Wales Centre for Public Policy
Canolfan Polisi Cyhoeddus Cymru

Poverty and social exclusion: review of international evidence on further education and skills

Irene Bucelli and Abigail McKnight
Centre for Analysis of Social Exclusion, LSE
September 2022

Our Mission

The Wales Centre for Public Policy helps to improve policy making and public services by supporting ministers and public service leaders to access and apply rigorous independent evidence about what works. It works in partnership with leading researchers and policy experts to synthesise and mobilise existing evidence and identify gaps where there is a need to generate new knowledge.

The Centre is independent of government but works closely with policy makers and practitioners to develop fresh thinking about how to address strategic challenges in health and social care, education, housing, the economy and other devolved responsibilities. It:

- Supports Welsh Government Ministers to identify, access and use authoritative evidence and independent expertise that can help inform and improve policy;
- Works with public services to access, generate, evaluate and apply evidence about what works in addressing key economic and societal challenges; and
- Draws on its work with Ministers and public services, to advance understanding of how evidence can inform and improve policy making and public services and contribute to theories of policy making and implementation.

Through secondments, PhD placements and its Research Apprenticeship programme, the Centre also helps to build capacity among researchers to engage in policy relevant research which has impact.

For further information please visit our website at www.wcpp.org.uk

Core Funders

Cardiff University was founded in 1883. Located in a thriving capital city, Cardiff is an ambitious and innovative university, which is intent on building strong international relationships while demonstrating its commitment to Wales.

Economic and Social Research Council (ESRC) is part of UK Research and Innovation, a new organisation that brings together the UK's seven research councils, Innovate UK and Research England to maximise the contribution of each council and create the best environment for research and innovation to flourish.

Welsh Government is the devolved government of Wales, responsible for key areas of public life, including health, education, local government, and the environment.

Contents

Summary

- The further education (FE) sector has much to contribute to a strategy to tackle poverty and social exclusion.
- There is good evidence that post-16 vocational education and training and adult learning can improve employment outcomes and offer vital opportunities for progression for disadvantaged learners and workers. Different systems show differential capacity to deliver these benefits.
- For the FE sector to foster inclusion, key elements are:
    - Flexible and open educational structures e.g. linking FE and higher education (HE), and linking formal and non-formal activities within FE.
    - Standardised routes leading to sufficiently high levels of qualifications, with recognised quality assurance mechanisms.
- There are connections between FE and skills and policy areas covered in other reviews, for instance:
    - **In-work progression:** Quality technical and vocational education and training delivered through FE, work-based learning and adult learning can develop higher skill levels and improve employability. It can also increase chances to maintain sustained employment, earn more and progress.
    - **Digital exclusion:** Digitalisation will lead to major changes in the demand for skills – digital inclusion can boost skill acquisition among the disadvantaged.
- We conclude the review with some promising actions that can support the role of FE and skills in improving the life chances of disadvantaged groups in Wales, namely:
    - Rebalancing resources between FE and HE and between full- and part-time study (including supporting the acquisition of higher levels of qualifications).
    - Strengthening links within FE (e.g. between formal and non-formal activities), and between HE and FE to support a more integrated, open and flexible system.
    - Considering qualification pathways that enable the development of broad occupational competences.
    - Revising entry requirements to improve the inclusivity of post-16 programmes and apprenticeships, and strengthening quality assurance mechanisms.

Background

The Wales Centre for Public Policy (WCPP) was commissioned by the Welsh Government to conduct a review of international poverty and social exclusion strategies, programmes and interventions. As part of this work, the Centre for Analysis of Social Exclusion (CASE)[1] at the LSE was commissioned to conduct a review of the international evidence on promising policies and programmes designed to reduce poverty and social exclusion across twelve key policy areas. This report focuses on further education and skills.

The key questions addressed in each of the twelve policy reviews are:

- What effective international poverty alleviation policies, programmes and interventions exist?
- What are the key or common characteristics/standards and features of these different approaches?

The questions are addressed by providing:

- The Welsh context of each policy area and main initiatives being undertaken by the Welsh Government;
- Detailed information on the relationship between the policy area and poverty and social exclusion;
- A summary of evidence of lived experience, which could help to understand how people may experience and respond to policy interventions;
- An overview of the international evidence of policy effectiveness (including case studies); and
- Challenges and facilitating factors associated with policy implementation.

In addition to the twelve policy reviews, we have produced an overview report which summarises the key evidence from each of the individual reviews, highlights connections between different policy areas and reflects on all the evidence to make a number of policy recommendations, or promising actions, within each of the twelve

[1] The Centre for Analysis of Social Exclusion (CASE) at the London School of Economics and Political Science (LSE) was established in 1997. It is a multi-disciplinary research centre exploring social disadvantage and the role of social and public policies in preventing, mitigating or exacerbating it. Researchers at CASE have extensive experience in conducting policy reviews covering evidence in the UK and international literature.

areas. Please refer to the Annex for detail on methodology, including how the twelve policy areas of focus were chosen.

This work forms part of a suite of reports produced by WCPP as part of its work on poverty and social exclusion for the Welsh Government. As well as this work by CASE, there are two reports on the nature, scale and trajectory of poverty and social exclusion in Wales – one focusing on quantitative data and evidence, and a second focusing on lived experience evidence (Carter, 2022a; 2022b). WCPP also commissioned the New Policy Institute to conduct a review of international poverty alleviation strategies (Kenway et al., 2022) which examines overarching governmental approaches to tackling poverty.

Introduction

In face of the labour market changes (e.g. digitalisation which is likely to affect the task content of most jobs), education and training policies, and lifelong learning, will be central to ensuring significant demands on the supplies of skills are met. This review focuses on approaches to the design and delivery of 'post-compulsory' and 'further education' which can contribute to reducing poverty and social exclusion. 'Post-compulsory education' is understood here as encompassing both upper secondary and tertiary education, including both 'higher education' and 'further education', as well as adult learning. The focus of the review is primarily on further education (FE), including technical and vocational education and training (TVET), although the relationship between FE and higher education (HE) will also be addressed.

According to the latest Statistics for Wales (2020), participation among 16-18-year-olds in education or training increased in 2019 to 78.3% compared to 77.6% in 2018. Participation in full-time education in 2019 was 64.2%, and FE accounted for 27.2% of those in full-time education and 6.6% in part-time education. Work-based learning accounted for 6.4%. For the first time since 2011, the proportion of 16-18-years-old in employment decreased, going from 38.5% in 2018 to 36.3% in 2019. Of these, 25.7% were also in some type of education or training, while 10.6% were in full or part-time employment but not in education or training. Meanwhile, the proportion of young people who were not in education, employment or training (NEET) increased to 11.1% in 2019, from 10.6% in 2018. Among 19-24-years-old, the proportion in education or training increased, from 38.8% in 2018 to 39.5% in 2019. 29.3% were in full-time education, with only 2.1% enrolled in FE – 1.8% enrolled part-time. Work-based learning accounted for 3.6%. The proportion in employment decreased from 64.0% in 2018 to 63.4% in 2019; 18.6% were estimated to also be engaged in some

type of education or training. The proportion who are NEET decreased slightly from 16% to 15.7% respectively.

Policy context

The FE sector is largely funded through Welsh Government grants, and there are also funds allocated to a range of specific employability support programmes, intended to develop skills for employment. Reforms to the funding framework for post-16 education in 2014/15 created learner-focused packages of support and greater stability for colleges through fixed annual allocations, but they lacked a long-term approach (Auditor General for Wales, 2017). Moreover, the Apprenticeship Levy introduced by the UK government in April 2017 charges all large employers 0.5% of their pay bill and is collected across the whole of the UK. Up until 2020, Wales also received funding from the European Social Fund to support projects focused on skill development and in vocational education, such as the West Wales and the Valleys programme (Welsh Government, 2019). Cuts to the sector have been common in the past ten years across the UK with reductions to grant funding for the sector between 2011/12 and 2016/17 amounting to 7% in cash terms, and 13% in real terms (Auditor General for Wales, 2017). The cuts primarily affected part-time courses (71% drop), while funding for full-time provision rose (3%), in line with the statutory duty to make reasonably sufficient provision for 16-19-year-olds.

Reductions in public funding are reflected in participation within the sector. Learners at FE institutions, in work-based learning, and adult learning, have decreased since 2013/14, but remained stable between 2017-2019, before falling slightly in 2019/20 (Statistics for Wales, 2021). Participation in full-time FE and work-based learning has remained relatively stable since 2013, but the latter fell by 10% in 2019/20 (Statistics for Wales, 2021). Part-time FE decreased sharply from around 100,000 in 2013/14 to slightly below 48,000 in 2019/20. Adult learning numbers saw a fall by nearly half between 2013/14-2018/19, before a further sharp decline in 2019/20, likely due to the Coronavirus pandemic (Statistics for Wales, 2021). Of all learning activities in 2019/20, 19% were at level 1, 34% were at level 2, and 30% were at level 3, with level 4 or higher accounting for just 5%. Foundation and level 3 apprenticeships account for the majority of all apprenticeships (over 70%), with higher apprenticeships accounting for less than a fifth.

This is in a context where employment projections estimate that the proportion in employment qualified at levels 4-6 and 7-8 has doubled since the early 2000s, and will account for over 50% of jobs in Wales by 2024, while the proportion in employment qualified to level 2 and 3 will remain stable (both at around 19%), and

employment at level 1 and with no qualifications will continue to decline to 13% and 2% respectively by 2024 (Welsh Government, 2017). Analysis of employment and skills in disadvantaged areas of Wales (e.g. the South Wales Valleys) shows sharp declines in employment rates among those with low qualifications (39%), while those with NQF level 4 and above remained constant at around 86% (Welsh Government, 2019). Moreover, these disadvantaged areas see much lower proportions of people completing tertiary education and attaining higher levels of qualifications in comparison to the rest of Wales (Welsh Government, 2019).

This is an area that has witnessed a range of activities in the past ten years. Reforms to vocational qualifications have been undertaken following the 2012 *Review of Qualifications for 14- to 19-year-olds* and the 2017 *Vocational Qualifications Strategy*. The latter has led to a series of sector-specific reviews. A review focusing on health, social care and childcare for example led to changes introduced in 2019, including streamlining qualifications to a suite of 22. A review of qualifications and the qualifications system in construction and the built environment highlighted that the sector is complex, with repetition and unclear progression routes, concluding that the qualifications needed to be reformed and quality assurance mechanisms revised (Qualifications Wales, 2018a). A review of the information and communication technology (ICT) sector also recommended revising qualifications, including developing new GCSE and A-level Digital Technology qualifications – which led to a new suite of qualifications introduced in 2021 – and monitoring vocational ICT qualifications used in apprenticeship frameworks (Qualifications Wales, 2018b).

Apprenticeships have also been central to the Welsh Government's recent skills reforms. The 2017 *Apprenticeships Skills Policy Plan* (Welsh Government, 2017) included a commitment to create 100,000 all-age apprenticeships over the following five years, integrating apprenticeships in the wider education system, and developing clearer skill pathways – acknowledging that many apprenticeships are delivered at level 2, while employment projections suggest the need to focus on level 4 and higher. The strategy also includes a commitment to improving access, equality and equity of opportunity. Overall, 79,595 apprenticeship learning programmes have started since the target was introduced.

The recent programme for government includes the commitment to delivering the Young Persons Guarantee, with the aim of 'providing everyone under 25 in Wales with the offer of work, education, training, or self-employment', a renewed commitment to creating 125,000 all-age apprenticeships, and a focus on strengthening and promoting consistency in social partnership through the Social Partnership and Public Procurement (Wales) Bill (Welsh Government, 2021). In 2019, the Welsh Government announced plans to establish the Commission for Tertiary Education and Research (CTER), which from 2023 will oversee strategic

planning of educational and skills delivery across all post-compulsory education and training, including funding, contracting, quality, and financial monitoring. CTER will replace the Higher Education Funding Council for Wales (HEFCW).

Relationship to poverty and social exclusion

The kind of technical and vocational education and training (TVET) delivered through FE, work-based learning and adult learning, is relevant to poverty and social exclusion largely because of its impact on employment prospects and income. People with higher levels of skills are more likely to:

- be in work,
- maintain sustained employment;
- earn more and progress within their work;
- benefit from labour market mobility; and
- withstand negative employment shocks because of their greater adaptability and general employability (UKCES, 2010; Preston and Green, 2008).

Effective TVET can improve people's opportunities across the life-course and help people out of low-skills/low-income traps. In this sense, TVET can support the social integration and labour market inclusion of disadvantaged and marginalised groups, such as early school leavers, low-skilled workers, the unemployed, and immigrants (CEDEFOP, 2012). Thus, FE, work-based learning, and adult learning, can provide a safety net for at-risk learners in general education, offering an alternative pathway towards qualifications, and securing their retention in education and training, but also ensuring opportunities for progression for adult learners.

When assessing whether skills directly affect employment outcomes, it is important to distinguish whether better jobs reinforce skills and worse jobs lead to skill depreciation, and whether factors such as family background and social networks impact on employment outcomes and skills – which would distort our understanding of the role of skills on such outcomes. Addressing these issues, Hampf et al. (2017) found that in relation to numeracy, literacy, and ICT skills, skills premia may actually be under-estimated in terms of both wages and employment outcomes.

Commentators are divided on the effect the so-called 'Fourth Industrial Revolution' will have on employment, but there is wide agreement that digitalisation will lead to major changes in the demand for skills (Martin, 2018; Deming and Noray, 2020). Since knowledge-based economies reward skills highly, policies boosting skill

acquisition among the most disadvantaged are essential for economic participation, and for work to be an effective route out of poverty.

In addition to improving employability, TVET and adult learning can foster skills which are relevant to other dimensions of social exclusion, for instance in relation to health, civic engagement, and financial literacy. These can lead to more active citizenship and participation in society, as well as contributing to financial capabilities, health and well-being. There are several recent studies showing that adult learning bears positive outcomes in terms of well-being, political participation, and civic engagement (Desjardins, 2021). Sabates (2008) showed how education and training programmes which include elements related to financial literacy can contribute to improved capabilities and understanding in terms of money management, access to financial services, and consumer rights. Individual participation in learning is also related to health benefits, for instance by improving health literacy (e.g. the knowledge and skills needed to access, evaluate and use health and social care information and services) and by improving confidence and understanding of how the health service sector works, and of the rights and responsibilities for patients and practitioners. Vocational education and training can thus play an important role in empowering people, not just by acquiring marketable skills but also by fostering broader capabilities relevant to several aspects of their lives.

Relationship to lived experience of poverty and social exclusion

Historically, a widespread public perception of FE as a second choice, concerned with low-status vocational or remedial courses, underpins the systemic neglect for the sector (Richardson, 2007; Raffe et al., 2001). From the standpoint of employers, low esteem, together with the complexity and volatility of the TVET system, hinder engagement, raising concerns about the relevance, quality, and transferability of vocational qualifications (OECD, 2010). Among learners, the lower status of FE is reflected in the tacit acknowledgement of their lower status as students when enrolling in FE courses (Bathmaker, 2005). From the standpoint of tackling social exclusion, this lower esteem has social significance, and bears on learners' experiences of inclusion. Moreover, this lower status, together with the low value frequently placed upon the qualifications attainable from the courses contributes to a lack of motivation and disengagement – which is common among 16-19-year-olds in FE (Wallace, 2014).

Public perceptions intersect with learners' own self-image in relation to both attainment and social class and contribute to the social composition of FE

(Thompson, 2014). Low-income high achievers are twice as likely to be in FE compared to their peers from more advantaged backgrounds with similar levels of achievement. Low achievers from middle-class backgrounds are actually *more* likely to attend FE than low achievers from low-income households, whose perceived academic failure is likely to see them leaving education altogether (Thompson,2014).

Research on the experiences and post-16 pathways of young people not in employment, education or training (NEET) shows that it is seldom the case for people to become NEET right after leaving school (Thompson, 2017). Young people's post-16 destinations are adapted to their educational attainment and the opportunities available, and while the choice of vocational subjects sometimes reflects a preference for more practical forms of learning, it is more often the case that they 'follow a particular route, not so much because they know what they want to do, but because they know what they cannot do' (Bathmaker, 2005). The process of becoming NEET is not linear, and sees young people often enduring several economic and personal shocks and social disadvantages, while having to navigate an array of often disappointing educational options, experiencing progressive frustration and disillusionment in a process that leads to marginalised forms of learning (Thompson, 2017).

Recently, a few studies have focused on the problems connected to framing 'low attainment', especially in terms of achievement in English and Maths by the end of key stage 4 (Lupton et al., 2021, Allan, 2017). This discounts other achievements, systematically through entry requirements that severely limit progression routes; but also because these achievements are under-recognised by learners, while a sense of 'deficiency' is entrenched, undermining their confidence about the future. This can lead to choosing lower-level courses, and further undermine progression. Moreover, these critical decisions about careers and vocational courses are taken in challenging circumstances, under the pressure of GCSE examinations, while post-16 options are also often hard to navigate, given the diversity of providers, subjects and occupational areas, different entry requirements, and local variations (Lupton et al., 2021).

An academic drift, that tends to position the vocational system as the second-best choice, is widespread in Europe. Kersh and Juul (2015) show that Danish students maintain a conception of TVET as inferior to the academic track, despite favourable job opportunities, and high regard for the sector among employers and social partners. Greater parity between the sectors can be found in countries like Germany or Switzerland, where participation in vocational education and training is higher, completion of higher level qualifications widespread, and significant numbers of students with the qualifications necessary to go to university decide not to go, not because of risk-averse attitudes and concerns with their ability, but rather because of

the good pay and career prospects they recognise in their sector (Pilz et al., 2020; Bolli et al., 2018).

Evidence of policy effectiveness

Intervention	Strength of evidence	Effectiveness
Policies related to system design (e.g. school/work-based models; Dual System)	Strong	Effective (more mixed for long-term employment advantages)
Policies boosting participation in adult learning	Good	Mixed (because of unequal participation)

Design of the vocational education and training system

Vocational education and training systems vary greatly and can be characterised by:

- School-based general and vocational programmes in different institutions (Czech Republic, Estonia, France, Finland, Greece, Italy, Japan, Poland and Russia);
- Comprehensive school-based general and vocation provision in one institution (Canada, Norway, Sweden and USA);
- Tracked school-based general education and Dual Systems of apprenticeship (Austria, Germany and Switzerland); and
- The use of mixed systems (Wales, Australia, Belgium, Denmark, England, Northern Ireland, Ireland, Scotland, Spain, the Netherlands and New Zealand).

Pensiero and Green (2018) explored the **contribution of post-compulsory education and training systems to the development of literacy and numeracy skills** across 15- to 27-year-olds in OECD countries. They found that Nordic countries, and countries with Dual Systems of apprenticeship, were particularly effective, while countries with mixed systems recorded a relative decline in both literacy and numeracy. This is in line with findings by Kuczera et al. (2016) showing that 16–19-year-olds in England have similar literacy and numeracy levels to their

counterparts in countries such as Germany, Denmark, Austria and Japan, but by age 20-22 their literacy and numeracy skills have fallen behind. These dynamics are explained by the fragmentation of the system, characterised by a confusing and rapidly changing array of sometimes low-quality, short vocational programmes, with weak links between workplace and classroom training, and lacking sufficient, shared quality assurance mechanisms for workplace training (Musset and Field, 2013).

There is a substantial international literature which has ascertained **positive short-term effects of TVET on school-to-work transitions** (CEDEFOP, 2012; Hampf and Woesmmann, 2016; Vogtenhuber, 2014) including for those from socio-economically disadvantaged families (Kemple and Willner, 2008). Effects on **employment rates and wage premia** for TVET over lower secondary and upper secondary education (e.g. GCSE and A-level) are also well-documented across countries (CEDEFOP, 2012; Vogtenhuber, 2014), although some countries, including the UK, see lower returns associated with TVET (CEDEFOP, 2013). However, the Augar (2019) review in England indicated that completion of qualifications at levels 3, 4 and 5 has on average very positive outcomes: a full level 3 qualification leads to an 11% wage premium (16% for qualifications gained through an apprenticeship). Average earnings for level 4 and 5 qualifications are higher and comparable to those of some HE graduates (Augar, 2019).

Nevertheless, **the status of jobs obtained by vocational students is lower**, likely the result of both self-selection of lower socio-economic students into vocational programmes, and the fact that upper secondary educated students are more likely to enter higher education and obtain higher educational levels (Forster et al., 2016; CEDEFOP, 2012). There is also evidence that **initial labour market advantages for vocational students decrease over time, but there is less agreement on the rate of decline.** According to some studies there is convergence between general and vocational education graduates at approximately 50 years of age (Hanushek et al., 2017); for others, advantages remain until much later, until 60-65 (Choi et al., 2019; Forster and Bol, 2018; Rözer and Bol, 2019). This long-term penalty can be significant for policy: it can pose challenges as the age of retirement increases, exposing workers to worsened employment outcomes later in their working lives.

Moreover, **differences between educational systems matter**: some studies find that employment advantages decline faster in work-based systems than in school-based TVET systems (Hanushek et al., 2017; Roosmaa et al., 2019), suggesting that the acquisition of narrow, job-specific skills may increase the risk of those skills becoming less in-demand, while transferable skills are more likely to promote worker flexibility and adaptability. Other studies find strongest employment advantages and limited life-cycle decline in systems where the link between vocational education and a specific occupation is strongest, like in Germany, especially for qualifications at

level 4a and higher (in the International Standard Classification of Education) (Rözer and van de Werfhorst, 2020). Employers' continued investment in on-the-job training may mitigate the decreasing value of vocational education, and such systems may be better equipped to preserve employment advantages (Forster and Bol, 2018). **Factors that contribute to skill development are: standardised core curricula, high rates of participation, and completion of upper-secondary education and training with standardised long cycle tracks (two or more years), leading to level 3 qualifications** (Green at al., 2014), particularly among more disadvantaged learners (Pensiero and Green, 2018).

Greater parity of esteem between academic and vocational education has also long been recognised as supporting skill development (Lasonen and Young, 1998, Raffe et al., 2001). Countries with strong traditions of vocational education are more likely to achieve this through differentiated Dual Systems of high-quality apprenticeships, delivering high levels of qualifications. In contrast, countries with weak vocational traditions are more likely to achieve this by developing more integrated school-based systems, which combine general and vocational programmes in a single institution with integrated examination frameworks (Green at al., 2014). These findings support recent analyses of the Welsh system recommending clear, standardised pathways leading to level 3 or higher qualifications (Hazelkorn, 2016).

So called '**Dual Systems'** combine relative standardisation in the core skills curricula and duration of programmes, and relative parity of esteem between the general and vocational tracks. Apprenticeships are generally considered to be of high quality and attract a large number of students from across the ability range (see Case Study 1). Austria, Germany and Switzerland see a third or more of young people participate in them. Importantly, while these countries are characterised by early-tracking systems in compulsory education, which are shown to increase educational inequalities, post-compulsory education and upper-secondary education in particular, are shown to reduce skills inequalities (Pensiero and Green, 2018). Eichhorst et al. (2012) found that the Dual System is more effective than school-based TVET in terms of employment outcomes. Once selection of lower attainers within the sector is accounted for, **the system is found to partially act as a mechanism to level the playing field.**

Case Study 1. Occupational Fields in the Swiss Dual System

Dual Systems have long been at the centre of academic and policy focus. Switzerland displays some of the defining characteristics of the system, for instance in terms of participation and parity of esteem between vocational and academic tracks. At the upper-secondary level, the share of enrolment in TVET programmes is high at 65.3%. A combination of work- and school-based programmes account for 90.4% of students – by comparison, the average EU share is 28.4% (CEDEFOP, 2020). TVET enjoys a high status in Switzerland. There is evidence that not only has this remained stable over time, but adolescents not born in Switzerland (among whom TVET initially has a lower status compared to the Swiss-born population) progressively value the social status of TVET the longer they live in the country (Bolli et al., 2018). The system has also witnessed a process of greater permeability between vocational and HE in the last couple of decades (Graf, 2013; Powell et al., 2012; Bernhard, N., 2019). This approach to skills supports flexibility, for instance making changing track straightforward, thanks to the transferability of competences the system develops (Hoffmann, 2011).

The development of broad competences not only produces high level abilities but also opens a range of occupational fields to TVET students beyond trade and craft occupations, including apprenticeships leading to white collar jobs (e.g. in banking, retail and public administration). These require high standards in maths, writing and speaking, along with transferable skills such as teamwork and problem-solving (Hoffmann, 2011). In Switzerland, the three most popular apprenticeship occupations are business and administration, retail and building and civil engineering (OECD, 2018). This is one of the characteristics that evidence shows grounds the success of Dual Systems in improving parity of esteem and reduce inequalities in employment outcomes.

Dual TVET Systems can be established sustainably only if there is significant institutional support and acceptance by major actors. **Strong social partnerships see employers and unions actively involved in the assurance of the quality and the relevance of on-the-job training** (Valiente and Scandurra, 2017). Dual Systems have been successful at ensuring participation of both big and small businesses, for instance adopting solutions which can also be found in Nordic countries (see Case Study 2) to engage small and medium sized enterprises (SMEs).

Case Study 2: SME participation in TVET in Norway

Making small and medium sized enterprises (SMEs) participate in apprenticeships is often challenging due to SMEs' limited organisational capacity, lack of economies of scale, and because of the specificity of their activities and diversification of tasks. These challenges are relevant to Wales, given the large share of the private sector workforce employed by SMEs (62.4%, higher than in the rest of the UK), mainly in micro (34.9%) and small firms (15.2%) (Statistics for Wales, 2019). Institutional support can foster the participation of SMEs through planning and provision of training. Chambers of commerce can create their own training centres that complement the training that takes place in the workplace in SMEs. Dual Systems are known to foster participation through these types of support, but other countries have developed similar approaches.

In Norway, cooperation mechanisms allow SMEs to operate as a network and develop local inter-firm collaborations, sometimes focusing on one trade, or a broader spectrum of related trades (e.g. industrial trades or in the service sector); sometimes adopting a multi-trade model in rural areas or in areas with low regional concentration of firms (Michelsen, 2021). While these initiatives have shown to be successful in supporting SMEs' participation, overall assessments of their outcomes are at an early stage. There is some case study evidence emerging that these approaches can improve the quality of TVET in SMEs by giving apprentices greater insights in different fields of branch activities, developing competencies of flexibility and mobility (Leeman et al., 2015) and that training networks can improve the integration of disadvantaged youth (Michelsen, 2021; Imdorf and Leeman, 2012). Morever, leveraging existing networks (e.g. regional innovation systems connected to manufacturing clusters) and cooperating with educational institutions can lead to a co-evolution. This sees education programmes tailoring to meet novel knowledge demands, and industry actors relying on their collaboration with knowledge institutions to support the development of their organisational capabilities for the implementation and application of new technologies (Lund and Karlsen, 2020).

Compared to a 'core skills' model that focuses on literacy and numeracy, these Dual Systems include a wider range of academic subjects and civic education (Clarke and Winch, 2007). Well-designed and effective dual training complements firm-specific technical skills acquired by learning on-the-job within a training company with general skills that are transferrable across employers within the occupation. This is due to the fact that Dual Systems are organised around the idea of developing broad

occupational competency, rather than focusing on a narrow set of skills. This means that the TVET system attempts to foster the ability to act competently within an occupational field, including higher level, as well as transferable abilities such as project management (Winch, 2015). This is a key, albeit not unique, characteristic of Dual Systems: other countries characterised by knowledge-based approaches to skill development and large apprenticeship systems have also been able to extend beyond trade and crafts occupations.[2]

Policy transfers are not straightforward, however. On the one hand, Dual System conditions, such as strong social partnerships and sectoral infrastructure, have long been undermined in Britain (Green, 2017). At the same time, agencies for development cooperation from Dual System countries, such as GIZ in Germany, have expended great efforts in developing dual TVET systems in developing countries with even more challenging structural conditions and limited capacities (GIZ, 2020). Eichhorst et al. (2012) found that there are **successful examples of some elements or 'lighter' forms of dual TVET** (with limited institutional requirements) implemented in developing countries. Regional or sectoral training clusters can be established with sufficient support and interest from governments and employers.

Boosting participation in adult learning

Ageing populations, the demands of a globalised economy and technological change have led to widespread acknowledgment of the need for systems that are flexible and support the continuous development of workers throughout their working lives. At the same time, while there was an original policy focus on participation in adult learning in general (Pont, 2004), more recent studies have shown that higher adult learning participation rates do not necessarily lead to lower social/educational inequalities in participation (Lee and Desjardins, 2019; Kilpi-Jakonen et al., 2015). **In all countries there is evidence of the so-called 'Matthew effect' (accumulation of advantage), whereby people with the most education and skills participate more in learning opportunities than their less advantaged peers** (Boren and Holford, 2016; Martin, 2018; Lee and Desjardins, 2019; Kilpi-Jakonen et al., 2015).

Nevertheless, disparities in participation in adult learning across countries are large. In Nordic countries, Canada and the US, more than a quarter of the population attained their highest qualification as an adult student (Desjardins, 2020). Employer-supported organi**s**ed adult learning is also witnessing fast growth in many countries

[2] See Brockmann et al. (2008) for a discussion of how this knowledge-based model applies to Germany and the Netherlands, in contrast to a narrower skill-based model prevalent in Anglo-Saxon countries.

(Desjardins and Ioannidou, 2020). There is also evidence that employers tend to support already skilled employees in their competence development (Desjardins, R. 2017.). **This suggests that some level of public intervention and support is required in order for the disadvantaged to benefit from these programmes.**

What works to ensure greater participation among these groups is less clear. For instance, welfare spending alone does not explain why Nordic countries (Denmark, Finland and Sweden) are the most successful in extending organised adult learning opportunities to disadvantaged learners, and have the highest levels of overall participation (Desjardins and Ioannidou, 2020). Countries with low spending show both less general participation and less participation among the most disadvantaged, but there are exceptions, with countries (e.g. the Netherlands) that enjoy both wide participation and distribution, despite low spending; and countries that despite high spending do not see wider participation among disadvantaged groups (e.g. Austria, Belgium, France and Germany).

Comparative studies (Desjardins, 2020) suggest that *open* and *flexible* education structures are important to produce more inclusive systems and widen participation to disadvantaged groups. For instance, there are strong associations between the openness of education systems and the employment rate among mature (sometimes defined as 'non-traditional') students who return to education after delaying completion (Desjardins, 2020). Open systems can better adapt to workers' needs and improve outreach by linking non-formal adult learning activities to formal qualifications (e.g. through recognition of prior learning mechanisms). Establishing these links increases motivation to undertake training because of the recognition of common formal qualifications among key stakeholders (e.g. employers) but also because it reduces the potential stigma among learners associated with establishing parallel, distinct systems. In an open system, active labour market programmes can also contribute to wider participation (see Case Study 3), when they are planned so that they can ensure access to organised adult learning and lead to formal qualifications (Desjardins, 2017; UNESCO, 2019).

Case Study 3: Flexibility and modular learning in Denmark

Evidence shows that open and flexible education systems can support disadvantaged and older learners. Denmark has long been recognised as a good example of a country that succeeds at making adult learning provision reach those with the lowest skills (OECD, 2019). Thirty percent of all formal adult education provision is undertaken by learners without upper secondary qualifications, while non-formal provision reaches 26% of adults with less than ISCED level 3 qualifications, and 43% of those with ISCED level 3 (Desjardins, 2017). Denmark's flexible system includes a qualifications framework that links provision related to adult learning with equivalences and pathways allowing for a high degree of integration between adult basic education and general education, higher education, and adult vocational education. Beyond linking qualifications, recognition of prior learning is also reflected in curriculum and examinations that are adapted to students' previous work and educational experiences.

The modularisation of adult learning increases flexibility, allowing higher shares of adults to obtain qualifications (OECD, 2019; EACEA, 2021). Modular provision divides a learning programme into self-contained modules, each with distinct learning outcomes and certified as credits or part-qualifications once completed. This accommodates learners for whom time-intensive traditional programmes are less suitable, allowing learners to have their progress recognised without the need to complete a programme in full to gain a qualification. Modularisation makes it easier to tailor courses around people's needs, and supports and complements the process of validating non-formal and informal learning. In Denmark, all programmes and qualifications up to and including ISCED level 3 are modular (EACEA, 2021). Learners can obtain formal qualifications by combining modules from different types of adult learning provision: this includes active labour market programmes, basic education programmes, higher education, vocational education and even non-formal education programmes taken at study associations, folk high schools and evening schools.

Challenges and facilitating factors

A summary of the challenges and facilitating factors relating to policies that aim to address poverty and social exclusion through further education, including technical and vocational education and training (TVET), is provided in Table 1.

Table 1: Challenges and facilitating factors

Challenges	Facilitating factors
• Lack of parity of esteem between vocational and academic programmes can influence the level of investment and shape a vision of FE as a 'second-best' option. • Inadequate funding severely undermines high-quality provision. At the same time, funding mechanisms can introduce distortions, e.g. by encouraging a focus on low value, easy to deliver programmes. Imbalance in the funding of full-time and part-time education, and of FE and HE can also crowd out part-time study and level 4 and 5 qualifications that would be a better fit for some individuals and the economy. • The inclusivity of post-16 programmes and apprenticeships can be reduced by employing entry requirements (e.g. linked to specific grades at key stage 4), which can effectively exclude many of the most disadvantaged learners.	• Flexibility, permeability and openness of the system can tailor provision to specific target groups. Links within FE (e.g. between formal and non-formal activities), and between HE and FE, can bridge the divide between sectors and increase parity of esteem. • An integrated, coordinated system can tackle challenges connected to fragmentation, which creates confusion among learners, undermines employers' engagement, and increases inefficiencies and duplication of resources. • Quality assurance mechanisms are essential to respond to employers' and learners' concerns about the relevance, quality, and transferability of vocational qualifications, which shape users' participation and employers' engagement.

Conclusion

This sector of the education system has much to contribute to a strategy to tackle poverty and social exclusion, and there is good evidence that post-16 vocational education and training and adult learning can improve employment outcomes and offer vital opportunities for progression for disadvantaged learners and workers. Different systems show a differential capacity to deliver these benefits. For the FE sector to foster inclusion, key elements are flexible and open educational structures (e.g. linking FE and HE, and within FE between formal and non-formal activities) and standardised routes leading to sufficiently high levels of qualifications, with recognised quality assurance mechanisms.

Transferability to Wales

Wales has witnessed a range of policy reforms in area of further education and skills which align with priorities identified in this review. These include creating more coherent learning pathways, while plans to establish a Commission for Tertiary Education and Research aim to harmonise FE and HE funding and organisation.

An integrated system could also introduce the openness and flexibility necessary for greater inclusion of disadvantaged learners – including consideration of the impact of funding arrangements, e.g. on part-time courses. Meanwhile the need to foster progression to higher levels of qualifications and access to standardised long-cycle programmes remains central, if this policy area is to contribute to reducing poverty and social exclusion.

Promising actions

This section concludes with **promising actions** to consider in the Welsh context as emerging from the analysis of the international literature.

Achieving **greater parity of esteem between academic and vocational education** can support FE's role in improving the life chances of disadvantaged groups. However, systemic changes are required, including:

1. **Rebalancing resources between FE and HE and between full- and part-time study**.
    - Funding mechanisms need to support the acquisition of higher levels of qualifications (e.g. levels 4 and 5), while maintaining flexibility and options that can better support disadvantaged learners.

2. Links within FE (e.g. between formal and non-formal activities), and between HE and FE, can bridge the divide between sectors.
    - **An integrated system can introduce the openness and permeability necessary for greater inclusion** of disadvantaged groups. Simple processes and adequate advice and support services can further aid learners navigating the system.
3. Qualification pathways that enable the development of **broad occupational competences** improve the transferability of skills, and can help make vocational education relevant to a range of occupational fields.
4. Inclusivity of post-16 programmes and apprenticeships can be improved by revising **entry requirements** (e.g. linked to specific grades at key stage 4), as the current system risks excluding those more likely to benefit.
5. **Quality assurance mechanisms** are essential to respond to employers' and learners' concerns about the relevance, quality and transferability of vocational qualifications, which shapes users' participation and employers' engagement.

References

Abrassart, A., and Wolter, S.C. (2020). **Investigating the image deficit of vocational education and training: Occupational prestige ranking depending on the educational requirements and the skill content of occupations**. Journal of European Social Policy, 30(2), 225-240

Allan, D. (2017). **Setting them up to fail? Post-16 progression barriers of previously disengaged students**. PRISM, 1(1), 21-45

Auditor General for Wales. (2017). **Welsh Government oversight of further-education colleges' finances and delivery**. Cardiff: Wales Audit Office

Augar, P. (2019). **Independent panel report to the Review of Post-18 Education and Funding**. CP 117, Department of Education. Retrieved from: **https://www.gov.uk/government/publications/post-18-review-of-education-and-funding-independent-panel-report**

Bathmaker, A.M. (2005). **Hanging in or shaping a future: Defining a role for vocationally related learning in a 'knowledge' society**. Journal of Education Policy, 20, 81–100.

Bernhard, N. (2019). **Supporting the needs of vocationally qualified students – changes towards institutional permeability in Germany?** Formation emploi, 146, 129-147.

Boeren, E., and Holford, J. (2016). **Vocationalism varies (a lot). A 12-country multivariate analysis of participation in formal adult learning**. Adult Education Quarterly, 66(2), 120–142.

Bolli, T., Rageth, L., and Renold, U. (2018). **The Social Status of Vocational Education and Training in Switzerland**. KOF Studies, No. 110, ETH Zürich.

Brockmann, M., Clarke, L., and Winch, C. (2008). **Knowledge, skills, competence: European divergences in vocational education and training (VET)—the English, German and Dutch cases**. Oxford Review of Education, 34(5), 547-567.

Carter, I. (2022a). **Poverty and social exclusion in Wales**. Cardiff: Wales Centre for Public Policy.

Carter, I. (2022b). **Poverty and social exclusion in Wales: Review of lived experience evidence.** Cardiff: Wales Centre for Public Policy.

CEDEFOP. (2012). **From Education to Working Life: The Labour Market Outcomes of Vocational Education and Training.** Luxembourg: Publications Office of the European Union.

CEDEFOP. (2013). **Labour market outcomes of vocational education in Europe**. Research Paper, No. 32. Publications Office of the European Union: Luxembourg.

CEDEFOP. (2017). **Statistical overviews on VET – Switzerland.** Retrieved from: **https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/statistical-overviews-vet-switzerland**

Choi, S.J., Jeong, J.C., and Kim, S.N. (2019). **Impact of vocational education and training on adult skills and employment: An applied multilevel analysis**. International Journal of Educational Development, 66, 129-138.

Clarke, L., and Winch, C. (2007). **Vocational Education: International Approaches, Developments and Systems**. London: Routledge.

Deming, D., and Noray, K. (2020). **Earnings Dynamics, Changing Job Skills, and STEM Careers**. The Quarterly Journal of Economics, 135(4), 1965–2005.

Desjardins, R. (2017). **The political economy of adult learning systems: Alternative strategies, policies and coordination of constraints**. London: Bloomsbury.

Desjardins, R. (2020). **PIAAC Thematic Review on Adult Learning**. OECD Education Working Papers No. 223. Paris: OECD Publishing.

Desjardins, R., and Ioannidou, A. (2020). **The political economy of adult learning systems—some institutional features that promote adult learning participation**. Zeitschrift für Weiterbildungsforschung, 43, 143–168.

Eichhorst, W., Rodríguez-Planas, N., Schmidl, R., and Zimmermann, K.F. (2012). **A Roadmap to Vocational Education and Training Systems Around the World**. IZA Discussion Paper 7110. Bonn: Institute for the Study of Labor.

European Commission/EACEA/Eurydice, (2021). **Adult education and training in Europe: Building inclusive pathways to skills and qualifications**. Eurydice Report. Luxembourg: Publications Office of the European Union.

Forster, A.G., and Bol, T. (2018). **Vocational education and employment over the life course using a new measure of occupational specificity**. Social Science Research, 70, 176-197.

Forster, A.G., Bol, T., and van de Werfhorst, H.G. (2016). **Vocational education and employment over the life cycle.** Sociological Science, 3, 473-494.

GIZ. (2020). **Implementing the Dual System of Training,** Indo-German Programme for Vocational Education and Training. Retrieved from: **https://www.giz.de/en/downloads/giz2019_en_Belagavi%20cluster_implementing%20the%20dual%20system%20of%20training.pdf**

Graf, L. (2013). **The Hybridization of Vocational Training and Higher Education in Austria, Germany, and Switzerland.** Opladen, Berlin & Toronto: Budrich UniPress Ltd.

Green, A. (2017)**. The Crisis for Young People: Generational Inequalities in Education, Work, Housing and Welfare**. Palgrave Pivot.

Green, A., Green, F., and Pensiero, N. (2014). **Why are Literacy and Numeracy Skills in England so Unequal? Evidence from the OECD's Survey of Adult Skills and Other International Surveys**. LLAKES Centre For Learning and Life Chances in Knowledge Economies and Societies Research Paper 47. London: Institute of Education

Hampf, F., Wiederhold, S., and Woessmann, L. (2017). **Skills, earnings, and employment: exploring causality in the estimation of returns to skills**. Large-scale Assessment in Education, 5(12).

Hanushek, E., Schwerdt, G., Woessmann, L., and Zhang, L. (2017). **General Education, Vocational Education, and Labor-Market Outcomes over the Lifecycle**. Journal of Human Resources, 52(1), 48-87.

Hazelkorn, E. (2016). **Towards 2030, A framework for building a world-class post-compulsory education system for Wales**. Final report. Cardiff: Welsh Government. Retrieved from: **https://gov.wales/sites/default/files/publications/2018-02/towards-2030-a-**

framework-for-building-a-world-class-post-compulsory-education-system-for-wales.pdf

Hoffman, N. (2011)**. Schooling in the Workplace: How Six of the World's Best Vocational Education Systems Prepare Young People for Jobs and Life**. Cambridge, MA: Harvard Education Press.

Imdorf, C., and Leemann, R. (2012). **New models of apprenticeship and equal employment opportunity. Do training networks enhance fair hiring practices?** Journal of Vocational Education & Training, 64(1), 57-74.

Kemple, J., and Willner, C. (2008). **Career Academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood**. New York: MDRC

Kenway, P., Ayrton, C., Chandran, C., and Tortajada, I. (2022). **What makes an anti-poverty strategy effective?** London: New Policy Institute.

Kilpi-Jakonen, E., Vono de Vilhena, D., and Blossfeld, H.P. (2015). **Adult learning and social inequalities: Processes of equalisation or cumulative disadvantage?** International Review of Education, 61, 529–546.

Kuczera, M., Field, S., and Windisch, H. (2016). **Building Skills for All: A Review of England. Policy Insights from the Survey of Adult Skills**. Paris: OECD Publishing.

Lasonen, J., and Young, M. (1998). **Strategies for Achieving Parity of Esteem in European Upper Secondary Education**. Jyväskylä Institute for Educational Research: University of Jyväskylä.

Lee, J., and Desjardins, R. (2019). **Inequality in adult learning and education participation: the effects of social origins and social inequality.** International Journal of Lifelong Education, 38(3), 339–359.

Leeman, R., Da Rin, S., and Imdorf, C. (2015). **Training Networks in VET as Innovative Concepts – Reasons and Boundaries for Training Companies to Participate** in Gessler, M. and Freund, L. (Eds.) Crossing Boundaries in Vocational Education and Training: Innovative Concepts for the 21st Century, Evaluate Europe Handbook Series Volume 6, University of Bremen, Germany

Lund, H.B., and Karlsen, A. (2020). **The importance of vocational education institutions in manufacturing regions: adding content to a broad definition of regional innovation systems**. Industry and Innovation, 27(6), 660-679.

Lupton, R., Thomson, S., Velthuis, S., and Unwin, L. (2021). **Moving on from initial GCSE 'failure': Post-16 transitions for 'lower attainers' and why the English education system must do better**. Final Report. Nuffield Foundation. Retrieved from: **https://www.research.manchester.ac.uk/portal/files/187105835/FINAL_main_report_for_publishing.pdf**

Martin, J. (2018). **Skills for the 21st Century: Findings and Policy Lessons from the OECD Survey of Adult Skills.** OECD Education Working Paper No. 166. Paris: OECD Publishing.

Michelsen, S., Høst, H., Leemann, R.J., and Imdorf, C. (2021). **Training agencies as intermediary organisations in apprentice training in Norway and Switzerland: general purpose or niche production tools?** Journal of Vocational Education & Training

Musset, P., and Field, S. (2013). **A Skills Beyond School Review of England. OECD Northern Ireland**. Oxford Review of Education, 27(2), 173–203

OECD. (2010). **OECD reviews of vocational education and training. Learning for Jobs, Pointers for Policy Development**. Paris: OECD Publishing.

OECD. (2018). **Seven Questions about Apprenticeships: Answers from International Experience**. OECD Reviews of Vocational Education and Training. Paris: OECD Publishing.

OECD. (2019). **Getting Skills Right: Engaging low-skilled adults in learning**. Paris: OECD Publishing.

Pensiero, N., and Green, A. (2018). **The effects of post-compulsory education and training systems on literacy and numeracy skills: A comparative analysis using PISA 2000 and the 2011 survey of adult skills.** European Journal of Education, 53(2), 238-253.

Pilz, M., Ebner, C., and Edeling, S. (2020). **University? No thanks! An empirical study of why German apprentices with the Abitur choose not to go to university.** Oxford Review of Education, 46(6), 770-787.

Preston, J., and Green, A. (2008). **The role of vocational education and training in enhancing social inclusion and cohesion**. Fourth report on

vocational education and training research in Europe: background report Volume 1. Luxembourg: CEDEFOP.

Pont, B. (2004). **Improving Access to and Participation in Adult Learning in OECD Countries**. European Journal of Education, 39, (1), 31-45.

Powell, J., Graf, L., Bernhard, N., Coutrot, L., and Kieffer, A. (2012). **The Shifting Relationship between Vocational and Higher Education in France and Germany: Towards convergence?** European Journal of Education, 47(3), 405-423.

Qualifications Wales. (2018a). **Building the future: Sector Review of Qualifications and the Qualification System in Construction and the Built Environment**. Retrieved from: **https://qualificationswales.org/english/qualifications/vocational-qualifications/sector-reviews/construction-and-the-built-environment/**

Qualifications Wales. (2018b). **Delivering Digital,** Retrieved from: **https://qualificationswales.org/media/4044/itc-review-2018-e.pdf**

Raffe, D., Brannen, K., Fairgrieve, J., and Martin, C. (2001). **Participation, Inclusiveness, Academic Drift and Parity of Esteem: A comparison of post-compulsory education and training in England, Wales, Scotland and Northern Ireland**. Oxford Review of Education, 27(2), 173-203

Richardson, W. (2007). **In search of the further education of young people in post-war England.** Journal of Vocational Education and Training, 59, 385–418.

Roosmaa, E., Martma, L., and Saar, E. (2019). **Vocational upper-secondary education and participation in non-formal education: a comparison of European countries**. International Journal of Lifelong Education, 38(3), 268-286

Rözer, J.J., and Bol, T. (2019). **Labour Market Effects of General and Vocational Education over the Life-Cycle and across Time: Accounting for Age, Period, and Cohort Effects**. European Sociological Review, 35(5), 701–717.

Rözer, J.J., and van de Werfhorst, H.G. (2020). **Three Worlds of Vocational Education: Specialized and General Craftsmanship in France, Germany, and The Netherlands**. European Sociological Review, 36(5), 780–797.

Sabates, R. (2008). **The Impact of Lifelong Learning on Poverty Reduction**. IFLL Public Value Paper 1. Retrieved from: **http://www.niace.org.uk/lifelonglearninginquiry/docs/public-value-paper-1.pdf**

Statistics for Wales. (2019). **Size Analysis of Active Businesses in Wales, 2019**. SFR 116/2019. Retrieved from: **https://gov.wales/sites/default/files/statistics-and-research/2019-12/size-analysis-active-businesses-2019-503.pdf**

Statistics for Wales. (2020). **Post 16 Education and Training. Participation of adults and young people.** Retrieved from: **https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Lifelong-Learning/Participation-of-Adults-and-Young-People**

Statistics for Wales. (2021). **Further Education, Work-based Learning and Adult Learning in Wales, 2019/20**. SFR 52/202. Retrieved from: **https://gov.wales/sites/default/files/statistics-and-research/2021-02/further-education-work-based-learning-and-adult-learning-august-2019-july-2020-643.pdf**

Thompson, R. (2014). **Social Class and Participation in Further Education: Evidence from the Youth Cohort Study of England and Wales,** in Reay, D. and Vincent, C. (eds.), Theorizing Social Class and Education. Routledge.

Thompson, R. (2017). **Opportunity structures and educational marginality: the post-16 transitions of young people outside education and employment**. Oxford Review of Education, 43:6, 749-766

UKCES. (2010). **The Value of Skills: An Evidence Review**. Retrieved from: **https://webarchive.nationalarchives.gov.uk/20140108094305/http://www.ukces.org.uk/publications/er22-the-value-of-skills**

UNESCO. (2019). **4th Global Report on Adult Learning and Education,** UNESCO Institute for Lifelong Learning, Hamburg.

Valiente O., and Scandurra R. (2017). **Challenges to the Implementation of Dual Apprenticeships in OECD Countries: A Literature Review**. In: Pilz M. (eds) Vocational Education and Training in Times of Economic Crisis. Technical and Vocational Education and Training: Issues, Concerns and Prospects, 24.

Vogtenhuber, S. (2014). **The impact of within country heterogeneity in vocational specificity on initial job matches and job status**. Journal of Vocational Behavior, 85(3), 374-384.

Wallace, S. (2014). **When you're smiling: exploring how teachers motivate and engage learners in the further education sector**. Journal of Further and Higher Education, 38(3), 346-360.

Welsh Government. (2017). **Aligning the Apprenticeship model to the needs of the Welsh economy**. Cardiff: Welsh Government.

Welsh Government. (2019). **Operational Programme West Wales and the Valleys ESF**. Retrieved from: **https://gov.wales/sites/default/files/publications/2019-06/west-wales-valleys-esf-operational-programme.pdf**

Welsh Government. (2021). **Programme for Government, 2021 to 2026**. Welsh Government: Cardiff. Retrieved from: **https://gov.wales/sites/default/files/publications/2021-06/programme-for-government-2021-to-2026.pdf**

Winch, C. (2015). **Towards a framework for professional curriculum design**. Journal of Education and Work, 28(2), 165-186.

Annex: Methodology

Definition of poverty and social exclusion

For the purposes of this project it was agreed that a multidimensional concept of disadvantage, including social as well as economic dimensions, would be adopted. The Bristol Social Exclusion Matrix (B-SEM) (Levitas et al., 2007) provides the theoretical structure that underpins the selection of policy areas. The B-SEM uses the following working definition of social exclusion:

> **"Social exclusion is a complex and multi-dimensional process. It involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, available to the majority of people in a society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole."** (Levitas et al., 2007, p.9).

It is structured around three main domains and ten sub-domains (see Table A1).

Table A1: B-SEM domains and sub-domains

A. Resources:	
A1: Material/ economic resources	Includes exclusion in relation to income, basic necessities (such as food), assets, debt and financial exclusion.
A2: Access to public and private services	Relates to exclusion from public and private services due to service inadequacy, unavailability or unaffordability. The range of services encompass public services, utilities, transport, and private services (including financial services).
A3: Social resources	Reflects an increasing awareness of the importance of social networks and social support for individual well-being. A key aspect relates to people who are separated from their family and those who are institutionalised.

B. Participation:	
B1: Economic participation	Includes participation in employment – which is not only important for generating resources but is also an aspect of social inclusion in its own right. Whether work is a positive, inclusionary experience depends partly on the financial rewards it brings, and partly on the nature and quality of work. Work is understood broadly and includes caring activities and unpaid work.
B2: Social participation	Comprises participation in common social activities as well as recognising the importance of carrying out meaningful roles (e.g. as parents, grandparents, children).
B3: Culture, education and skills	Covers cultural capital and cultural participation. It includes the acquisition of formal qualifications, skills and access to knowledge more broadly, for instance digital literacy inclusion. It also covers cultural and leisure activities.
B4: Political and civic participation	Includes both participation in formal political processes as well as types of unstructured and informal political activity, including civic engagement and community participation.
C. Quality of life:	
C1: Health and well-being	Covers aspects of health. It also includes other aspects central to individual well-being such as life satisfaction, personal development, self-esteem, and vulnerability to stigma.
C2: Living environment	Focuses on the characteristics of the 'indoor' living environment, with indicators of housing quality, inadequate housing and exclusion in the form of homelessness; and the 'outdoor' living environment, which includes neighbourhood characteristics.
C3: Crime, harm and criminalisation	Covers exposure to harm, objective/ subjective safety and both crime and criminalisation. This reflects the potentially exclusionary nature of being the object of harm, as well as the exclusion, stigmatisation and criminalisation of the perpetrators.

Notes: the descriptions of the sub-domains are the authors' understanding of what each sub-domain includes based on Levitas et al. (2007).

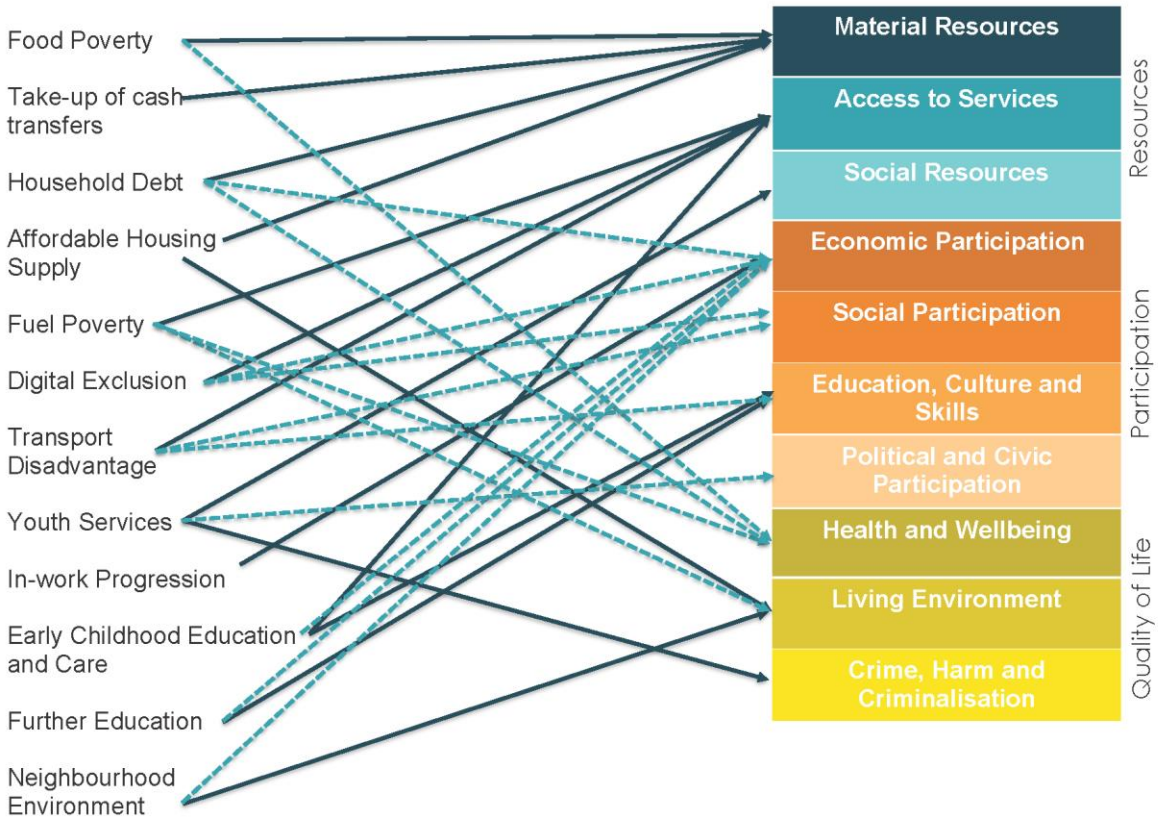
Selection of policy areas

The first step involved the research team identifying a long list of 40 policy areas with reference to the domains and sub-domains of the B-SEM. The long list was, in part, informed by a review of key trends in poverty and social exclusion in Wales, across the ten sub-domains, conducted by WCPP (Carter, 2022a); a consideration of the Welsh Government's devolved powers across policy areas; and meetings with experts. From this long list a shortlist of 12 policy areas was agreed. The shortlisting process took into account advice on priority areas identified by a focus group of experts, but ultimately the final list of 12 policies was selected by the Welsh Government.

The final set of 12 policy areas covers a broad spectrum within the B-SEM, and most are related to more than one sub-domain within the B-SEM (Figure A1). However, the final selection should not be considered exhaustive from a poverty and social exclusion policy perspective. This is because some important policy areas are not devolved to the Welsh Government and, therefore, were not included. For example, while adequacy of social security is a key driver of poverty the Welsh Government currently has no powers to set key elements of social security policy (e.g. rates and eligibility criteria for the main in-work and out of work benefits) and this is the reason why we focus on one aspect of social security, take-up of cash transfers, that the Welsh Government has power to influence.

Another factor was the project's scope and timescales, which limited the selection to 12 policy areas and meant that other important areas had to be excluded (for instance, social care, health care and crime). To make the reviews manageable, it was also necessary to identify a focus for each of the 12 policy areas. The research team identified a focus for each of the reviews on the basis of a brief initial scope of the research evidence and consultation with WCPP who, where relevant, consulted sector and policy experts. This means that there are likely to be additional policies which could be included in a poverty and social exclusion strategy by the Welsh Government *within* the 12 policy areas and *in addition to* the 12 policy areas reviewed.

Figure A1. The selected policy areas mapped to relevant B-SEM sub-domains



Source: prepared by the authors

Notes: The figure outlines the mapping of the 12 selected policy areas to the B-SEM matrix: bold lines show the relationship between each policy area and main B-SEM sub-domain(s), light dotted lines identify selected secondary B-SEM sub-domains the policies are related to (a full list of these 'secondary subdomains' is included in the specific reviews).

Review stages

In the 'evidence of policy effectiveness' section, while it was not possible to produce a full systematic review (although evidence from existing systematic reviews and meta-level analyses were included where available), a structured approach was adopted. This first involved an evaluation of the state of the relevant literature, focusing on whether effectiveness was assessed via methods standardly considered better suited to establish causality (e.g. on the basis of hierarchical grading schemes such as the Maryland Scientific Method Scale (Sherman et al., 1997) or the Oxford Centre for Evidence-Based Medicine's (OCEBM) levels of evidence (Howick et al., 2011) such as randomised controlled trials (RCTs), meta-analyses of RCTs and other quasi-experimental studies. While RCTs are particularly powerful in identifying whether a certain intervention has had an impact in a given context, other forms of evidence, such as quasi-experimental and observational studies with appropriate

controls may be better suited, depending on the type of intervention, to establish the range of outcomes achieved as well as providing an understanding of distributional effects and allowing sub-group analysis (i.e. ‘for whom’ did the intervention work). In the process of assessing evidence, case studies were selected to further elaborate some of the key findings resulting from the review and to identify specific examples of promising policy interventions.

In a few areas, the literature review highlighted a lack of robust evaluations – the reviews underscore this and present the best available evidence found along with an assessment of the strength of the evidence. Where possible, an evaluation of the underlying mechanisms of change was also considered, allowing an explanation of not just whether, but why a certain intervention works, thus also facilitating the identification of challenges and facilitating factors, which is crucial in thinking about not just ‘what’ should be done but also ‘how’ it can best be implemented.

Acknowledgements

We are grateful to a number of experts who attended a series of focus groups whose input:

- helped guide the identification of key policy areas;
- improved our understanding of the transferability of policies to Wales; and
- informed our consideration of implementation challenges and facilitating factors.

We would also like to thank the following people for peer reviewing the policy reviews: Dr Rod Hick, Cardiff University; Dr Victoria Winckler, Bevan Foundation; and Gwennan Hardy; Citizens Advice Bureau. Amanda Hill-Dixon, Dan Bristow, Manon Roberts and Isabelle Carter at WCPP helped steer the project and provided invaluable feedback and detailed comments on drafts of the policy reviews.

Author Details

Dr Irene Bucelli is a research officer at the Centre for Analysis of Social Exclusion at the London School of Economics and Political Science.

Dr Abigail McKnight is the Director of the Centre for Analysis of Social Exclusion and Associate Professorial Research Fellow at the London School of Economics and Political Science.

For further information please contact:
Dan Bristow
Wales Centre for Public Policy
+44 (0) 29 2087 5345
info@wcpp.org.uk

Wales Centre
for Public Policy
Canolfan Polisi
Cyhoeddus Cymru