional higher education cannot. Previous studies have found that "despite the mushrooming growth in higher education and the overall expansion in access...regional and social imbalances in higher education participation appear strongly resistant to change" (James, 2001, p. 456). Workintegrated learning can help to address this longstanding issue. It can scaffold student learning, address the affective concerns of students from rural backgrounds, habituate the aspirations (Zipin et al., 2013) deriving "from their biological and historical conditions" (Gale & Parker, 2015, p. 85), and diminish student concerns that aspirations may not be possible (Bourdieu et al., 1990, p. 159). The potential of work-integrated learning to improve graduates' employability is significant; however, there is room for a wide degree of variability in the design of work-integrated learning, including the creation of a modified apprenticeship model. This model could be of benefit to students from historically underrepresented groups such as rural and regional students. Future research will investigate specific applications of the model in the disciplines of law, accounting, and management and its short- and long-term benefits, and consider the findings from this review with a view to informing policy particularly in respect to underrepresented groups.

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