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Editorial: Post-secondary education and training, new vocational and hybrid pathways and questions of equity, inequality and social mobility

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Post-secondary education and training, new vocational and hybrid pathways and questions of equity, inequality and social mobility: introduction to the special issue

Higher vocational education, equity, inequality, social mobility, comparative research

Introduction

Distinctive forms of post-secondary education for those who do not follow well-worn academic routes from school to university are evolving rapidly across a wide range of countries. Referred to as Higher Vocational Education (HVE) in countries such as the Netherlands and China, and career-technical, vocational or applied higher education in North America, they can many take different forms, including two year ‘short-cycle’ higher education such as associate degrees and foundation degrees, applied baccalaureates, higher level and degree apprenticeships, and hybrid courses that combine vocational and academic learning. Emerging developments include changes to the pathways into, through and beyond the growing diversity of education and training provision post-school in different countries, alongside new and evolving institutional contexts for provision. The papers in this special issue cover diverse aspects of this changing landscape. This introductory paper sets out the background context for the papers and then introduces the key themes of equity, inequality and social mobility that are of central concern to the special issue.

Why a special issue on post-secondary education and training and new vocational and hybrid pathways?

In 2014, the OECD’s report *Skills Beyond School* threw a spotlight on post-secondary vocational education, arguing that it is a largely ‘hidden world’, but is of key

importance to the development of systems that are successfully able to respond to the increasing demand for higher level technical and professional skills (defined as ISCED level 5 and above¹). The report is just one example of how the importance of higher level skills has become a policy given since the end of the 20th century. In the global race for economic advantage, policy makers in advanced industrialised and post-industrial countries have argued that workers with high levels of knowledge and skill will enable these countries to compete successfully in globalised knowledge economies. So, for example, the European Commission's New Skills Agenda for Europe, published in 2016 (EC, 2016), characterises high-level skills as driving productivity and innovation within European societies, and the European Centre for the Development of Vocational Training CEDEFOP predicts an increasing need for higher level knowledge and skill:

All sectors are expected to employ more highly qualified people, reacting to a combination of demand and supply factors. Technology, by replacing routine tasks, is making jobs more demanding and requiring higher skills (CEDEFOP, 2016: unnumbered).

In their *Skills Beyond School* report, the OECD emphasises that higher skills are not just about university education, but include higher level technical skills at sub-Bachelor degree level. Using forecasts of future labour market needs in Europe and the USA (CEDEFOP 2012; Carnevale, Smith and Strohl, 2010), the report declares that nearly two-thirds of overall employment growth in the European Union will be in the category

¹ The International Standard Classification of Education (ISCED) is a statistical framework that categorises education into levels from 0 (early childhood) to 8 (doctoral level or equivalent) maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2012). The most recent version is ISCED 2011.

of technicians and associate professionals, and nearly one-third of job vacancies in the USA by 2018 will require some post-secondary qualification but less than a four-year Degree. These imperatives can be traced through into policy and reform at individual country level. In the UK for example, the ‘modern industrial strategy’ proposed in the government Green Paper published in January 2017 states:

we have a shortage of high-skilled technicians below graduate level. Reflecting the historic weakness of technical education in the UK, only 10 per cent of adults hold technical education as their highest qualification, placing us 16th out of 20 OECD countries. (HM Government 2017: 38)

While alternative prognoses question this account of current and future labour markets and skills needs (Autor, 2010; Holmes, 2015; Rifkin, 1995; Stiglitz, 2012), the drive towards higher skills has become a dominant policy narrative. It is therefore a timely moment to bring together research that examines current developments related to post-secondary vocational education. In particular, it is important to consider the implications of current developments for equity, inequality and social mobility, and to raise questions about whose interests are served by changing policies and practices.

What is post-secondary higher vocational education?

So what is HVE? The OECD’s *Skills Beyond School* report defines post-secondary higher vocational education and training as ‘the programmes and qualifications that prepare students for specific occupations or careers, that are beyond upper secondary level, and that would normally require at least six months full-time or equivalent preparation.’ (OECD, 2014: 22). The report identifies three types of qualification as fitting into this definition:

- Post-secondary qualifications, requiring more than six months and less than three years of full-time study (or the part-time equivalent), normally at ISCED level 5 (under ISCED 2011)
 - Vocational bachelor degrees, designed to prepare graduates for occupations for careers, and sometimes described as professional bachelor degrees
 - Professional examinations (sometimes also described as industry certifications), often free of requirements for fixed programmes of study, such as examinations for accountants, for master builders and proprietary software certifications.
- (OECD, 2014: 22-23)

The above definition demonstrates the diversity of the landscape that constitutes post-secondary higher vocational education. It also emphasises the strong association of HVE with specific qualifications or credentials, often at sub-Bachelor degree level (ISCED level 5), but also Bachelor degree level provision (ISCED level 6). In terms of labour market destinations, HVE tends to be positioned as preparation for higher level technical occupations, ‘associate professional’ roles as defined in the UK Standard Occupational Classification (ONS, 2010), distinguishing it from preparation for the professions and for management positions associated with university education. But increasing blurring of divisions between ‘associate’ professional and professional occupations, particularly in occupations where a particular level of qualification is not required as a license to practice, draws attention to the complicated status and positioning of HVE, and the danger of attempting to create a reified entity into which particular forms of provision are then forced.

These considerations signal the importance of using the term higher vocational education with caution. While HVE is the term for a specific vocational track in China and the Netherlands (see Stewart, 2015: 15; Casey, 2013: 9), it does not at present

appear to have strong purchase elsewhere. There is however an absence of any agreed alternative defining term or terms, and this means that it is not easy to identify and locate research, or to get a sense of key debates and concerns that are raised in current scholarly inquiry that focuses on HVE. To take this journal as an example, a search using the term higher vocational education in December 2016 found a total of 17 items, only eight of which addressed HVE as the substantive focus of the paper. A further search using the OECD's preferred term 'professional education and training' (OECD, 2014) returned nothing at all, while a recent paper in the journal uses a different term altogether, referring to 'work-based academic education' (Graf, 2016). College higher education is a designation regularly used in countries such as Norway (Kyvik, 2009) and England, though it only covers some forms of HVE, and earlier research refers to 'non-university HE' (Taylor et al, 2008; Teichler, 1998).

There are important reasons for the use of different terms. As the term 'non-university HE' suggests, they reflect the content, value and esteem attached to vocationally-oriented higher level routes in different countries, and the aim of this special issue is not to impose or reify a particular understanding of higher vocational education, but to use the notion of HVE as a lens to consider current developments that operate in what might be defined as the liminal space between vocational and higher education. The focus on equity, inequality and social mobility points to a significant feature of this space. Taking the UK as an example, it is here that the 'other 50 per cent' may be found: those who do not progress to university higher education, but go on to further vocational education and training or work, who tend to be from disadvantaged and lower socio-economic backgrounds, and who face lower funding and greater complexity in their choices (Avis and Orr, 2016; House of Lords Select Committee on Social Mobility, 2016; UK Social Mobility Commission, 2016). Whereas policy in

countries such as England and *College for All* policy in the USA focused on participation in higher education in the recent past - the UK had a target of 50% of those under 30 participating in some form of higher education under New Labour (1997-2010), there are now questions being asked about what forms of education and training are available for the other 50%, and in early 2017, the UK Conservative Government proposed a new wave of reforms, to create a system of technical education that would 'benefit the half of young people who do not go to university', as one pillar in a new industrial strategy (HM Government, 2017: 11).

Questions of equity, inequality and social mobility in HVE

But does HVE in its diverse forms further contribute to a game of winners and losers? Or can it be a source of progressive change and a means of breaking down inequalities? The development and expansion of post-secondary HVE forms part of an overall expansion of tertiary education that has occurred across the Western world since the late 20th century (Brown et al, 1997), and increasingly across other countries at the start of the 21st century. Shavit, Arum and Gamoran (2007) define this expansion as one of the most important social transformations of the second half of the twentieth century, holding out the promise of opening up access for disadvantaged groups to higher levels of education and enhancing overall life chances. However, a key question that has been a focus for research into widening access to HE, is whether expansion reduces or conversely maintains and produces new forms of inequality (Bathmaker et al, 2016; Mayhew, Deer and Dua, 2004; Osborne, Gallacher and Crossan, 2007; Teichler, 2007, 2008; Vignoles and Crawford, 2010). For while expansion has opened up HE, the status and value of different forms of HE are not equal in relation to one another. Hierarchical stratification of the HE field means that who goes where and who does what are

important considerations (Reay, David and Ball, 2005).

These concerns are crucial for research into evolving systems of higher *vocational* education at the beginning of the 21st century: how do different forms of HVE contribute to the distribution of life chances and rewards, and in what ways may they help to narrow or conversely widen inequalities? Do current developments in HVE simply contribute to what Marginson (2016: 415) refers to as a ‘vertical ‘stretching’ of stratification’, through new hybrid qualifications and institutions, alongside binary systems, different fields of study and tiered hierarchies of institutions, which continue to reinforce the intersection between stratified social backgrounds and stratifying structures.

The papers in this special issue indicate that the evidence from different countries does not allow for straightforward answers to these questions. Comparative research in this issue and elsewhere (for example Bernhard, Graf and Powell, 2013; Ertl, 2014; Moodie, 2008) shows that despite concerted attempts by supra-national policy organisations to achieve greater standardisation of education and training systems (Gordon, 2015; OECD, 2014), HVE is evolving in different ways in individual countries, and responses to rapidly changing labour market conditions are influenced by the history of social and economic relations, and the relationship between education and training and the labour market in particular contexts. Vocational pathways, particularly the dual apprenticeship system, in countries such as Switzerland, Germany, Austria and Denmark for example have a long-established reputation amongst employers and students as a valued route into skilled employment. Hybrid or ‘dual’ routes at higher levels have built on the strength of that reputation, and are positioned as high quality routes that are proving increasingly desirable to academic high achievers. The challenge in these countries is that vocational routes become colonized by those from advantaged

backgrounds, squeezing out the disadvantaged and under-served (Graf, 2016; Edeling and Pilz; Jørgensen in this issue).

The papers in this issue

While a number of the papers in this special issue focus specifically on HVE (Bragg and Soler; Hippach-Schneider et al; Webb et al), others consider pathways that lead into HVE at upper secondary (Virolainen and Thunqvist, Jørgensen; Edeling and Pilz) and post-secondary levels (Giani and Fox), and Wheelahan and Moodie focus on the relationship between vocational education and labour markets.

Based on an analysis of Australia and Canada, Wheelahan and Moodie explore the link between vocational education qualifications and occupational destinations in liberal market economies. They argue that in these economies, where there is limited occupational regulation, the connection between qualifications and destinations is weak. They argue that although governments persist in trying to match education and training to types of employer demand, in labour markets where there is limited occupational regulation, this will not work. Providing effective pathways into employment depends more on the structure of the labour market than on the nature of qualifications. They conclude that while postsecondary education can contribute to educational and occupational progression and social inclusion, it cannot in unregulated labour markets solve the skills problem.

Hippach-Schneider and colleagues' paper then raises a significant challenge for understanding the nature and extent of HVE across different countries at the present time. Based on a comparison of Austria, Germany and France, their paper highlights the considerable differences in where vocationally-oriented higher education sits in different national tertiary education systems. They demonstrate how current statistical

data, particularly that used to make international comparisons, provides either an oversimplified or at times erroneous picture. The paper shows how changes to the classification used for ISCED 2011 compared with ISCED 1997 result in a completely different picture of provision in individual countries, even when nothing has changed. Moreover, the statistics do not allow a proper indication of the amount of vocational education that forms part of tertiary education, nor the amount of academic higher education that includes workplace learning. Following on from the analysis in this paper, it is clear that if we do not have a robust statistical understanding of HVE provision, it becomes impossible to consider whether patterns of participation and progression show up class, gender, race and other differences, and what the implications of such differences might be.

The following three papers, by Virolainen and Thunqvist, Jørgensen, and Edeling and Pilz all consider transition systems from upper secondary to higher level education. The papers by Virolainen and Thunqvist and that by Jørgensen focus on pathways from initial vocational education and training (IVET) to HE in the Nordic countries of Sweden, Finland and Denmark. These papers highlight differences among countries that are often deemed to be similar in their practices, most strikingly here in the contrast between a tendency towards an education logic (Iannelli and Raffe, 2007) in the school-based IVET systems of Sweden and Finland, allowing increasing opportunities for transition to HE but less secure transitions to employment (Virolainen and Thunqvist), compared with the employment logic of the apprenticeship model in Denmark, which provides a strong route to employment but does not enable access to academically-driven forms of HE (Jørgensen). Jørgensen's paper moreover, highlights the challenges of combining equality goals with seeking higher status quality for vocational routes. The increasing academic emphasis in high status vocational routes in

Denmark means that vocational qualifications no longer provide a secure progression route to higher level vocational education for disadvantaged young people, creating a barrier to upward social mobility.

The paper by Edeling and Pilz considers an emerging form of hybridity in the German educational system. Whereas hybrid qualifications involving integration between academic and vocational education have become more common-place in Germany, their focus is on a different form of educational hybridity: the increasing use of apprenticeship as an additive double qualification pathway, whereby students who have completed the academic Abitur qualification do not progress directly to university, but opt first to complete an apprenticeship. Their paper suggests that with over 50% of young people in Germany now completing the Abitur, and growing drop-out rates from university HE, the double qualification pathway could be understood as a means for students who may be less certain about participation in HE to build a more stable career pathway, that allows them to delay their decision about progression to HE, and also provides a fall-back if they decide to leave early.

Giani and Fox move the focus to post-secondary pathways. Their paper presents an analysis of a strategy implemented in five states in the USA, based on a system of credit accumulation, intended to lead participants on from short credentials to the completion of longer term qualifications, with a goal of achieving upward mobility amongst low-income, low-skilled adult workers. The paper demonstrates the importance of detailed breakdown by factors such as gender, ethnicity and socio-economic background in seeking to evaluate the effects of these sorts of initiatives. Their analysis found that while the strategy did encourage progression from short programmes to longer credentials, there were considerable disparities by ethnicity, particularly in relation to completion and progression.

Bragg and Soler's paper also look at provision in the USA. They focus on Applied Baccalaureate degrees, offering an exploration of the differing perspectives of community college staff, university staff, employers and students towards these degrees. They find that community college staff and university staff have contrasting views of Applied Baccalaureates, with the former seeing them as having wider benefits than the latter. While students and employers support the degrees, they lack the power to influence change in the higher education system. These differences in perceptions and power to achieve change amongst different stakeholders affect the possibility of the Applied Baccalaureate degree becoming a stronger part of overall provision. While this may limit the opportunities that the Applied Baccalaureate may open up, the authors also point to how expanded use of the qualification could act as a diversionary or 'cooling out' mechanism (Clark, 1960), rather than creating opportunities for upward mobility.

The final paper in the special issue by Webb et al focuses on HVE provision in vocational institutions in Australia and England. Expansion of HVE in both countries has been associated with policies to widen participation, as a means of counteracting the exclusion of those who have not traditionally participated in university education. Their paper offers an analysis of available statistical data to evaluate and compare the role of Technical and Further Education institutes in Australia and further education colleges in England in widening participation and creating the potential for social mobility. In contrast to the strong hierarchical stratification in the English system, that creates a weak basis for social mobility, they suggest that the presence of young middle class people in Australian HVE may help to increase the positional value of these programmes, and result in increased opportunities for upward mobility among participants from lower socio-economic backgrounds.

Together, this collection of papers offers a unique opportunity to move beyond the more technicist treatment of these issues to be found in the work of organisations such as CEDEFOP and the OECD, and it looks beyond a narrow national emphasis, to consider HVE in broader international social and economic contexts.

Implications for future research

So can current reforms to post-secondary technical and vocational education help address inequalities and contribute to social mobility? The papers in this special issue draw attention to how, not surprisingly, HVE is not the magic bullet to achieving increased equity, and that changes to HVE have to be understood within the wider context of social and economic relations that prevail in particular countries. An important theme arising out of the papers concerns the positioning of post-secondary technical and vocational education in relation to high status academic education pathways and qualifications. Examples from Germany, Denmark and Australia in this issue demonstrate that some forms of technical and vocational education are gaining a reputation for distinction, and there is evidence that the privileged are using these pathways as well as traditional academic routes to gain and maintain advantage. While this may be seen as helping towards goals of creating high quality vocational education, it may conversely also contribute to increased inequality, by serving to exclude the disadvantaged and lower achievers from provision that is now deemed too challenging for them. Thus pathways to quality can at the same time become pathways to inequality.

To understand and address these conundrums in productive ways needs work that is prepared to question what Grubb and Lazerson (2007) call the ‘education gospel’ that sees education, and vocationally-oriented education in particular, as the remedy for social and economic problems. It requires work which considers how the promises of

the ‘American Dream’ of success and prosperity for all through education and hard work (Brown, Lauder and Ashton, 2011) remain a myth for many people, that will not be solved in a straightforward way through more reforms to education and training.

In moving forward and rising to such challenges, there is an important place for continuing the ‘political arithmetic’ outlined by Brown et al (1997), which holds current policies and practices up to critical scrutiny and account. There are also stronger links to be made with the critical traditions and literatures concerned with inequalities and social mobility (see for example Birkelund, 2006; Bol and Van de Werfhorst, 2011; Breen and Jonsson, 2005; Busemeyer, 2015; Goldthorpe, 2016; Robertson, 2016; Thompson and Simmons, 2013), that challenge researchers as well as policymakers to think beyond what works, and to consider much more carefully who gets what and why. Finally, there is a wealth of previous research that has addressed the long-standing issues and challenges that are associated with vocational education provision, and as researchers we have a duty to build on the insights from this work. A crucial task in holding policy up to scrutiny, as the papers in this issue have shown, is to counter research and policy amnesia in our analysis of new solutions to long-standing problems.

Coda

The idea for this special issue originated in discussions and debates that have taken place as part of two initiatives: the International Pathways Collaborative, and the Economic and Social Research Council funded seminar series Higher Vocational Education and Pedagogy. The Higher Vocational Education and Pedagogy seminar series, led by Jill Jameson (University of Greenwich, UK), ran from 2013-2016. The series focused on questions of parity, progression and social mobility in higher vocational education, and involved researchers from European countries, including the

four nations of the UK, as well as Australia, South Africa and the USA. The International Pathways Collaborative was formed in 2013 by Ann-Marie Bathmaker (University of Birmingham, UK), Leesa Wheelahan (University of Toronto, Canada and formerly University of Melbourne, Australia) and Debra Bragg (University of Illinois at Urbana-Champaign, USA) to bring together scholars who research technical and vocational pathway policies and programmes in different regions of the world. The Collaborative has held two international colloquia (Chicago 2015, Washington 2016). A third colloquium, sponsored by the *Journal of Vocational Education and Training*, will be held in Oxford on 6 July 2017, with the aim of developing our thinking and understanding further.

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