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Higher vocational education and social mobility: educational participation in Australia and England

Abstract:
This article explores the issue of social mobility in relation to the recent expansion of higher vocational education by non-university providers. The post-school vocational education sector has become the object of policies to widen access to higher education to ensure greater social mobility and provide second chance education to those who do not complete initial education in Anglophone countries. Drawing on typologies of vocational education and training systems, the article generates understanding of the expansion of higher vocational education (HIVE) within two Anglophone countries (Australia and England). The article considers the implications for widening opportunities to higher education for non-traditional students from disadvantaged socio-economic backgrounds in these two contexts. Descriptive analysis of current national data on participation reveals surprising differences between countries. The article concludes by discussing the extent to which the higher education offerings in vocational institutions can contribute to social mobility within these two countries. 147 words

Keywords: HE in FE; widening participation; VET; applied higher education.

Introduction
Globally, labour market demand for highly skilled workers is soaring as knowledge-work becomes essential for innovation, economic diversification and growth (OECD 2014). Economists and policy-makers have identified higher education as a key mechanism to increase national productivity and ameliorate societal inequalities by increasing the economic participation of disadvantaged equity groups (Picketty 2014). At the same time, education researchers have argued that social equity is central to any analysis of system expansion (Brennan and Naidoo 2008). There have been concerns that not everyone will benefit from the expansion of higher education (Brown, Lauder and Ashton 2011). The fear that some people will miss out in the increased ‘academisation’ of post-school education (Wolter and Kerst 2015)
has resulted in strategies to widen participation in higher education moving from a marginal to a central policy position in the UK in the late 1990s (Scott 2004) and in the mid 2000s in Australia (Gale and Parker 2013). However, social mobility, defined as the movement of people over time from one socio-economic position to another has now become a major focus of these education policies in Australia (Universities Australia 2013) and the UK (DBIS 2013), based on the presumption that increased educational qualifications will result in increased upward social mobility (Bathmaker, Ingram and Waller 2013).

While bachelor degrees from universities continue to be the most common tertiary award, a major global development is emerging to meet this demand for widening access to higher education. Vocational institutions, known in the UK as further education colleges (FECs) and in Australia as VET providers (including technical and further education institutes – TAFEs), which have specialised in providing vocational education and training and qualifications for occupations, are increasingly offering bachelor degrees (OECD 2015; Trow 2006). Consequently, the institutional and learner focus of widening participation policy and practice has shifted: towards higher vocational education (HIVE) in non-university higher education institutions offered primarily through in FECs in England and TAFEs in Australia; and towards learners following vocational qualification pathways to bachelor degrees. In other words, the focus has moved away from widening participation to institutions and fields of study that have traditionally admitted low proportions of students from disadvantaged equity groups, to widening access to the system by expanding the range of providers and pathways to undergraduate degrees (Tonks and Farr 2003).

Whilst the developments in higher vocational education have followed different trajectories in Anglo-Saxon and German systems (Kuhlee and Laczik 2015), the focus of this article will be on exploring the implications of participation data in two Anglophone countries, Australia and England for understanding how higher education expansion affects opportunities for different social groups. This is because as Bathmaker (2016) notes, in the
context of the UK goals of the coalition government from 2010 and more recently, the majority Conservative government from 2015, vocational education and training has been promoted as the preferred pathway to higher education qualifications for certain types of people. In other words, the focus has shifted to providing a fast accessible route to high-level qualifications and employment for those who traditionally have not participated in higher education. However, policy developments in this area are fluctuating. In England, recent policy papers such as the Green paper and White paper (DBIS, 2016) have shifted from protecting the role of FECs in higher vocational degree provision to providing regulatory frameworks underpinned by ‘competition and choice’. This policy shift acknowledges the overall contribution that FE colleges play to degree provision, but emphasises developing a regulatory framework that makes the HE field accessible to alternative providers and new entrants (DBIS, 2016, p.93). FECs are then viewed as one of four provider types (Higher Education Institutions, Alternative Providers, Further Education Colleges and new entrants), to be overseen by one new market regulator, the Office for Students. Where FE colleges were viewed as a means to social mobility, emphasis has now shifted to addressing the low expectations of high achieving students from disadvantaged backgrounds when making choices of higher education providers.

Similarly, in Australia, King and James (2014) have observed that one of the consequences of the introduction of a demand-led system in which provision has increased in response to student demand, has been increased diversity of providers. Yet, the overall increase in participation since 2009 masks new patterns of enrolment by under-represented groups (especially those from low socio-economic status (SES) backgrounds (King and James 2014). New patterns of provision are emerging as universities are reaching down to lower level programmes, which previously have been the core business of vocational education and training colleges to develop pathways to boost their recruitment of students, and colleges are reaching up and becoming new providers of undergraduate degrees. Previous distinctions between provider types using the International Standard Classification of Education framework
(UNESCO 2011) to identify the programmes and courses on offer have become blurred. Some universities now offer what previously would have been considered VET qualifications at ISCED level 4 post-secondary non-tertiary and ISCED level 5 short cycle tertiary programmes (such as Advanced Diplomas and Associate Degrees in Australia and Foundation Degrees in England), as well as the more typical university qualifications of ISCED level 6 bachelors or equivalent, level 7 masters or equivalent and level 8 Doctoral or equivalent. At the same time the majority of TAFE colleges in Australia and Further Education Colleges in England now offer ISCED level 5 short cycle qualifications and level 6 bachelors or equivalent degrees alongside ISCED level 4 or lower qualifications. Yet admissions criteria remain meritocratic with the universities and colleges differing in the extent to which admissions policies in the former (especially the research intensive universities) are selecting from the top achieving school leavers and the latter (especially the TAFEs and FECs are recruiting those with lower school leaving qualifications or other non-traditional experiences (Bathmaker 2016; King and James 2014).

Clearly, the expansion of higher vocational education may be prompting similarities or differences for social mobility among these Anglophone countries that need examining. Therefore, the concern that underpins this article is, who is benefiting from the expansion of high level qualifications and participation in the vocational education and training sector and for what futures?

The article focuses on the national contexts of Australia and England because these provide good systems for comparison as they share a long tradition of policy borrowing, particularly with respect to social inclusion policy and practices (Gale 2011). The article begins with a discussion of the concepts and literature that will be used to understand the development of higher education in vocational education in these two national systems, before presenting and discussing participation data to higher vocational education and the implications for the access and social mobility of the equity groups that have become policy proxies for social class. In Australia the focus is on those from low socio-economic status backgrounds (LSES), and in England those from low participation neighbourhoods. In sum, through exploring the
policy context and data on student participation in two Anglophone countries, the article will address the following research question: Are vocational institutions widening participation to higher education for under-represented groups and creating the potential for social mobility? At the same time, by adopting a comparison between two systems, the article considers the implications of different national regulatory models of higher vocational education on equity and social mobility.

Concepts and literature
Widening access to the system is not the same thing as widening participation to specific institutions and pathways in the system (Tonks and Farr 2003). Expansion of opportunities to gain a higher education degree through extending the range of institutions and types of degree offerings raises issues for social mobility if the outcomes of participation are unequal. The OECD has noted that ‘because of strong links to employment, earnings, overall wealth and the well-being of individuals, education can reduce inequalities but it can also perpetuate them’ (OECD 2015, 78). Across OECD countries the expansion of higher education is increasingly overcoming the influence of parental education and social class on employment outcomes, but in Anglophone countries, including Australia and the UK, social class is found to be a statistically significant influence on higher education outcomes (OECD 2015). For example, in a UK longitudinal national study, Elias and Purcell (2011, 18) found that there is ‘little evidence to suggest that the expansion of higher education has favoured those social categories which have low rates of participation in higher education’, even though there are difficulties in operationalising concepts such as social class to measure intergenerational mobility. The outcomes of higher education in Australia also vary by equity group, with completion rates of those from LSES backgrounds being substantially lower and stretched out over much longer time periods than those from higher socio-economic groups (Edwards & McMillan 2015).

Consequently, some claim that in Anglophone contexts the expansion of higher vocational education provides weak opportunities for social justice and social mobility (Avis and Orr 2016; Wheelahan 2016). This argument is
derived from the recognition that student outcomes are unequal when HIVE is positioned at the ‘bottom of the hierarchy’ of tertiary institutions (Wheelahan 2016, 45). Hierarchically stratified systems are typical of liberal-market systems, such as Australia and England (Graf 2013). The consequence is that vocational institutions are perceived as lower status than universities, and often aimed at second chance learners and those in low-paid work (Norton Grubb and Lazerson 2005; Kyvik 2004; Parry, Callender, Scott and Temple 2012; Wheelahan 2009; 2015). The logic of these analyses according to Ebner (2015) is that as the tertiary system expands, qualifications and the position of their holders are revalued, but this re-evaluation process may not lead to greater social mobility.

In contrast, analysis of models of vocational education and training in German-speaking countries has identified hybrid models with outcomes that enable upward social mobility for students because the HIVE institutions (often called applied higher education) are positioned closer in status to universities, than is typical for Australian and UK VET institutions. A recent study in Switzerland shows that whilst vocational higher education institutions admit more students from lower socio-economic backgrounds, compared to academic higher education, the students’ initial lower status position is compensated for by less risky labour market outcomes (Backes-Gellner and Geel 2014). Although German-speaking countries have strong segmentation between academic and vocational education with divisions that reach down into the structure of the schooling system, and divisions that continue into the tertiary system, the status differences between academic and vocational education have been less stark than in Anglophone countries (Wolter and Kerst 2015). This may be because the dual system of vocational education, involving employers and social partnership agreements, as well as education providers, has ensured greater qualifications hybridity within vocational qualifications. These vocational qualifications comprise broader educational outcomes alongside the vocational, and their development has shown
resistance to the spread of Anglo-Saxon competency models\(^1\) (Clarke and Winch 2015). Correspondingly, students and employers may attach greater value to the outcomes of the vocational higher education sector resulting in recognition that routes to widen access to new forms of hybrid higher vocational learning are reconfiguring the relationships between academic universities and applied universities (Deissinger 2015; Wolter and Kerst 2015).

Mission and status differences between higher vocational education and university-based higher education, would appear to be important areas of consideration in exploring the relationship between widening access and social mobility, not only between Anglophone and German speaking countries, but also within Anglophone countries (Graf 2013; Powell, Graf, Bernhard, Coutrot and Kieffer, 2012; Wheelahan 2009). Furthermore, the literature on typologies of post-school lifelong learning systems locates the rationale for positioning vocational institutions, as sites for second chance learning, in the open characteristics of schooling systems in Anglophone countries (Verdier forthcoming). For example, where the schooling system is comprehensive, yet still promotes a strong hierarchy between academic and vocational education through school-based merit ranking and selection systems, polarised inequalities of outcome are commonplace because academic qualifications have provided the ‘gold standard’ and pathway to universities (Davies, Williams and Webb 1997; Vickers and Bekhradnia 2007). Learners’ post-school pathways and later lifelong learning typically become segregated between those who are channeled into vocational education as a compensation for the failings of their schooling and those that progress to the highly selective university system. Even where post-school vocational pathways involve qualifications that are hybrid (as in the UK), in that they attempt to provide both vocational preparation for occupations and academic knowledge for educational progression, Davey and Fuller (2013) argue that

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\(^1\) Anglo-Saxon competency models refers to an approach to industrial training that has developed over the last 40 years focused on identifying the skills needed for specific tasks and developing training and assessment in workplaces or their proxies to ensure people learn to perform these tasks. Competency models usually specify learning outcomes and assessment criteria for skills, but do not overly specify the underpinning knowledge required and the methods of teaching and learning (Guthrie 2009).
these hybrid qualifications provide weak pathways to occupations and weak pathways to academic higher education.

In Australia, which also has comprehensive systems of schooling, there are similarities in the way that vocational qualifications included within the comprehensive school-leaving certificate are regarded as routes to post-school vocational education only, rather than to universities that select entrants on academic ability. According to Wheelahan, Moodie, Billet and Kelly (2009), Australian tertiary education policy was constructed on sectoral differentiation between institutions and qualifications, with universities funded by the federal government providing higher education and the VET sector funded by the states, offering competency-based qualifications, rather than hybrid qualifications containing disciplinary knowledge. Additionally, the VET sector in Australia has been assigned a more central role in workforce development (Guthrie, Stanwick and Karmel 2011). Consequently, vocational awards are less distinctly hybrid than those in the UK, and much less so than those in German speaking countries (Wheelehan 2015). This is because vocational qualifications comprise occupation specific competency-based training packages to standards set by national bodies with responsibility for determining the skills needed in different industries with employer and trade union involvement, but not training providers² (Australian Industry and Skills Committee 2016; Burke 2015b) and overseen by the Australian Skills Quality Authority (ASQA). This focus on competencies and assessment methods gives rise to considerable variation in the design and teaching and learning experienced on these packages, which undermines their utility for progression to higher education (Watson, Hagel and Chesters 2013).

Not surprisingly, Australian vocational qualifications have been widely criticised for not encompassing foundational knowledge and where the qualification levels parallel higher education awards, these forms of higher vocational education are regarded as lower status than university

² Currently the Commonwealth of Australia Government has an Industry and Skills Council advised by the Australian Industry and Skills Committee (AISC) that oversees Industry Reference Committees (IRCs) that are supported by Skills Service Organisations (SSOs) that have replaced Industry Skills Councils.
qualifications (Wheelahan 2016). Wheelehan (2015, 141) argues that in Australia the VET sector operates with the education logic typical of liberal-market economies, rather than following a corporatist or mixed-regulation model more typical of German-speaking countries. She acknowledges that even though employers and state governments have some influence over training package development and their funding, different varieties of capitalism and institutional logics are resulting in ‘marketisation policies [that] are leading to the decimation of TAFE and hence its capacity to meet Australia’s skill needs now and in the future and to support students from disadvantaged backgrounds to gain an education and enter the labour market’ (Wheelahan 2015, 141). Furthermore, Wheelahan (2016, 45) contends that analysis of higher education level curricula in Australia shows that whilst expansion may increase the participation of those from previously excluded social groups, so long as these new types of students are gaining access to an unequal system and to applied rather than theoretical knowledge, ‘college for all’ is ‘helping to sustain existing social hierarchies and inequalities’.

Arguably, Burton Clark’s (1960) thesis that the open recruitment policies of the American community college system acts as a form of compensatory education for those who fail or are deselected for academic progression from the comprehensive or general academic school system, still has relevance. Clark’s (1960) account of how these colleges provide a ‘cooling out’ function to soften the negative effects of educational inequalities, or a ‘warming up’ function for the forms of higher education (Alexander, Bozick and Entwistle 2008) deemed less prestigious (Jary and Jones 2006) may be useful for exploring whether higher vocational education in Australia and England is a form of second chance learning and limits the opportunities for upward social mobility.

Evidently, researchers are drawing on the body of literature that explores different typologies of development of VET systems and the wider governance structures of the systems in order to understand the effects of the positioning of HIVE in the higher education system for social mobility. Typologies drawn on have included for example, ideal types that distinguish between the free
market (e.g. US, UK, Canada), the corporatist (Germany, Denmark, Austria), also known as the mixed regulation system, and the developmental state (Singapore, Taiwan, South Korea models (Fuller, Munro and Rainbird (2004). Alternative models have been developed through theorising based on the ‘varieties of capitalism’ which emphasise differences along a continuum between liberal-market economies found in Anglophone countries and the coordinated market economies found in Nordic and German-speaking counties and states,(Hall and Soskice 2001). Increasingly though, these typologies or models of systems have been criticised for suggesting path dependency forms of development at a time when tertiary systems are more and more hybridized (Verdier 2017 forthcoming).

The literature that has conceptualised system differences between liberal-market and mixed regulation ideal types has argued that vocational education and training (VET) in Australia has developed a distinctive version of the liberal- market Anglophone model due to the greater role played by employers in Australia, compared to the UK, and partly shaped by the regulations of occupational sectors and the activities of some states and territories (Graf 2013; Knight and Mlotkowski 2009; Powell et al. 2012). The introduction of deregulation of student fees and market competition for VET funding between private and public providers has reduced the role of the public providers of VET, increased the role of the private sector, particularly as large employers become private training organisations and consequently increased the appetite of TAFEs to seek out new markets, such as higher vocational education (Gale et al 2013; Knight and Mlotkowski 2009). Paradoxically, since responsibility, funding and ownership of the VET system in Australia is split between the federal and state governments, there have been unintended consequences for equity, participation and quality as some state governments have striven to make VET more responsive to labour markets and ensure that industry and the private sector play an increasing role (Burke 2015a).

Since 2012, when the demand-led Australian higher education system was initiated, the liberal-market system operating for VET, enabled TAFEs to expand the offerings of HIVE and become accredited providers of
undergraduate degrees. Consequently, HIVE has grown within the design framework of the higher education standards that requires the development of disciplinary and generic knowledge, in contrast to the vocational competencies provided through employer driven training packages for the non higher education provision. Meanwhile, in England, Verdier (2017 forthcoming) argues that tertiary education continues to operate within an organised market with a redistributive logic (rather than a pure liberal market). In this organised market, FECs are exhorted by policy to expand HIVE, but they are structurally positioned as junior partners to universities because the majority provide short cycle higher education, the Foundation Degree, and bachelors degrees under the regulatory approval of universities, which restricts or shapes the form of this expansion. In England, these steep status hierarchies between FECs and universities have cut across policy attempts to expand HIVE because the ‘system architecture [is] designed to reserve one sector for higher education and a further education sector for lower level programmes and qualifications’ (Parry 2015, 493).

**Applying the concepts and identifying relevant data**

Implications from this discussion of literature are that in order to consider whether widening access to higher vocational education is increasing opportunities for social mobility, there is a need to focus not just on who is participating in higher vocational education, but also to consider the position of the vocational institutions in the wider system. In other words, as Ebner (2015) argued the effects of expansion on social mobility will depend on the re-evaluation of qualifications, the institutions that offer them, who holds these qualifications and how they relate to labour market opportunities. Empirical work therefore is required to fully answer the article’s research question. However, arguably prior to collecting new data, existing national data needs to be explored in order to provide some understanding of the localized contexts. Yet, data generated by national policy considerations are

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3 At the time of writing, policy changes to expand the role of FECs have led to degree awarding powers for Foundation degrees being granted to 6 FECs, and one of these also has bachelor degree awarding powers. However, the majority of 240 FECs and sixth form colleges delivering higher education, do this in conjunction with one of the 139 providers (primarily universities) that have degree awarding powers. See http://www.hefce.ac.uk/reg/register/search/Overview
not always collected and constructed to answer researchers’ questions. This is particularly difficult in relation to national comparisons. Whilst agencies such as the OECD do provide international comparisons, these data are not sufficiently detailed to answer the research question about specific higher education programmes in the vocational institutions of TAFEs and FECs. For this reason for the purposes of this article, two main secondary national data sets are drawn on to provide an overview of the provision and trends in HIVE in Australia and England, albeit that these data sets provide different accounts of HIVE in each context and have some limitations in relation to answering fully the research question.

For Australia, the article draws on data collected by a project commissioned by the Australian National VET Equity Advisory Council (NVEAC), some of the authors of which are also authors of this paper (Gale et al. 2013). The data were acquired from the federal education department – at the time known as the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE) – the agency responsible for collecting national data on higher education and who have a history of consistent and robust data collection. These data were provided to the researchers as a special request (for a fee) as they are not publically available. The analysis that follows utilises this data for a six year time frame, from 2006 to 2011 which was the most recent data available at the time of the NVEAC project. The data presents student enrolment and completion in bachelor degrees at non-universities that provide higher education. The number of institutions grew for each year of the data set, but in 2011 there were 39 such institutions, and included both fee-for-service (29) private providers and state-funded TAFEs (10), however, the TAFE numbers cannot be disaggregated from the overall numbers4. Nevertheless these data enable analysis of the social profile of students undertaking and completing bachelor degrees in non-university higher education, which can be compared to similar data in England.

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4 At the time of writing here was a total of 840,333 domestic students in bachelor (pass) degrees in Australia in 2015, with 43,285 of them in bachelor degrees at ‘non-university providers’. That makes enrolments in non-university bachelor degrees 5.15% of the total. The Australian Government Department of Education and Training statistics do not differentiate between TAFE and non-TAFE providers within their category of ‘non-university providers’. The category includes private universities and ‘Non-University Higher Education Institutions’ (DET 2016a; 2016b).
Other limitations though, are that the Australian data unlike the English data does not include any employment measures, which makes it difficult to comment on the social mobility outcomes of degrees in TAFEs. Future research to explore the career pathways of HIVE graduates with other pathways from lower level VET programmes that provide access into universities and their career pathways would be necessary to answer this aspect of the research question.

In England, the data set used is one collected by the Higher Education Funding Council for England, which has now produced two reports (HEFCE 2013; 2016) on trends in widening participation in FECs in relation to the indicators of effectiveness used across the whole sector of higher education. These data provide comparisons between the further education providers and universities in relation to the profile of students, their completions and employment outcomes. Prior to these reports, data was collected and reported about the ISCED level 5 short cycle Foundation degree only (HEFCE 2010). The article does not discuss these earlier data though because whilst the earlier reports yielded comprehensive accounts of the role of Foundation Degrees in providing access to new types of students (Webb, Brine and Jackson 2006), the data were limited in enabling comparisons with the universities.

The next section provides further contextual information about policies and provision in TAFEs in Australia and FECs in England before presenting and discussing findings from the two national data sets.

**Higher education in TAFEs and FECs**

In 2016, the Australian Government introduced changes to allow students studying degrees in private higher education institutions, including registered non-university higher education providers (such as TAFEs) access to state provided loans (to cover the cost of tuition fees) in order to broaden participation, ‘increase competition and drive innovation, value and choice’ (www.highered.gov.au). This change has enabled students in TAFEs access to federal funding for higher education study that is regarded as private, yet
these TAFEs are owned and run by individual state governments as public providers. Whilst the largest non-university provider in Australia is a private international organisation, Navitas (Wheelahan et al. 2012), the publicly funded TAFEs are growing in importance in most state jurisdictions, possibly driven by the TAFE Directors Australia commitment to higher education expansion as an equity strategy for the sector (TDA 2010) and by changing regulations enabling vocational institutions to become non self-accredited authorities or to partner with higher education institutions (Gale et al. 2013). Between 2007 and 2012 the growth of domestic undergraduate enrolment in higher education in non-university providers (including TAFEs) doubled to 33,688 students, (Dockery, Seymour and Koshy 2015). In just three years (2011 to 2013) enrolments almost doubled - from 3.4% to 6% of the higher education provision (Gale, Hodge, Parker, Rawolle, Charlton, Rodd, Skourdoumbis & Molla 2013; TEQSA 2015), with 11 TAFEs now providing over 100 qualifications, including degrees, across a range of sectors.

In the Australian context, TAFE-based HE (HIVE) differs from other provision in the Vocational Education and Training (VET) sector in several respects. A major difference consists in the fact that VET and HE qualifications occupy different levels of the Australian Qualifications Framework (AQF, 2013), and the numbering of these levels is different to the ISCED classification described earlier. The 10-level Australian framework differentiates qualifications in quantitative terms (e.g. ‘volume of learning’) and qualitative terms (e.g. the degree of autonomy expected of graduates). VET qualifications span the first six levels (Certificates I, II, III, IV, Diploma and Advanced Diploma) with provision for higher VET qualifications at level 8 (i.e. Graduate Certificate and Diplomas). HE qualifications begin at level 6 through to 10 (Associate Degree, Bachelor Degree, Honours, Graduate Certificate and Diploma [the latter three all at level 8], Masters, Doctoral degree). VET and HE also differ in terms of curriculum. All VET qualifications in Australia are competency-based with competencies developed centrally. In contrast, no single model of curriculum is mandated for HE qualifications because curriculum in Australian HE is developed at the individual institution level and based on disciplines and professional bodies of knowledge.
With respect to differences between HIVE and university-based HE, a key difference lies in the funding models for each. The Commonwealth government subsidises student places at universities, and offers income-contingent loans for the unsubsidised portion. The Commonwealth does not subsidise HE places at TAFEs. Income-contingent loans can be accessed by students studying HE at TAFEs, but these loans are more expensive than loans offered students at university. The university student income contingent loans (‘HECS-HELP’) are indexed, but no interest is charged over the life of the loan. Students accessing HE at a TAFE will, if the institution is an approved provider, have access to a ‘FEE-HELP’ loan that is indexed, has no interest charged, but attracts a flat 25% loan fee which is added to the amount the student must repay once their income reaches a certain level. In brief, it is generally more expensive to undertake HE at a TAFE than it is at a university.

Another difference between HIVE and university-based HE is that HIVE qualifications are focused on preparation for occupations, while university-based HE can be general (e.g. a Bachelor of Arts degree), discipline-based (e.g. a mathematics degree) or occupation-oriented (e.g. a dentistry degree).

In England, a similar differentiation occurs within the further education colleges between VET qualifications and higher education qualifications with the Skills Agency having responsibility for VET level programmes and the Higher Education Funding Council for England (HEFCE) responsibility for HE programmes. However, unlike Australia, in England students on HE programmes in FECs have access to the same funding support as those in higher education institutions and programme fees are normally lower than in universities. This funding support for HIVE is because FECs are regarded as strategically important providers of higher education courses that ‘develop distinctive learning programmes, respond to local demand, develop education and training in high-level skills, widen participation and increase the

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5The Skills Funding Agency overseas the provision in 1000 providers including private providers of which there are 209 FECs. Higher vocational education though is mostly found within the 325 colleges and sixth forms. See https://www.gov.uk/government/organisations/skills-funding-agency and https://www.aoc.co.uk/about-colleges/research-and-stats/key-further-education-statistics
accessibility of HE' (HEFCE, 2014). The short-cycle sub-bachelors Foundation Degree introduced in 2001 to widen higher education opportunities and experiences by involving employers and the further education college sector in England, with a focus on work-place learning, has been given new emphasis under the current Conservative government along with ‘degree apprenticeships’ (Johnson 2015). Since 2012 FECs have responded to new regulations by expanding from franchised arrangements with universities to become directly funded by HEFCE to provide higher education (HEFCE, 2014).

Understanding the impact of these changes on participation and social mobility in these countries is complex because the data reporting structures of the two countries is affected by these different regulatory positions of TAFEs and FECs and the lack of comprehensiveness of national data. In Australia, the majority of entrants to undergraduate degrees in TAFEs are direct entrants (personal communication Chair, HE in TAFE Network 2016) and their details and preferences are not captured by the state-based admissions systems. Differences in these two admissions processes have the consequence that published data based on the state-based admissions centres underestimates the numbers of mature entrants, who also are more likely to be part-time and from non-traditional backgrounds compared to those applying through the state systems. Similarly, many mature and part-time entrants to degrees in England do not apply through the national universities admissions system (UCAS). Whilst in both countries there are data-collection processes that record details of registered and taught students, not all of these data are made publicly available. In Australia, data are available for those on courses where the institution receives funding from the Commonwealth government to provide the programme and reduce the fees that students pay, but these are a minority of TAFE degrees because this

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6 In Scotland, higher vocational education has continued to expand through the use of higher vocational qualifications awarded by Edexcel (Reeve, Ingram and Gallacher 2007)
provision is regarded as private in the context of higher education\(^7\). In England, HEFCE is committed to extending publication of the higher education performance indicators in widening participation to embrace further education colleges, although at present these participation data are confined to the student records of young (under 21 in the year of entry) full-time students (HEFCE 2016).

Given these caveats about the difficulties in identifying comprehensive and comparable data on higher vocational education in Australia and England, in what follows different participation data sets from each country will be considered to begin a discussion of the role of vocational institutions in social mobility. Using previously unreleased data encompassing higher education by Australian institutions that are also and/or traditionally have been providers of vocational education and training, Gale et al. (2013) showed that the number of students enrolled in degrees at vocational institutions (TAFEs and private VET) increased markedly between 2006 and 2011 from 4,851 to 19,118\(^8\). This provision included that delivered in partnership with a university and that provided by a public TAFE or private VET provider. The majority of enrolments have been in four major subject areas: Creative Arts, Health, Management and Commerce, and Society and Culture. Other fields of study – notably Engineering and the Natural and Physical Sciences – account for very few enrolments. Creative Arts, for example, accounts for the largest number of students and the biggest increase in enrolments of the reported period: reaching 6,185 students enrolled in 2011, up from just 905 in 2006 (Gale et al. 2013). Content analysis of the degree titles of these programmes particularly in TAFEs suggests a close alignment between the degrees and occupations rather than broad disciplinary fields (Gale et al. 2013). Similarly, case study analysis of public and private VET providers in Australia delivering degrees

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\(^7\) Here a distinction is being drawn between the direct funding of the costs of tuition through the scheme, commonwealth supported places, and the funding students may apply for to take out a loan to cover their fees. Most degrees in TAFEs do not have CSP funding, and tuition fees are set to cover the full cost. Typically degrees in TAFEs cost similar amounts or more to degrees in universities unlike England where FECs fees have been structured to be lower than universities.

\(^8\) This report was based on Australian Government Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE) data and definitions of equity groups for all VET associate and bachelor degrees.
has shown that these offerings have been developed to complement rather than compete with universities, often building on niche areas of existing strengths and to improve the labour market opportunities of their existing diploma and advanced diploma students (Callan and Bowman 2015). However, despite the expansion of undergraduate offerings in vocational institutions, the representation from students of disadvantaged backgrounds remains low. In the following tables, disadvantage is conceptualised using the six equity groupings identified in Bradley report (2008) and which now inform Australian higher education equity policy (Pitman and Koshy 2014) namely: Low socio-economic status (LSES) students; Students from a non-English speaking background (NESB); Indigenous students; Students from regional and remote areas; Students with disability; and Women in non-traditional areas of study. In order to make comparison with England and the focus on social mobility, attention is drawn to the data on the proxy for social class, socio-economic status. In these data, socio-economic status is calculated using the postcode of the applicants’ school and comparing it with the 2011 Socio-economic Index for Areas (SEIFA) Index of Education and Occupation (ABS 2013), to determine which quartile a given postcode area is. Low SES in this context constitutes the bottom quartile (25%) and High SES the top quartile (25%). Table 1 illustrates the proportion of students from each of these ‘equity’ groups enrolled in HIVE bachelor degrees across the period 2006-2011.

As a point of comparison the table includes a ‘reference value’ on the left-hand column that expresses ‘parity’ or proportional representation based on the Australian working-age population. All of the groups here are represented below parity across all of the years. Students from outside metropolitan areas, that is, those from regional areas are enrolled at about half the parity rate. Similarly, Aboriginal and Torres Strait Islanders constitute just over 2% of 15-64 year olds in the population but represent around 0.5% - 0.8% of students. Students with disabilities were represented at less than half of their parity rate (8%) until 2011 when there was a steep increase to just over parity. People
from low socio-economic areas – the equity group of most concern in Australia’s recent widening participation policies (see for example, Australian Government, 2009) – constitute 25% of the population. In VET bachelor degrees, however, only around 15% of students were from low SES backgrounds.

Insert table 2

Table 2 compares the proportional representation of equity groups in university-provider and VET-provider bachelor degrees. These data suggest there is an equity ‘problem’ for VET-provider degrees that is even more marked than for Australian universities which has been the focus of recent policy interventions. While the relatively static low SES participation rate of around 16% in the reported years (it has increased since) has been a cause for concern and a catalyst for change, in VET-provider degrees the participation rate is lower and declining. The same is true for the other equity groups. Completion rates for these VET provider degrees are also strikingly low as proportion of total enrolments – see Table 3.

Insert table 3

Even accounting for a three-year lag between commencement and completion of a degree, and for the marked increase in total enrolments, the number of students completing their qualifications is low. The completion rates of students in equity groups are also very low, even lower than their participation rates, effectively compounding the inequity of VET-provider bachelor degrees. For some groups – Aboriginal and Torres Strait Islanders, students with non-English speaking backgrounds (NESB), and those from remote parts of Australia – there were virtually no completions at all over the period 2006-2011. For other groups, completion rates were substantially below participation rates, which are themselves below parity as portrayed in Table 4.

Insert table 4
Further work analysing student higher education preferences of those who apply for undergraduate study through the South Australian and Victorian Tertiary Admissions Centres shows that whilst there is a low level of interest in TAFE bachelor degrees compared to universities, student preferences for HE in TAFE in the four year period between 2010 and 2013 rose by 30% (Gale, Parker, Molla and Findlay 2015). Intriguingly analysis of this preference data provides further support that student preferences for TAFE degrees do not conform with the policy expectations that HIVE is the second chance pathway for those from equity groups. Instead, the striking finding is that students who prefer TAFE bachelor degrees most often come from metropolitan schools rather than the regional schools and from schools in high rather than low socio-economic status areas (Gale et al. 2015). However, it should be noted again that these data sets only capture the preferences of young applicants who apply through the state-wide admissions system directed at school leavers, albeit these are in the states with some of the greatest provision of TAFE degrees. Mature applicants, are more likely to apply direct to the TAFEs in these two states, which means that the data may well underestimate the role of HIVE in TAFEs in providing second chance learning to those from low SES backgrounds.

The finding that preferences for TAFE bachelor degrees are more likely to come from students in high socio-economic status schools and from metropolitan schools, needs some further research attention given that current research literature has identified an association between lower status institutions such as TAFEs and higher participation from those from low status backgrounds (Gale and Parker 2013; Webb, Black, Morton, Plowright and Roy 2015). The range of provision available and the timing of preferences may go some way to help understand these choices. The preferences of students from high socio-economic schools outnumbered other SES groups in

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9 Note that in the States of New South Wales and the Australia Capital Territory, where there is considerable provision of higher vocational education, the Universities Admissions Centre requires applicants to TAFEs to apply direct to the institutions. Therefore, direct admissions data from NSW and the ACT are not available to compare with the data from South Australia and Victoria.
almost every TAFE-degree field of study, including the fields of Health and Education, which have often been seen as typical low SES student choices in universities (Gale et al. 2015). Furthermore, student preferences for TAFE bachelor degrees increased after the publication of their Australian Tertiary Admission Rank (ATAR) and the mean ATAR scores for those expressing a TAFE preference from among the high SES schools was just under 57, well below the expected cut-off for entry to university bachelor degrees, which would preclude them from entry to university (Gale et al. 2015). Drawing on literature discussed earlier that showed that education can also perpetuate inequalities through the influence of parental education and social class on employment outcomes (OECD 2015), arguably, the finding that high SES students are redressing their weak school performance by accessing new degree provision provided by HIVE could be understood as evidence of the middle classes trying to maintain their positional advantage and avoid downward social mobility (Brown, Hesketh and Williams 2003). It is also an analysis that accords with the view that every period of higher education expansion has benefited the middle classes (Tomlinson 2005). Clearly, this unexpected finding needs further empirical investigation to explore how these high SES students regard degrees in TAFE and whether these pathways are being used as a ‘back door’ route to enter university at a later stage.

Yet intriguingly, data on participation in higher vocational education in England presents a different picture, albeit one that should be considered with caution given the differences in the types of data sets available for comparison. In 2016, HEFCE published the third in a series of analyses of trends in higher education comparing FECs and HEIs in relation to three performance indicators: widening participation, non-continuation and employment (HEFCE 2016). The data were derived from individual student records for the academic years 2010-11, 2011-2012 and 2012-2013 and the destinations of leavers from higher education surveys for the years 2011-2012 and 2012-2013. The focus of the participation performance indicator was on young (under 21 before 30th September in the year of entry) full-time entrants to degrees and other undergraduate study (including foundation degrees). Other differences between the English and the Australian data are in the way
that equity groups are identified and measured. In the UK, the concept of low participation neighbourhood is used to identify where students lived prior to participating in higher education and to indicate those areas with the highest rates of low participation\textsuperscript{10}. Whereas in Australia, the socio-economic status designation of an area is deemed to indicate the location of the equity group that has not traditionally participated in higher education. However, it is important to note that researchers in both countries have questioned the accuracy of these area-based proxy indicators of socio-economic disadvantage for the identification of equity groups and the locales to target resources to widen participation. For example, in the UK new indicators are being evaluated (Boliver, Gorard, & Siddiqui 2015) and in Australia, Dockery, Seymour and Koshy (2015) argue that area-based socio-economic status measures leads to substantial misclassification, which results in overestimating the proportion of students from low-SES households enrolled in university and underestimating the difficulties many individuals may have in accessing higher education. Notwithstanding these difficulties, for the purposes of this article, the measures used in government national collections and publications will be used for the comparative discussion, albeit with caution, because these are the data that inform policy discussion and development. Also, since the data discussed below are derived from government reports published already (HEFCE 2016), a narrative discussion rather than tables of the English data will be included because the data cannot be presented in the same format as the Australian material.

Unlike the Australian data presented above, in England, the proportions of young, full-time entrants registered at FECs from low participation neighbourhoods were higher than the equivalent proportion in HEIs in both first degrees and on other undergraduate programmes (HEFCE 2016). In 2012-2013 for full-time, first degrees, 21.8% of students registered at FECs were from low participation neighbourhoods compared with 10.9% in HEIs. On other undergraduate programmes the proportions were 21.5% in FECs

\textsuperscript{10} Low participation neighbourhoods have been defined using HEFCE’s Participation of Local Areas Classifications, POLAR 2 and POLAR3. These classifications divide POLAR into five quintiles with quintile 1 having the lowest rates of participation. See http://www.hefce.ac.uk/analysis/yp/POLAR/
and 16% in HEIs. HEFCE (2016) also provide data on the sector adjusted averages based on allowances made for the students’ ages, subject areas being studied and the highest qualifications on entry to the sector, which show that the proportion of students from low participation neighbourhoods in FECs well exceed the sector adjusted averages compared to HEIs.

In England continuation data tracks students by age, young (under 21 years of age) and mature (21 years of age and over on entry) from the year they enter an institution to the following year recording whether they are on the same programme, have transferred internally to another programme or externally to another institution or have left HE. In 2011-2012 mature entrants registered at FECs had higher non-continuation rates (12.3%) on full-time first degrees compared to young entrants (9.3%) (see HEFCE 2016). Figures for non-continuation on other undergraduate study showed that mature entrants to FECs were very slightly higher than for young entrants (16.8% compared to 15.2%), but interestingly were the other way around in HEIs, with mature entrants having a non-continuation rate of 11.2% compared with 13.7% for young entrants. Overall, including young and mature entrants solely on first degrees, HEIs had lower non-continuation rates than FECs (89% of HEIs had a non-continuation rate of less than 10%, whilst this applied in only 57% of FECs), although the proportions of FECs performing better than their sector-adjusted average were similar to those of HEIs.

The third performance indicator that HEFCE (2016) published is the employment rates of leavers obtaining a higher education qualification. Overall, in 2012-2013, the proportion of full-time first-degree qualifiers from FECs who progressed to work or further study was lower than the qualifiers from HEIs (84.5% compared to 91.9%). The differences between the two sectors were much lower for those on other undergraduate programmes (93.2% in FECs and 95.5% in HEIs), but this is to be expected because progression to further study is a significant outcome for short cycle higher education (Reeve, Gallacher and Ingram 2007). Reviewed as a whole, the HEFCE (2016) data shows that over the three-year period from 2010-2011, the sector-adjusted average highlighted a reduction in the proportion of FECs
performing better than their sector-adjusted average for the proportion of full-time degree and other undergraduate qualifiers progressing to employment or further study. Yet, more research perhaps exploring changes in labour market opportunities is needed to fully understand whether progression opportunities from FECs are diminishing because whilst distinctions between the outcomes of FECs and HEIs were also present in earlier data (HEFCE 2013), two years on, both sectors show that more people are in employment or further study following their undergraduate study (HEFCE 2016). Performance indicators published to date have not included salary data, but the 2010-2011 data revealed that graduates from HEIs experienced a salary premium over those from FECs (HEFCE 2013), which may add further weight to these differential outcomes between the two sectors.

Implications for social mobility
This article began with the question, who is benefiting from the expansion of higher education qualifications and participation in the vocational education and training sector and for what futures? Alongside this question the article considered how do typologies for the development of HIVE compare between Anglophone countries, such as Australia and England? Similarities have been identified in the way that higher vocational education has developed in Australia and England. In both countries the expansion of higher vocational education has been associated with policies to widen participation to counteract the social exclusion of those who have not traditionally participated in university education (Scott 2004; Gale and Parker 2013). The article has shown that these countries have followed the developments typical of liberal-market economies in which vocational and academic education are hierarchically divided by status and bounded within different institutional and sector regulations (Parry 2015; Wheelahan et al. 2009). At the same time, a number of differences have been identified at the system level between Australia and England, which indicate different policy drivers and players shaping the expansion of higher vocational education. These differences discussed in the article lead to some complicating and nuancing of the argument in the current literature that Anglophone models position HIVE as
‘bottom of the hierarchy’ (Wheelahan 2016, 45) and the outcomes of higher vocational education will not advance social mobility.

In England, the main drivers to expand higher vocational education have been government policies to increase the skills base of the population. Rather than pure liberal-market driven expansion, an organised-market has developed (Verdier 2017 forthcoming). State regulation and funding steers have targeted and controlled the expansion of HIVE and positioned this provision as second chance higher education to widen access to the system rather than participation to specific selecting universities and fields of study (Parry, 2015; Tonks and Farr 2003). Such drivers have ensured continued status segmentation between vocational and academic higher education providers and differential participation across the system typical of Anglophone, rather than German-speaking countries (Wolter and Kerst 2015). The foundation degree, with its required progression pathways to a bachelor degree accredited by a university, has ensured that the college-based pathways are closely linked to local skills needs and employers, but such regulatory frameworks have circumscribed the development of colleges to a role that complements the broader based degree provision of the universities (Parry et al. 2012).

Evidence from HEFCE (2013; 2016) performance data, shows the further education sector is performing this complementary role well in widening access to higher education, although since the employment and salary outcomes are lower for FE college graduates, this expansion has not necessarily increased social mobility. Such findings confirm the arguments of others that the expansion of the higher education system through increasing participation of the most disadvantaged in the provision of the lower status institutions in the sector elides widening access with social mobility and ignores who is participating where and with what outcomes (Avis and Orr 2016; Bathmaker 2016; Brown 2013). In this regard, whilst the expansion of HIVE benefits many individuals socially and economically, this English version of the Anglophone model of development segregates and enforces steep hierarchies between institutions, which limits the ‘redistributive potential’ of
widening access (Hayward and Hoelscher, 2011, 317). As the relationships between different forms of employment and qualifications accommodate new institutions and students, the relationships within the sector hierarchy stay the same (Ebner 2015), therefore the potential for social mobility is diminished.

In Australia, the expansion of higher vocational education demonstrates some similarities with the English example in that employers, who have been involved in designing competency-based qualifications, have provided a base for the development of niche higher education awards to increase the employability of TAFE graduates and complement university provision (Callan and Bowman 2015). However, the expansion of HIVE in Australia is being driven more by a fall-out from a liberal-market system rather than through policy and funding steer from government, as in England. Competition from private providers and contestability for state funding have restricted TAFE opportunities in the VET market (Burke 2015; Knight and Mlotkowski 2009), whilst concurrently, opportunities for expansion of non-university providers have been opened up by actions at the federal level. Ironically, degrees in TAFE operate as private provision within a public system under the same regulations and standards as those in universities, in contrast to England, (where apart from one provider of foundation degrees, further education undergraduate provision occupies a different zone from universities, Parry 2015)11. In repositioning TAFEs as providers of higher education in this changing space, TAFE directors have drawn on federal level widening access policies directed at the higher education system and TAFEs’ history of working with local labour markets and employers to justify their distinctiveness in developing new provision (or new markets for their awards) and bridging students into what they refer to as applied higher education (TDA 2010).

Therefore, although the main driver for the development of HIVE in Australia could be construed as liberal-market forces, in England, it has been the result of strategic policy by the state. However, from a regulatory perspective, higher vocational education in the two countries is positioned very differently. HIVE in non-university providers in Australia operates within the same standards

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11 By 2016 this figure had increased to six providers.
framework as university providers. Consequently, there is the potential for the
Australian tertiary sector to reduce the steep hierarchical status segmentation
between academic and vocational higher education and display some
characteristics more typical of hybrid systems of German-speaking countries,
rather than those found in the English Anglophone system (Graf 2013; Powell

Whilst this discussion has identified regulatory differences between Australia
and England that suggest higher vocational education is differently positioned
in the two countries, the analysis of participation data has revealed some
paradoxes that will now be discussed. Even allowing for the difficulties in
comparing like-for-like data sets between Australia and England and the
problems of whether or not area-based measures of disadvantage adequately
measure individual disadvantage, it is still puzzling that the participation data
for HIVE in Australia shows the high preference rates and presence of many
younger students from high socio-economic status areas, and
disproportionately few young people from low socio-economic status areas
compared to universities; the obverse of the participation data in England
(Gale et al. 2013; Gale et al. 2015; HEFCE 2016; Parry et al. 2012). Further
research is needed to explore the reasons why young people are choosing
these degrees, but given the literature discussed earlier about the effects on
congested labour markets of expansion of higher education (see Ebner 2015)
the preferences of these young people from high SES areas suggest one
reading of the data is that these young people are trying to recover or prevent
a fall in their class position.

Also why would young people from high SES areas choose degrees in TAFEs,
given the overwhelming evidence that in Anglophone systems where
vocational and academic pathways to higher education are differentiated by
status and outcomes, post-school participation is typically classed or
ethnicised ‘choice’ (Gale and Parker 2013; Reay, Davies, David and Ball
2001; Webb, Black, Morton, Plowright and Roy 2015) and our findings show
TAFEs have low completion rates? To answer this new question further
empirical work is necessary to consider whether the corporatist and mixed-
regulations models that required TAFEs to work within National Skills Council expectations (Burke 2015b) have created a context for occupation-linked degrees which employers value (Callan and Bowman 2015) and therefore provide effective progression for those who do complete. Correspondingly, further empirical work is needed to explore whether the involvement of employers in degree development in TAFEs is evidence of an applied curriculum without theoretical knowledge and whether the open access recruitment policies that prevail in TAFEs (in contrast to the more highly selecting entry policies operating in universities) are ‘helping to sustain existing social hierarchies and inequalities’ (Wheelahan 2016,45). Australia does not yet publish performance data for higher education that would allow the same detailed analysis of outcomes discussed above in relation to England.

**Concluding ideas**
The article has identified many similarities and differences in the positioning of the vocational and academic sectors in England and Australia, which show the importance of exploring national trajectories in order to understand the provision available and differences in participation. Whilst systems that segment academic and vocational learning hierarchically have tended to provide a weak basis for social mobility as the English data indicates, the presence of young middle class students on Australian TAFE degrees suggests they may well be using the expansion of higher vocational education to sustain their advantages, just as the middle classes have benefitted from previous system expansions (Tomlinson 2005). Yet, the analysis presented here also suggests that expansion of HIVE in Australia may provide opportunities for vocational higher education to recompense those with lower socio-economic starting points (Backes-Gellner and Geel 2014). The participation logic is that, if young middle class students regard degrees from TAFEs as valuable capital resources to secure their class position and lower their risk in the positional conflict of career entry (Brown 2013), is it possible that those from low SES areas could use such degrees to achieve upward social mobility?
In conclusion, whilst this article can only raise these questions not answer them, arguably, the regulatory positioning of higher vocational education in TAFEs and the history of engagement of this sector with employers' organisations has the potential to modify the steep hierarchical differences between the vocational and academic sectors that still prevail in England. Further work is needed to ask in what ways degrees in TAFEs might be widening access to higher education as is happening with the increased participation of those from low participation neighbourhoods in FECs in England, and what might be the implications for social mobility if the higher education system in Australia is developing new forms of hybridity more typical of German speaking countries than that found in England?

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### Table 1: Equity group enrolments in HIVE-bachelor degrees, per cent

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Females</strong>*</td>
<td>68.5%</td>
<td>68.6%</td>
<td>66.1%</td>
<td>65.0%</td>
<td>63.5%</td>
<td>62.8%</td>
</tr>
<tr>
<td><strong>Low SES (25%)</strong></td>
<td>15.2%</td>
<td>14.3%</td>
<td>15.9%</td>
<td>15.4%</td>
<td>15.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td><strong>NESB (4.66%)</strong></td>
<td>0.7%</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>Aboriginal and Torres Strait Islanders (2.23%)</strong></td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>Regional (23.32%)</strong></td>
<td>12.7%</td>
<td>12.2%</td>
<td>13.9%</td>
<td>13.6%</td>
<td>12.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td><strong>Remote (0.6%)</strong></td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>Disability (8.0%)</strong></td>
<td>2.7%</td>
<td>2.6%</td>
<td>2.3%</td>
<td>2.9%</td>
<td>3.3%</td>
<td>8.1%</td>
</tr>
<tr>
<td><strong>Women in Non-traditional Areas (40%)</strong></td>
<td>2.6%</td>
<td>3.3%</td>
<td>3.8%</td>
<td>4.6%</td>
<td>7.9%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

*Source: Gale et al. (2013, 39)*

### Table 2 Comparison of HIVE and university enrolments, bachelor degree

<table>
<thead>
<tr>
<th>Bachelor degree (pass &amp; honours) %</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VET</td>
<td>Uni</td>
<td>VET</td>
</tr>
</tbody>
</table>

36
<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total bachelor degree enrolments</strong></td>
<td>4,851</td>
<td>8,518</td>
<td>11,558</td>
<td>14,296</td>
<td>17,291</td>
<td>19,118</td>
</tr>
<tr>
<td><strong>Total Bachelor Degree completions</strong></td>
<td>451</td>
<td>994</td>
<td>1,130</td>
<td>1,553</td>
<td>1,900</td>
<td>2,409</td>
</tr>
</tbody>
</table>

*Source: Gale et al. 2013.*
Table 4: Comparison of HIVE- bachelor degree students by select equity groups

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW SES (Reference value 25%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>15.2%</td>
<td>14.3%</td>
<td>15.9%</td>
<td>15.4%</td>
<td>15.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Completion</td>
<td>10.9%</td>
<td>7.3%</td>
<td>6.6%</td>
<td>10.2%</td>
<td>11.6%</td>
<td>8.6%</td>
</tr>
<tr>
<td><strong>DISABILITY (Reference value 8%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>2.7%</td>
<td>2.6%</td>
<td>2.3%</td>
<td>2.9%</td>
<td>3.3%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Completion</td>
<td>1.6%</td>
<td>1.0%</td>
<td>0.4%</td>
<td>0.8%</td>
<td>1.2%</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>REGIONAL (Reference value 23.3%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>12.7%</td>
<td>12.2%</td>
<td>13.9%</td>
<td>13.6%</td>
<td>12.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Completion</td>
<td>10.0%</td>
<td>5.9%</td>
<td>5.8%</td>
<td>7.0%</td>
<td>8.4%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

*Source: Gale et al. (2013, 45)*