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Equally as generous were the general, human resources and training managers from the workplaces we visited in person who engaged with the local FE Colleges. As we note in the report, Wales faces many economic and social challenges. These personnel interviewed revealed, however, the country also has many strengths. We were particularly impressed by the modesty but also deep competence, care and imagination that was evident amongst these individuals. Despite being extremely busy in undertaking their work, all were very generous with their time in patiently sharing their insights with the research team.

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All errors of fact and judgement are those of the research team alone.

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ColegauCymru preface: Challenges of renewal

In mid-2019, ColegauCymru drew together a research team to help develop a platform from which to advance a policy position ahead of the elections to the Senedd to be held in May 2021. This led to a research project and a broad ranging discussion between ColegauCymru and the researchers about how Further Education in Wales could, now and in the longer term, contribute to a project of Welsh renewal.¹

In Wales, when we meet new people, we often default to two basic location questions that can both define and determine all future interactions. They are 'What do you do?' and 'Where do you come from?'. Alongside occupation, place and community are important social markers of identity in Wales. Reinforced by other non-verbal signs and cues, as well as our innate presumptions and of course our deeper prejudices, the answers to location questions can be very hard to shake once an initial perception of someone's identity in place or profession has been established.

The negative consequences of these responses should not be overlooked but the questions are at least helpful in focusing the confusing discussion on the planning, provisioning and funding of post-compulsory education across the various regions and communities of Wales. Further Education in Wales spans various modes of secondary education, tertiary provision and initial and continuing vocational education. After devolution of education in 1999, there was an early commitment to lifelong learning. However, despite an ambitious start, execution has been more problematic, even after the *Well-being and Future Generations Act* added a legal commitment to well-being.

Across education, there is concern that education benefits the learner but this needs to be balanced against the needs of business. This is then complicated by the pursuit of league table positions in various educational rankings and overlaid by guilt about Gross Value Added (GVA) underperformance. Against this background, education policy should pay more attention to 'where I come from and what I do'. This is especially true in the case of upper secondary and tertiary education, where the formative capacity of pedagogical instruction becomes enmeshed with normative experiences of everyday life in a place.

For Wales to flourish in any sense in the post-industrial and post-carbon era, effective and impactful post-compulsory education is needed. This can only happen when we locate the citizen within a physical community that is changing as well as within occupational communities of practice or professions that are also similarly being disrupted. Meeting these three challenges - that is renewing citizenship, occupations and places - successfully will mean that that we equip people and districts for the task of renewal in the emerging twenty-first century.

The challenges are about meeting the needs of the individual as a citizen and as a member of a dynamic and changing workforce. And doing so in extraordinary times when climate change, and related issues such as loss of biodiversity, bring disasters of fire and flood, and Covid 19 shows how the pestilence of

¹ A summary of the research design and strategy informing this project is provided in Appendix A.



infectious disease can threaten all the basic systems of our economy. The convergence of the environmental, economic and social realms has occurred before our eyes.

A redefining of our understanding of the Welsh economy has been under way since 2015, albeit slowly, as the significance of the foundational economy has begun to be grasped. The notion that individuals must act collectively for the greater good has gained credibility as belief in market mechanisms has lost all but its most zealous advocates. This new understanding needs to shape all our policy solutions and become more than an add-on to the existing educational curriculum or a special module studied at the margins of mainstream provision. It will demand a fundamental reorientation of our programmes of learning and their methods of delivery.

The three challenges - renewing citizenship, occupations and places - taken together, present the context in which a vision for the future of further education in Wales must be drawn. Talk of a vision for further education or the post-compulsory sector more broadly, has so far been little more than a vague wish list and a list of actions to support regulatory and structural change after a cursory glance over the border. A true vision, if it is ever to become reality, must be grounded in an understanding of Welsh specifics and also draw on international experiences.

This report has emerged from a two-year collaboration between ColegauCymru and an international team of researchers from England, Wales and Australia. In commissioning this research report and in identifying the national and international researchers to undertake it, we are seeking to address the challenges not just individually but more importantly together. They form a basis of 'people, prosperity and place' and it is by examining each that we intend to be challenged, chided where necessary, and hopefully find some comfort in our endeavours to date.

lestyn Davies

Dr Rachel Bowen



Executive Summary

The Covid 19 crisis is accelerating economic and social changes in Wales that have been unfolding since 1980s deindustrialisation. To date, these changes have not been handled well. Wages are low but unemployment and under-employment remain. Inequalities in wealth and income continue to rise. The quality of public services - especially in health and care - is concerning. All are legacies of the failed 'market' experiment underway since the 1980s. Unless different choices are made, Welsh drift will continue. This report outlines how the Further Education (FE) system can help Wales transition to something better. When we refer to Further Education in this report we are primarily referring to the network of FE colleges and their constituent campuses.

On its own, Further Education cannot solve these challenges by, for example, conjuring up higher levels of labour demand or better quality jobs. But this does not mean that Further Education should be confined to playing auxiliary roles like soaking up the unemployed in training courses and meeting skills shortages as the demand for labour shifts — Further Education can make a big difference in helping build better citizenship, occupations and business communities.

We argue for expanding Further Education's role beyond providing quality credentials and training services. Further Education can become a key institutional support of a more ambitious project, as an enabler integrating those delivering Welsh economic and social renewal. At its educational core, this means helping citizens to flourish at all stages of their lives and enabling occupational coherence (and adaptation) as the nature of work changes.

These more ambitious objectives can be pursued by building on the locally embedded resource of 'shining light' employers and Further Education campuses. 'Shining light' employers are exemplary small to medium sized organisations that blend commercial acumen with social purpose; while the distributed network of Further Education campuses combines clusters of education expertise and organisational infrastructure, often deeply embedded in district labour markets.

Part I of this report provides a concise account of deficiencies and constraints arising from Wales' disorganised economy and polity and problems in the Further Education system where training has frequently meant ever more credentialisation. Further Education in Wales needs to be both more realistic and ambitious in positioning itself as one enabler of a national renewal project. Realism is about engaging with the Welsh economy as it is, not with the abstract requirements of economic discourse.

In **Section 1** we argue that contemporary Wales is best understood as a disorganised economy and splintered polity. The Welsh Government has had some autonomy in shaping its education and training sectors, especially since devolution in the late 1990s. While there have been some achievements in this domain (especially compared to England), significant problems remain.

In **Section 2** we describe how, despite the declarations that Wales is a 'learning country' with vocational education in a key role, the results have been unsatisfactory. Further Education has been characterised by a preoccupation with the certification of individuals, declining employer investment in training, a



focus on narrowly defined competencies and now, in the Covid 19 crisis, is likely to move to short-run fixes.

The current situation is not, however, all bleak because the field work undertaken for this project, described in **Section 3**, highlighted Welsh resources which have for the most part been neglected by policy makers and could be mobilised for renewal.

Wales does have a problem of the 'missing middle' and not enough medium-sized firms but it also has some impressive small to medium sized employers which combine considerable commercial success with commitment to their communities. Wales also has a distributed network of Further Education campuses which bring together a depth of staff experience and expertise with strong links to their local business environments. These 'shining lights' are already important in the everyday lives of ordinary places and they deserve greater recognition and support. They do, however, face challenges of their own in their capacity to grow, to expand training and to forge linkages across business communities.

Part II of this report outlines a practical vision for building on this base over the next decade and beyond. We explore how Further Education could use its educational and organisational expertise to assist reforming labour demand through broadening occupational categories and coordinating local business communities. We make specific suggestions about how Further Education in Wales should be a universal basic service, as facilitator for occupational coherence and as a key agent nurturing better ways of sharing risks and knowledge in local labour markets to help nurture more and better jobs.

A precondition for taking on this broader, enabling role is changing how we think about Further Education (**Section 4**). We need to move away from seeing it as simply a reflection of the needs of business within local communities. FE should instead be seen as an active player, shaping the supply of labour, prompting the renewal of labour demand, and enabling more and better business activity within communities.

In **Section 5** we argue that, if Further Education is to play this active role, it will need to be supported and strengthened. This is partly about supply-side measures, through providing more funding certainty for FE and enabling colleges to develop new capabilities.

Just as importantly, the Welsh Government will need to contribute to reshaping the demand for Further Education's output (i.e. better trained citizens). While a wholesale reshaping of labour market demand is not possible given the levers available to the Welsh Government, there are specific measures which can be undertaken. These include moving from transactional to relational public procurement which supports both local employment creation and quality skills development.

Using this strengthened positioning as a base, FE can actively shape the quality of labour demand in two ways. First, it can shape how occupations emerge and evolve systemically by working with clusters of jobs (what we call vocational streams) and then align the use of micro-credentials with those reforms (**Section 6**). Secondly, FE can play an active co-ordination role in local business communities, particularly through its presence at the campus level (**Section 7**). This co-ordination role can take a number of forms:

• enabling the growth of shared apprenticeship schemes, which can expand capacity to generate apprenticeship opportunities across a local area or district;



- providing an organisational nucleus for Foundational Economy Extension Collaborations, aimed at building connections between workplaces at the local or district level to help share both learnings and capabilities;
- participating in district Employment and Education Accords, which would provide linkages between organisations, public and private, at both a sector and district level.

The Collaborations and Accords should be trialled in one or two districts on an experimental basis to provide an evidence base for a wider roll-out.

In the last half century, Wales has drifted through deindustrialisation into becoming an increasingly disorganised economy, with devolved government which has struggled to generate momentum in a polity where political agency is splintered. But we do now have the opportunity to renew the Welsh economy by engaging with it as it is. Central for success will be developing the grounded resource of shining light SME employers and the deep education and organisational capacity embedded in our Further Education campuses. On its own, Further Education cannot lead the renewal of Wales – but, without it, transition to renewal will be hard to achieve. It is time for Further Education campuses to be resourced and empowered to play a critical role in enabling a wider array of parties to come together to help Welsh citizens, occupations and business communities to flourish.



A note on terminology

This report was undertaken to inform debate and policy development about the future of Further Education in Wales. The research team has focused on engaging with specifics of a place and not reworking established policy prescriptions that are presumed to be universally relevant for any place at any stage of development. In thinking about new directions for FE we have taken special care to engage with Welsh specifics. This is most evident in Part I, in the sections on contemporary Welsh economic and social history, problems in skills policy and practice in Wales and hidden Welsh treasures in local labour markets.

While engagement with specifics is vital, this report is also informed by a range of key ideas that are not commonly referred to in contemporary debates on skills and workforce development. To help the reader understand what we mean by key concepts, a short glossary has been prepared (Appendix B). The ideas covered in it (and in our report) concern the following matters. Words *italicised in bold* are covered in the glossary.

(a) The nature of economic development and renewal

In thinking about more effective approaches to economic development this analysis is especially concerned with revitalising the infrastructure for everyday life, what we refer to as the *Foundational Economy*. Much mainstream policy thinking is concerned with promoting 'best practice', with leading edge enterprises conceived as dynamic economic machines operating on principles allegedly relevant to any time and place. Against this, our analysis is built around reflections on what we term *'Shining Lights'* — organisations characterised by deep commercial competence as well as deep roots in particularly localities. Extending the strength of these organisations from their particular organisational context to broader localities is proposed by building up new *'extension services'* supported by *relational contracting* operating at the *district level*.

(b) The nature of work

This analysis argues for lifting the quality as well as the quantity of jobs. A matter of particular interest is how to nurture coherent clusters of expertise at all levels of labour market. In a very practical way this means re-establishing the notion of **occupation** as a key concern of economic, social and education policy. The analysis is not backward looking — most workers have not, in the past, had the benefit of strong occupational identity. In moving forward we need to modernise the notion of what occupation means today. This is done by proposing a modern notion of **vocation** and associated **vocational streams** that structure flows of learning and labour.



(c) The nature of vocational education

Raising the status of Further Education is vital. Central to achieving this is improving the quality of knowledge at the heart of this domain. Unlike school and university, much of Further Education is concerned with immediately relevant competencies. These are derived from current jobs and are inevitably backward looking in nature. In place of competencies it is important vocational education builds on the broader notion of *capability* – giving all citizens capacity to adapt rapidly to changing circumstances. This shift requires more than just rewriting VET standards and quality frameworks – it requires quality institutions of vocational education. Wales is fortunate as it has preserved many features of such arrangements in its *Further Education* system, including a diffused network of **FE Campuses**. These provide the infrastructure for many of the initiatives proposed in this report.



Part I - Analysis

Section 1. Welsh specifics: a disorganised economy with splintered political agency

The expansion of all forms of education since the mid-twentieth century has been justified in the categories of economic discourse. Education is investment in human capital and the role of vocational education is to provide workers with relevant skills so that the growth of marketable output can continue. This syllogism glosses over complex educational issues about what kinds of workforce and management competences are relevant, as well as broader issues about orders of worth and what kinds of output have value. It also abstracts from the specifics of any real existing economy and its political governance. Before we can engage the educational complexities, it is sensible to begin by considering the specifics of the Welsh economy which Further Education (FE) in Wales should serve. How is the Welsh economy structured economically and just as important how is it politically directed by public policy?

Two generations ago Wales was to a great extent a place of opportunity for many male breadwinners who had left school with few qualifications. Wales was a place of large industrial workplaces and heavy industry which was anchored by coal and steel. In coal, the NCB employing more than 100,000 in the publicly owned South Wales mines in 1960. Steel employed over 60,000 when the big firms were renationalised in 1967: Steel Company of Wales employed 25,000 with more than 15,000 at its main Port Talbot site,² RTB more than 20,000 at Llanwern and Ebbw Vale while in North East Wales another 10,000 worked at Brymbo and Shotton.³ Women could also find employment in a range of manufacturing jobs. Welsh branch plants in light manufacturing produced clothing, white goods, components and toys at scale: the Hoover factory at Merthyr Tydfil and the Corgi diecast toy car factory at Fforestfach separately each employed 5,000 workers in the 1960s.⁴

By 2020, Wales was a country where the new hubs of retail and business parks had replaced the old hubs of large single site works. If the children and grandchildren of miners and steel workers had few qualifications, they were employed at near minimum wages in distribution centres, supermarkets, branch retail and hospitality; or in call centres for wages which were not much higher. Covid 19 has demonstrated the fragility of this new Welsh economy built mainly around the low wage servicing of

² See Grace's Guide (nd) 'Steel Company of Wales' Grace's Guide to British Industrial History' https://www.gracesguide.co.uk/Steel Company of Wales, BBC (2016) 'Why is Port Talbot steelworks important?' https://www.bbc.com/news/uk-wales-35161054

³ See Crump, E (2018) 'Events that shook North Wales: How Shotton steelworkers closure saw 6,500 jobs lost in one day' Daily Post, 11 July, https://www.dailypost.co.uk/news/north-wales-news/events-north-wales-shotton-steelworks-14935801

⁴ See WalesOnline (2009) 'End of an era at Merthyr Hoover Plant', WalesOnline, 14 March https://www.walesonline.co.uk/news/wales-news/end-era-merthyr-hoover-plant-2117878; Prior, N (2016) 'How Corgi cars sparked a 'toy arms race', BBC News, 2 May 2016, https://www.bbc.co.uk/news/uk-wales-south-west-wales-36115331



private consumption that assumes the car is the universal tool to access retail, leisure and work. The hospitality industry will only return slowly, Covid 19 will accelerate the structural decline of bricks and mortar retail and the shift to the internet will also strip out lower level jobs in customer service. After Covid 19, many Welsh low-wage service jobs look as vulnerable in the 2020s as manufacturing jobs in the 1980s.

Before Covid 19, the Welsh political classes were slowly coming to terms with the reality that inward investment and high tech are not levers of improvement which will automatically bring well-paid employment for many of their voters. From the 'what works' point of view, the only reliable stabiliser of the Welsh economy is the foundational economy which serves basic needs and will (one way or another) be there as long as Wales is populated. As well as housing, the foundational economy includes providential activities - like health, education and care, which provide personal face-to-face services that cannot easily be automated; and also material activities - like the pipe and cable utilities or food distribution - whose essentials will always be required even when the modes of delivery in network and branches change, as for example, when mobile telephony replaces land lines.

The foundational economy now provides Wales with its leading sectors in terms of volume employment. In the late 2010s, the foundational economy accounted for 44% of Welsh GVA output and 49% of employment. The dominant element is publicly funded providential activity with large scale employment in health, education and care; the balance was in the material economy of utilities and food distribution. The providential suffered cuts in the austerity decade of the 2010s but the collective weight of the foundational was not significantly reduced in this period: from the years of New Labour to the later years of austerity, from 2007-16 the decline in foundational share of GVA over this period of austerity was only from 45.6 to 44.2%.

30% 21% 35% Material Providential Overlooked Other

Share of Foundational Economy Employment Wales 2016 %

Source: Froud, J, Haslam, C, Johal, S, Tsitsianis, Williams, K (2018) 'Wales through a foundational lens' [powerpoint slide pack], http://foundationaleconomy.com/scibits.com on the foundational economy.com web site at https://foundationaleconomy.com/activity-classification/

Notes: The foundational economy refers to those domains of the economy and society that provide the essential services that are the infrastructure for everyday life. The providential includes publicly funded welfare services like health, education and care. The material is mainly pipe and cable utilities and food distribution which are now private sector activities with market revenue from households. Outside the foundational (providential and material) there is an outer zone of overlooked services like hairdressing, takeaways etc which are culturally part of daily life but not essential like health care or piped water.

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⁵ Statistics in this and the next paragraph are all taken from 'Wales through a foundational lens' on the foundational economy.com website. See https://foundationaleconomy.com/activity-classification/



When size has been established, it is important to dispel the misconceptions that the foundational economy is a low wage zone where wages are constrained by productivity⁶. Covid 19 has highlighted how some 'key workers' in care and food distribution are badly paid. But the credentialised and organised sections of the foundational workforces in health and education do much better. The pipe and cable utilities are outliers with high labour productivity which does not hugely benefit most waged and salaried employees. And, in terms of wages and productivity, Welsh foundational economy activities do not lag far behind the rest of the UK: in the material foundational economy sector GVA per employee is 85% of the UK average and in the providential foundational economy sector it is 93% of the UK average.

What is in the other half of the economy, outside the foundational zone? The overlooked economy of mainly day-to-day local services like hairdressing and takeaway food account for a substantial 18% of GVA and 21% of employment. Thus, tradeable and competitive manufacturing and professional services or high-tech activities account for much smaller proportions of the Welsh economy than would be supposed from political discourse or media coverage.

If we look beyond the overlooked economy and everyday high street retail, much of Welsh private service activity meets the demands of our foundational public services. Health and education have large scale operations, purchasing everything from food through grounds maintenance and IT systems to refurbishment and new build. When we looked at construction, for example, outside Cardiff, the larger new build construction contracts are all public and cover primary schools, FE colleges, hospital extensions and such like. As we shall see, one of the major Welsh problems is that the publicly-funded foundational sectors are not organised to benefit local private contractors even when the work does go to local grounded firms.

Partly for this reason, the Welsh economy has too few grounded medium-sized firms. This is the problem of the 'missing middle' as originally argued in the 2015 *What Wales Could Be*⁷ report which highlighted the dumbbell distribution of Welsh private sector employment by firm size. In 2019, small and medium firms accounted for just over one quarter of employment: 9,500 small firms in the 10-49 employee category accounting for 15% of employment and 2,200 firms in the 50-249 employee category accounting for some 12% of employment. The 250,000 micro firms and the 1,700 large firms each account for more than one third of employment (Table 1).

⁶ For detailed analysis of UK productivity in different foundational sectors see: Froud, J., Haslam, C., Johal, S. and Williams, K. (2020) '(How) does productivity matter in the foundational economy', *Local Economy*, Vol, 35 (4), pp 316-36

Prill, L., Cowie, L., Folkman, P., Froud, J., Johal, S, Leaver, A., Moran, M., and Williams, K. (2015) What Wales could be, FSB Wales and Centre for Research on Socio-Cultural Change, Manchester. Available at: https://foundationaleconomycom.files.wordpress.com/2017/01/what-wales-could-be.pdf



Table 1: Welsh private business structure: number of enterprises and share of employment and turnover by size band in 2019⁸

	Enterprises No.	Employment Share %	Turnover Share %
Micro (0- 9)	253,640	34.9%	13.0
Small (10- 49)	9,485	15.2%	11.1
Medium (50- 249)	2,215	12.4%	13.7
Large (250 +)	1,705	37.6%	62.1
	267,045	100.0%	100.0%

The small and medium sector has held but not increased its share of employment over the past twenty years. The main changes in the distribution of employment from 2003-19 were a decline in the share of large firm employment which fell from 42% to 36% from 2003-19, while there was a roughly corresponding rise in the share of micro firms from 31-35%. As in the rest of the UK, but rather more sharply, Welsh employment is being decanted into the micro sector where the average Welsh enterprise employs just 1.6 people and is not so much a firm as a small business person-with-helpers operation.

Given similar processes of deindustrialisation across the North and West of England, Wales has a similar share of small and medium enterprises in terms of enterprise count as in these other regions and these firms actually account for a higher share of employment and turnover than the UK average. But this does not necessarily mean, as Kapitsinis et al have recently argued - that 'there is no missing middle'. The point of the 'missing middle' argument is that the future of private sector employment in Wales depends on increasing the number of capable grounded SME firms. Increasing the number of very small micro firms actually does little for firm capability and resilience unless they grow into SMEs; and, as argued in the 2015 FSB report, growing capable SMEs to sell them on to international corporate buyers limits the benefit. As for large private sector employers, as we have noted, their share of employment has contracted and it seems very unlikely that they will expand their operations in the coming years.

Welsh private employment in 'household name' larger firms is manifestly precarious. After Covid 19 and Brexit, Airbus and GE Aviation are likely to downsize; while there is the possibility that Tata Steel may exit, as Ford has done at Bridgend in autumn 2020. More worrying, the Welsh large private enterprise sector is completely dominated by a second tier of mainly internationally-owned private sector enterprises with relatively small and vulnerable branch operations in Wales. Just under half of all large Welsh private enterprises are non-UK owned, but this group of firms accounts for a remarkable

⁸ Source: 'Business structure in Wales by size-band and measure', StatsWales. https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Businesses/Business-Structure/Headline-Data/latestbusinessstructureinwales-by-sizeband-measure

The classification of firms by numbers employed is straightforward for micro, small and medium firms which most probably have a single establishment or a few establishments within the region but it is more complicated in the case of multi-site large firms. In this series, 'large' means firms employing more than 250 workers on all sites inside and outside Wales. These firms may employ less than 250 in their Welsh branch establishments.

⁹ Kapitsinis, N., Munday, M., Roberts, A. (2019) *Medium sized businesses and Welsh business structure*, Welsh Economy Research Unit, Cardiff Business School, Cardiff, 34



86% of Welsh large private firm employment and turnover. And their Welsh establishments are not that large. For example, whereas the average large firm (employing more than 250 people) has 1,364 workers across the whole UK, the Welsh establishments of this group of large firms employ just 261 staff on average.

Table 2 Non-UK owned enterprises in Welsh private business: share in total number of enterprises, employment and turnover by size band in 2019¹⁰

	Share of Enterprises %	Employment %	Turnover %
Micro (0- 9)	17.1%	0.5%	1.4%
Small (10- 49)	14.1%	2.3%	2.1%
Medium (50- 249)	21.2%	11.6%	10.6%
Large (250 +)	47.6%	85.6%	85.9%
	100.0%	100.0%	100.0%

The small Welsh branches of internationally-owned enterprises contribute disproportionately to output and employment because they are typically operating in the upper reaches of their supply chain with access to UK and international markets. However, this is mobile capital where, even before Brexit, the inflow was not adequate to stabilise the share of large firm employment. So in 2020 we would reiterate the conclusion of our 2015 analysis: Wales does need to grow the number and capability of SMEs in the missing middle. And when those SMEs do not have Welsh retail customers in private households, their main source of domestic Welsh demand will often be the publicly-funded foundational economy.

Given its structure and funding, the Welsh economy is not set fair on a path of endogenous economic growth and private sector led development where the Welsh Government's task is to steer not row. But the Welsh Government has often added confusion by committing to economic policy objectives which have manifestly not been achieved and are probably unachievable and contradictory. The original aim was economic growth to close the gap in per capita GVA with the rest of the UK, but the Welsh gap remains much the same 20 years later. In response to the climate emergency, Welsh Government now aims for net zero carbon emissions by 2050 and the Institute of Welsh Affairs has published detailed sector proposals. But Wales is not on track to deliver its promised long-term reductions: in 2010 it set a target of 3% per annum emission reductions for the coming decade but the 2020 outcome will be nearer 1.5%. 12

The failure to deliver on major economic and environmental policy objectives is not surprising given the limited powers of Welsh Government under the post-1997 devolution settlement and the splintering of political agency between Welsh Government, local authorities and the 'not-for-profit institutions

¹⁰ Source: 'Business structure in Wales by size-band and measure', StatsWales. https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Businesses/Business-Structure/Headline-Data/latestbusinessstructureinwales-by-sizeband-measure

¹¹ See BBC (2019) 'Wales to target 'net zero' climate change emissions' 12 June https://www.bbc.co.uk/news/uk-wales-48583917;

¹² See BBC (2018) 'Climate change: Welsh emissions target progress 'disappointing', 25 May https://www.bbc.co.uk/news/uk-wales-politics-44237368



serving households' like housing associations.¹³ Wales combines an economy which has structural issues and a polity which has struggled to address these issues and generally turn the good intentions of public policy makers into positive outcomes on GVA or decarbonisation; or, more specifically, to lever advantage from state-funded foundational sectors to benefit citizens and SMEs.

Welsh Government, after the 1997 referendum, was formally responsible for devolved areas, which included health, education, economic development, transport, the environment, agriculture and local government. But this was under a home rule regime where Welsh Government was responsible for economic development but did not control the levers of mainstream economic policy because fiscal as well as monetary policy was decided in London. Until 2015, Welsh Government had no tax varying powers and its borrowing powers remain very limited; so Welsh Government's main activity was and is to make modest adjustments to spending priorities out of the block grant it receives from Westminster.

Welsh Government has generally gained powers over the past twenty years. Most significantly, in 2011, the then Assembly gained primary law-making powers in devolved policy areas. But the balance between centralisation and devolution could easily shift in the other direction after Brexit. The UK Government is already seeking to impose mutual recognition of Welsh and English product and service standards after Brexit to create a UK wide internal market; and thereby undermining the capacity of Welsh Government to set distinctive and higher standards, in areas like the environment or animal welfare. Against this background, of limited powers and external constraint, the Welsh Government capacity to execute policy is then restricted by its limited ability to control or direct other Welsh political actors.

Within a multi-level system of government, Welsh Government has an uneasy relation with local government. Wales, with a population of around three million people, currently has 22 local authorities which often believe they are sensitive to place and circumstance in a way that Welsh Government is not. The relationships are further complicated by financial tensions when local authorities receive 75% of their funding from Welsh Government, which was squeezed by the UK Government in the austerity years. Welsh Government funding for local authorities was cut in real terms by some 20% between 2009-10 and 2018-19 with long term consequences for service provision and council capability.¹⁴

A further layer of complexity is added by the fact that an increasing number of publicly-funded services are provided by autonomous institutions - what the ONS calls 'not-for-profit institutions serving households'- which manage their own finances, subject to single unit board governance. Since the early 1990s, both vocational education and social housing have exited local authority control. Twelve Welsh Further Education Colleges are now the major providers of 16-19 year old education; and, after large scale voluntary transfer, some 40 housing associations own the majority of the social housing stock. Similarly, in terms of boundaries which do not match other agencies in Wales, the National Health Service in Wales is currently organised into seven Health Boards and three NHS trusts all of which have substantial operating autonomy.

¹³ For example, the largest reductions in recent years in carbon emissions in Wales have come from changes in the energy sector, an area that is not devolved. Industry is now the largest case of pollution, and Wales does have the ability to impact on this. See page 34 of Committee on Climate Change (2019) Reducing UK emissions: 2019 Progress Report to Parliament, UK Parliament, London: https://www.theccc.org.uk/wp-content/uploads/2019/07/CCC-2019-Progress-in-reducing-UK-emissions.pdf

¹⁴ See BBC (2018) 'Climate change: Welsh emissions target progress 'disappointing', 25 May https://www.bbc.co.uk/news/uk-wales-politics-44237368



Section 2. Welsh training confusions: certification, competency and unsatisfactory results

Education and training have the potential to make a positive difference to individuals and the economy. Partly in consequence, the education and training system has been caught between two key objectives of Welsh Government; the desire to be 'a learning country', where learners are 'placed first', and the desire to serve the needs of 'the economy' where more skills are a route to competitiveness and economic development. The needs of the economy have tended to win out, with improving workforce skills seen as central to boosting the industrial base of the country and attracting inward investment. ¹⁵ But the results have often been disappointing. As in England, despite the proliferation in qualifications and the substantial funding of workplace training, the step-change in productivity and economic performance has failed to materialise.

Further Education colleges play a major role in providing education and training across Wales. The sector has been through a process of rationalisation where the number of FE institutions has reduced from 24 to 13 over the past decade. In some cases, this has led to multi-campus institutions and new or upgraded campuses although each campus continues to be grounded in its local community with strong partnerships. In 2018, there were over 120,000 learners, 38% studying full-time, 46% part-time and 16% on work-based programmes. The tables in Appendix C indicate the range of enrolments and learning activities taking place. The bulk of full-time students are aged 16-19, taking A-levels, initial vocational qualifications in subjects such as engineering, catering and business studies, or access to learning or work programmes. Part-time learners are mainly in the 25-60 age range, with health and social care for women, and business and ICT qualifications popular, alongside basic skills courses. Further Education colleges also provide support for work-based learning. Young men have far more access to this type of provision, particularly in construction and engineering, while women are disproportionately found in the older age groups, often in areas of health and care, and retail.

Unlike institution-based Further Education, Work-based Learning is procured though a Welsh Government tender and delivered by a network of 17 commissioned contract holders (six FE-led consortia, 11 independent training providers and one local authority). The network also includes approximately 100 independent training providers and charities as sub-contractors or delivery partners across the 17 contract holders. But whilst FE colleges represent approximately 44% of WBL contract value, in terms of 16-19 more broadly, independent training providers represent a small proportion of the overall FE and Skills provision by volume of learners, learning programmes and allocation.¹⁶

The Further Education College sector is socially important in that one of its key functions is to provide access to those who have not fared well in compulsory schooling; offering a 'second chance' for both school leavers, and older age groups. However, neither FE nor HE has been unable to counter deeply entrenched educational inequalities or have much impact on social mobility.¹⁷ A succession of reports,

¹⁵ Brill, L., Cowie, L., Folkman, P., Froud, J., Johal, S, Leaver, A., Moran, M., and Williams, K. (2015) *What Wales could be*, FSB Wales and Centre for Research on Socio-Cultural Change, Manchester

¹⁶ See https://gov.wales/sites/default/files/publications/2020-09/work-based-learning-contract-values-2020-to-2021.pdf

¹⁷ Lang, M. (2020) Can you get there from here? Post-16 education, social progression and socio-economic resilience, ColegauCymru, Cardiff



including Hazelkorn's *Towards 2030* (2016), have stated a desire to create 'parity of esteem' between vocational and academic qualification, and thereby raise the status of FE. These objectives appear unrealisable given the continued encouragement for all young people to aspire to attend university, major issues of under-funding, the complex maze of vocational qualifications and often unclear or absent progression routes into quality employment.¹⁸

FE in Wales has avoided much of the hyper-innovation of endless churning reforms which has afflicted English FE over the last 20 years and undermined capability. ¹⁹ Welsh FE has also shifted away from the competitive model of independent institutions towards a more collaborative and relational approach. Welsh Government has continued with the process of professionalisation of FE staff, abandoned in England, although training requirements are still below that required for schoolteachers.

Since 2014/15 core funding is no longer based upon small units of activity which incentivised colleges to enrol students on as many courses as possible. There has been a shift to fixed allocations linked to complete learning programmes.²⁰ Nevertheless, UK-driven austerity measures, which led to Welsh Government reducing the funding available to the FE sector, have mainly impacted on part-time learners, whose numbers have almost halved over six years. Many FE colleges have pursued commercial opportunities to sustain income, such as running refreshment facilities, hiring out facilities, offering bespoke courses for local employers, or recruiting overseas students. These activities have not filled the funding gap²¹, and increased reliance on commercial activities presents high levels of risk and instability, which is starkly illustrated with the Covid 19 pandemic.

Welsh policy makers have attempted to pursue some different policies to their English counterparts, but they have not constructively articulated an alternative Welsh way in Further Education. In most cases, Wales still uses vocational qualifications created and designed in England and has accepted the need for more workplace certification as a default policy recommendation (regardless of disappointing outcomes). This is often without challenging the premise and practice of credentialisation for skill formation or engaging with what is distinctive in the Welsh economic and industrial context.

In those countries where vocational education and training (VET) has a higher status, such as Germany and Norway, there is a strong link between qualifications and access to a well-organised, recognised and well-paid occupation.²² In the Welsh economy as it is, this is often not the case. Countries that have developed effective initial and continuing VET systems have typically had some form of tripartism - collective decision-making by employers, trade unions and the local state, along with educational representatives. In the current Welsh economy, the private sector is generally small scale and not

¹⁸ Hazelkorn, E. (2016) *Towards 2030: A Framework for Building a World-Class Post-compulsory Education System for Wales*, Crown Copyright

¹⁹ '[S]ince 2000 English further education has been subject to 24 major reviews or changes in government policy, averaging 1.3 major reviews/changes per year. Further education has been the responsibility of five funding agencies over this period': Moodie, G., Wheelahan, L., Lavigne, E. and Coppens, L. (2018) *Case Study of Further Education in England: Preliminary Report*, Ontario Institute for Studies in Education, University of Toronto, 9

²⁰ Wales Audit Office (2015) *Welsh Government Oversight of Further-Education Colleges' Finances and Delivery*, WAO, Cardiff

²¹ Ibid.

²² Brockmann, M., Clarke, L., and Winch, C. (2011) Knowledge, skills and competence in the European labour market: what's in a vocational qualification?, Routledge, Abingdon; Lloyd, C. and Payne, J. (2016) *Skills in the Age of Over-qualification: Comparing Service Sector Jobs in Europe*, OUP, Oxford



unionised. Since the financial crisis, constraints on funding have seen Welsh Government reduce subsidies to employers, particularly for lower-level qualifications. Employers are expected to make a significant contribution but often have not stepped into the breach. This is hardly surprising when most sectors lack strong employer engagement and coordination.

This current situation has resulted in a training sector in Wales with four distinct problems.

a. Increased educational certification and over-qualification

More certification has become the default position because that supposedly aligns provision with the assumed and abstract interests of the economy and employers' requirements. Wales has been very successful in increasing the number of people with qualifications. Nearly 40% of the working age population now hold a higher-level qualification (up from 30% in 2008). FE has played a significant role in raising qualification levels (particularly at the lower end), and the proportion of the working age population without qualifications has fallen from 15% to 8% over 10 years, and to just 3% for the 18-24 age group.²³

However, Wales has persistently high levels of over-qualification, such that Felstead and Davies report that 40% of Welsh workers are over-qualified for their jobs. ²⁴ Reflecting the structure of the economy reported in the last section, Wales has a lower proportion of jobs in professional and technical occupations and those that require a degree (22.8%) than in Britain more widely (28.7%). ²⁵ Over a quarter of jobs (28%) in the Welsh economy, significantly more than in England, do not require any qualifications on entry, yet there are only 1 in 12 people (8.3%) without qualifications.

It has been argued that the existence of an 'over-supply' of qualified workers is attractive to potential inward investors, while also encouraging existing employers to use the skills of these workers to enhance productivity. However, there is little evidence to indicate that 'mobile capital shifts to countries based on PISA results or the proportion of the workforce with a degree' or that employers are making use of these 'excess' skills. The lack of good quality jobs in Wales leads many young people with a higher education to migrate internally or to work in England.²⁷

The promised gains from the significant money invested in increasing skill levels, in terms of economic prosperity and social inclusion, have not been realised. Despite increased credentialisation, social inequality and poverty remain high and the number of low wage jobs has barely changed over 20

²³ See https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Lifelong-Learning/Qualification-Levels/highestqualificationlevelsofworkingageadults-by-ukcountry-regionqualification

²⁴ Felstead, A., and Davies, R. (2019) *Work in Wales, 2006-2017: Evidence from the Skills and Employment Survey,* Welsh Government, Cardiff

²⁵ Ibid., 18

²⁶ Lloyd, C. (2014) 'Skills Policy: Developing a New Approach in Wales' in Wales TUC (ed.) (2014), *Debating Industrial Policy*, Wales TUC, Cardiff

²⁷ Bristow, G., Pill, M., Davies, R. and Drinkwater, S. (2011) 'Stay, leave or return? Understanding Welsh graduate mobility', *SKOPE/WISERD Working Paper Series*, Vol. 05, Cardiff University, Cardiff



years.²⁸ Recent falls in low wage work in Wales reflect UK Government policy on raising the statutory minimum wage rather than any substantial changes to the labour market as a result of a more qualified workforce.

If the abstract, generic, economics discourse justification of training is increasingly implausible, the implication is not that Wales needs less training or more effort into skills utilisation (though the latter would help). Wales needs a national conversation about what education is for, given the specifics of Welsh economy and society.

b. Employers invest less in training and complain more about inability to recruit

Employers in many different times and places are inclined to complain about their inability to recruit the 'right skills', as it is in their interest to have an abundance (over-supply) of potential employees. It is often difficult to identify the difference between 'real' skill shortages, an unattractive job (due to pay, hours etc.) and an employer's reluctance to provide initial and ongoing training for their workforce. In most economies, there will be undoubtable skill shortages in specific areas, but it is not easy to identify them using social survey methods. Local knowledge is likely to be required in determining whether shortages are due to a lack of technical skills in an area or due to high levels of churn in unattractive occupations.

The latest (2019) DfE Employer Skills Survey shows that in Wales, 15% of employers had at least one vacancy in the previous 12 months, with one third of these reporting skills shortage vacancies covering the broad definition of 'lacking the necessary skills, qualifications or experience'.²⁹ This accounted for just 0.8% of all jobs or around 9,800 vacancies across Wales. Furthermore, only 4% of workers were estimated by their employers to have skill gaps, with over three-quarters of these being new to the role or had not completed their training. These figures do not support the supposition of major skill shortages in Wales and the results may appear surprising given the widespread attention given to them in policy and media circles. More concern, amid declining levels of Welsh employer investment in training, a lack of skill shortages could be further evidence of limited skill requirements in many jobs and a lack of development opportunities in Wales.

Many of the big corporate Welsh employers of the 1960s and 1970s, like the steel companies, were skills intensive and over-trained to the benefit of the local community as much as the giant firm. The current Welsh private economy has few private employers who can afford to behave in this way. In recent years, the proportion of employers offering training (62% in 2017) has not varied much and (predictably) most non-trainers are small employers.³⁰ But training volumes have fallen dramatically. Research by Green et al estimates that the volume of training in Britain fell by around a half between

²⁸ Lang, M. (2020) Can you get there from here? Post-16 education, social progression and socio-economic resilience, ColegauCymru, Cardiff; Lloyd, C. (2016) 'From low wage manufacturing industries to the low wage service sector' in D. Manney (ed.) Our Changing Landscape, University of Wales Press, Cardiff

²⁹ See Department for Education (2020) *Employer Skills Survey 2019*https://www.gov.uk/government/publications/employer-skills-survey-2019-wales-results

³⁰ See also FSB (2018) A Skilful Wales, FSB, Cardiff



1997 and 2012, and there is no reason to suspect that Wales is any different.³¹ Over time, the responsibility for skill formation has shifted firmly towards state-funded education systems. FE has become a provider of 'employability skills' and job specific training that used to be the employers' domain through apprenticeships, initial induction and company training.

Austerity has intensified this trend, as cuts to funding have disproportionately impacted on adult learning while large areas of community and lifelong learning have virtually disappeared. Employers are expected to make a greater contribution to workplace training but, unsurprisingly again, Welsh employers have not, on the whole, stepped into the breach. Keep argues that in the longer term there has to be a shift in the role of employers: 'a clear set of employer rights, roles and responsibilities... needs to be established and agreed. We should be moving from employers as semi-detached customers to partners and co-producers within an education and training system' (emphasis added).³² How this could be engineered is a key theme in the latter part of this report.

c. Limited benefits from training for competency (not capability)

Vocational Education and Training (VET) in Wales has been dominated by the various qualification frameworks and the associated qualifications market that has developed in England. There has been an almost constant process of reforms and changes in qualifications that Wales has generally been forced to follow, having no qualifications of its own until recently.³³ Since the development of NVQs, vocational qualifications in England have been based on defining a set of competencies that the learner should be able to do rather than on specifying underlying knowledge and capability. These competences are often narrowly defined and, to some extent, reflect the jobs that students leaving FE are expected to enter; training is then task-based rather than related to a broad 'occupation' as in Germany, Austria, and Scandinavia.³⁴

The use of VET as a narrowly defined 'preparation for a job' has led to the stripping away of any form of general education from those undertaking vocational qualifications and apprenticeships. Across the UK, general education has been limited to the study of core or essential skills, and GCSE English and Maths. These are considered 'deficit' models of learning where the FE college tries to make up for the qualifications that were not achieved in school. This is in stark contrast to most other European countries where young people, including apprentices, will still study their own language, maths, science and PE (for example). General education in those countries is deemed critical to developing the idea of a worker-citizen, with the capacity to participate fully in society as well as to provide the foundations for progression in education and the labour market.³⁵

³¹ Green, F., Felstead, A., Gallie, D., Inanc, H. and Jewson, N. (2016) 'The declining volume of workers' training in Britain', *British Journal of Industrial Relations* 54 (2), 422-448

³² Keep, E. (2020) 'Covid-19 and Brexit: The impact on industry, jobs and skills' in J Wright (ed.) *Revolutionary Forces: Shaping the Post-16 White Paper*, potential consequences for education, NCFE and Campaign for Learning, Newcastle upon Tyne, p12

³³ Wales introduced Wales-specific qualifications in health, social care and childcare in 2019

³⁴ Brockmann, M., Clarke, L., and Winch, C. (2011). *Knowledge, skills and competence in the European labour market: what's in a vocational qualification?*, Routledge, Abingdon

³⁵ Lloyd, C. and Payne, J. (2016) *Skills in the Age of Over-qualification: Comparing Service Sector Jobs in Europe*, OUP, Oxford



The English (or Anglo-Welsh) pursuit of narrow competency is rejected by Buchanan and his group of researchers based at the University of Sydney. These researchers take a broad capability approach and argue that education should be about the wider human and social benefits that nurture the human capacity to adapt by creating 'learning dispositions' (the capacity to concentrate, resilience, curiosity and ability to function in learning relationships), rather than focus on generic employability skills. ³⁶ Although the foundations for such dispositions are built in early years education, they are best developed in the context of mastering specific disciplines or fields of vocational expertise. ³⁷

Decoupling from the English system and the preoccupation with competency is a prerequisite for progress towards any broader view of this kind; and there is some progress on this as Welsh Government has shifted away from the approach in England. The introduction of the Welsh Baccalaureate for students across the 14-19 age group, despite its problems, was aimed at developing a broader set of skills that covered both the academic and vocational pathways. More recently, there has been a willingness to create Welsh vocational qualifications. A succession of reports has questioned the English qualification market that relies on numerous providers offering an 'alphabet soup' of qualifications, often competing on price rather than quality. Welsh vocational qualifications are now being developed where needed, for example in health, social care and childcare; 200 qualifications (English-based) that were eligible for funding have been reduced to 19 Welsh qualifications delivered through a more stable, longer-term contract.

d. Post-Covid dangers of short-term fixes

The most recent challenge to the VET system is Covid 19, and the risk that it encourages quick fix training initiatives that are likely to be costly but not necessarily positive for those involved. Jobs will be scarce, and employment will be lost in sectors that typically offer a first step into the labour market, such as leisure and hospitality, retail and the arts. Hence the potential for a return to mass 'warehousing' of young people in FE (and higher education) while energy and resources go into more placements for those leaving education in whatever jobs can be expanded quickly and at least cost. This would be disruptive to existing provision in FE and would lead to incentive schemes that encourage particular types of training at the expense of established, better quality vocational education arrangements. For example, there is a serious risk that measures such as the UK Government's Kickstart, which offer six months work placement paid by government in any sector/job, may replace existing apprenticeships or college work placement arrangements.

Transitions into employment are already complex and fragile for young people, in the context of employers' use of internships, agency work and zero hours contracts as mechanisms for recruitment.³⁸ These trends are likely to be further exacerbated post-Covid 19 as jobs become scarcer. Those leaving FE will see more competition from both graduates shifting down the occupational labour market and

³⁶ Buchanan, J., Wheelahan, L. and Yu, S. (2017). *Skills and inclusive growth: From competency standards and twenty-first-century skills to capabilities and vocational streams* (a version of a paper prepared for the ILO Regional Meeting on Skills and the Future of Work: Strategies for Inclusive Growth in Asia and the Pacific, Bangkok, 12–13 October 2017)

³⁷ Buchanan, J., Wheelahan, L., and Yu, S. (2018), 'Increasing young people's adaptability and mobility: from competency approach and twenty-first-century skills to capabilities and vocational streams' in Sakamoto, A and Sung, J., *Skills and the Future of Work: Strategies for Inclusive Growth in Asia and the Pacific*, ILO, Geneva

³⁸ Purcell, K., Elias, P., Green, A., Mizen, P., Simms, M., Whiteside, N., Wilson, D., Robertson, A., and Tzanakou, C. (2017) *Present Tense, Future Imperfect? – Young people's pathways into work*, Warwick University, Institute of Employment Research, Coventry



older workers with experience who have lost their jobs. Increased training provision in this context, without countervailing demands on employers, is likely to pose a serious threat to the Fair Work agenda.

In the aftermath of Covid 19, paying to do more of the same is to some extent politically inevitable. But the crisis will be wasted if Wales does not have a national conversation about what FE can contribute in the medium-to long-term if it links up to other institutional bodies and embraces capability for lifelong learning. If education is to play an effective role as a 'complementary condition' in societal well-being, there needs to be a realistic acknowledgement of the limits of the narrow and abstract economics-based approach and a serious assessment of where and how FE's role can be broadened to maximum effect.³⁹

Section 3. Welsh resources: 'shining lights' without policy support

The story so far is thoroughly dispiriting: after uncontrolled deindustrialisation and the subsequent confusions about generic policies ill-adapted to specifics, at national level Wales has a disorganised economy, an ineffectual polity and training muddle where certification of competency has produced unsatisfactory results. But, at the same time there are reasons to be cheerful, at local or district level, about what happens without policy support or explicit encouragement. Wales has a 'missing middle' problem about not enough SMEs but, in the existing stock, Wales also has its 'shining lights' in the form of medium-sized organisations which combine social values with commercial acumen: these include for-profit and not-for-profit firms in sectors like care and construction.⁴⁰ Our fieldwork also suggests that the distributed networks of local FE campuses are themselves shining lights.⁴¹

The later sections of this report are about what policy can do to support more shining lights but in this section we will describe what we found in fieldwork across Wales in December 2019 when we interviewed firms delivering construction and care services and cross checked with local FE staff about business practices and about whether and how FE contributed to their effectiveness. These enterprises encompassed for-profit and not-for-profit, were medium to medium-large and were mainly regionally based. They also reflect areas of high occupational gender segregation; in the UK, 98.6% of construction

³⁹ Brown, P. and James, D. (2020) 'Educational expansion, poverty reduction and social mobility: Reframing the debate', in *International Journal of Educational Research*, 100: 101537. doi:10.1016/j.ijer.2020.101537.

⁴⁰ It is important to note that while the 'shining light' businesses combine social values with commercial acumen, there is more that could and should be done. Specifically, the social value of environmental responsibility needs to become a key concern of shining light businesses; and Welsh Government needs to take responsibility for creating new foundational resource and conversion systems in which SMEs can flourish. On the latter point see: Calafati, L., Froud, J., Haslam, C., Johal, S., and Williams, K. (2020) 'Serious about Green: building a Welsh wood economy through co -ordination', Foundational Economy Research https://foundationaleconomycom.files.wordpress.com/2020/10/serious-about-green-wkw-ferl-report-oct-2020-vb-002.pdf

⁴¹ Further information concerning the term 'shining lights' and how they differ to best practice businesses and social enterprise is provided in the glossary in Appendix B.



workers are men and 84.3% of care workers are women.⁴² The five construction organisations included two private businesses, a council housing repairs division, a local housing association maintenance service and a regional construction shared apprenticeship body. The five care providers delivered elder care, disability support and social and emotional support for children with additional learning needs. The FE college staff we spoke to included curriculum co-ordinators, teachers and staff engaged with these employers.

The organisations were chosen because they are successful and are well regarded within their spheres of practice. The reasons for this were confirmed in the interviews. The people we spoke to, who included owners, senior and middle-level staff, displayed strong knowledge of their businesses, their markets and their labour forces. Almost all of the private businesses were family firms which had been established by their current owners and had grown rapidly within their working lifetimes, while one was a family firm which had continued successfully for three generations. The not-for-profit firms took different shapes but were all, within the boundaries of their different organisational forms, entrepreneurial and ambitious.

Values: The commercial acumen of these organisations was complemented by a strong commitment to clients, place and community. Each of the care providers we interviewed had been founded to try to fill a gap in the provision of care, and this remains their core vision. When we asked an owner of a care provider about the future of the company, the response was: 'I haven't got any issue with the ownership of it so long as the values are maintained'. The construction providers expressed this in terms of their contribution to their communities: 'what people started to realise is the legacy that you leave behind, once you've built the building and how you build it, the importance of the [local] people being involved'. All providers expressed a strong commitment to training not just as a business requirement but as an ethical commitment to young people and their staff generally: 'I've been an apprentice, you change people's lives, don't you?'. This was shared by FE college staff. When we asked about 'non-academic' students who often present challenges for FE staff, we were told by a curriculum co-ordinator:

a lot of the lads who are in construction were those lads one day in school. They're the lads who weren't academic, they work with their hands, they didn't like school, they didn't get on with school, they went on to a building site, they liked it, loved it, now as you get older, you change. Your attitude towards people changes; I know mine does every day. I forgive a lot more, not that you want to, it's just that you see the grand scheme of things, don't you? It's not all about money or I've got to get this or...it's about giving a bit back and helping people, and that's what it is with these lads.

Limits to growth: Despite the success and dynamism of these organisations, there was not a strong sense that most were going to expand much beyond their current size. This reinforces the argument that we need a larger stock of SME firms because we cannot rely on our existing shining lights to grow.

⁴²ONS (2018) EMP04: Employment by occupation,

 $[\]frac{https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/data}{sets/employmentbyoccupationemp04}$



A number of the private firms have never had a general commitment to 'growth' – their priority has been to provide a high-quality service in a specific region, with expansion being undertaken case-by-case on the basis of unmet need. One owner consciously decided not to expand when they felt that they could not personally ensure high quality services:

Somebody mentioned a name, and I didn't know if it was a carer or if it was a client. So I thought, no, no, this isn't for me. Because I know all the clients, I know all the carers, so we pulled back and we said we weren't going to tender [... for additional work].

The same owner has identified the need for a new (respite) service in the district area, but rather than expand the existing business, instead argues that a new service should be established to address that gap. Another construction business has effectively limited its operations to within a 50-60 mile radius of its base in the interests of the quality of life of its staff - to ensure they can get back to their homes each night. There is also a partly latent issue for family firms about succession. Where the firm has been the product of a dynamic individual (or couple) there is a question mark about its future expansion when the founder moves on and there is not necessarily a successor with a strong interest in the business.

The not-for-profit organisations we spoke to are interested in expanding where possible but are necessarily limited by their organisational catchments – local councils or housing associations operate within boundaries. To the extent that they have expanded or will do so, not-for-profits are motivated by the desire to move into areas previously dominated by (often non-Welsh) subcontractors to increase quality and capture benefits for the region:

external contractors ...work until Friday afternoon, they want an early finish Friday and all the money that we give them goes up the M6 and heads off somewhere else.

These organisations have been steadily increasing the range and depth of their skills in order to replace the need for sub-contractors.

Limits to training: All the organisations we spoke to were committed to training their staff, and they spoke positively of their relationships with local FE campuses in the district. There are, however, sectoral boundaries and external limits on their practical commitment to extend training. In construction the main barrier to expanding the number of apprenticeships is the heavy reliance of private construction firms on sub-contracted firms.

Leading private firms provide data and general commitments to training as part of their social obligations under procurement frameworks, but they are not directly involved in providing and improving training itself. The lead firms are very small organisations with staff focused on project management, tendering and so on. They take on very few, if any, apprentices. These firms use a pool of established sub-contractors who undertake specific elements of the construction. The sub-



contractors, however, also take on very few apprentices. They provide work to micro-businesses (1-5 workers) and it is these firms who provide the bulk of apprenticeship opportunities. Fieldwork suggested that these apprenticeships are often offered on the basis of family or friends-of-family connections, risking reinforcing existing patterns of inequality in access, and are limited by the decisions each business makes about the (uncertain) likelihood of retaining the apprentice beyond the term of the apprenticeship.

These extended labour supply chains in private contractors (often working on public contracts) stand in contrast to the council and housing association construction organisations, who have reduced their reliance on sub-contractors and have direct control over the quantity and quality of the training of apprentices. The leading managers in these organisations took great pride in being able to offer quality apprenticeships in a way fragmented, private sector firms could not. As one put it:

what I'm trying to do is I'm trying to grow my own basically because then, as you can appreciate, you can mould them to the way that you want them to work for the organisation and you can ensure that they are trained to get the skills that they want.... We've got far more control over it because they're all directly employed.

In this way organisational form played a direct role in being able to provide a quality employment and educational offer.

The care providers we interviewed are also committed to training but are more directly involved in its provision than the construction firms, working closely with FE campuses and/or providing training inhouse. This is particularly important in the context of the new Welsh requirements for Level 2 care workers, where an additional cohort of existing workers will require upgraded qualifications over the next two years as part of new regulatory requirements for registration. The practical commitment to training is, however, partly countered by the high levels of turnover of care staff. The low pay levels for the predominantly female care workers mean that a large number of staff leave for higher paid jobs or for similarly paid work which is less stressful, such as working in supermarkets. All care providers talked about this problem, and two providers have annual turnover of staff of 20 per cent – lower than the industry average but still very significant.

This level of churn means that, while there is a large quantity of entry level training in care, a substantial proportion of this is effectively wasted and compromises the capacity of the organisation to further develop the expertise of existing staff in the sector. A further consequence is that the increased registration requirements, which are generally supported by providers as improving the quality of the sector, are being resisted by many existing workers who may leave as a result: 'The [increased] wage has to come if you want these qualifications... The training that these guys have to undertake compared to someone stacking shelves is phenomenal'.



A further limitation in the scope of training is that it often does not extend beyond the entry-level phase, particularly in construction. It is difficult to convey managerial skills (e.g. supervision and estimation) in apprenticeship training and there can be a disincentive for micro-firms to pass on these skills to apprentices where they may be used in competition with the employer: 'because I suppose a lot of people would see that as you're just giving that apprentice more knowledge where he can go off and do it by himself anyway'. Yet, in the absence of training which extends beyond the initial training phase, micro-firms may not have the skills to become viable middle-size businesses.

Limits to coordination: All the organisations we spoke to support working with other businesses to lift standards and improve their industries in general. In practice, however, there appears to be very limited contact between employers beyond some networking and co-operation on specific issues such as health and safety. To some extent this is a predictable result of market rivalries and tensions generated by competitive tendering, which result in reluctance to share information or best practice which could either erode a company's market advantages or expose weaknesses to competitors or purchasers. It is notable, however, that there is also limited contact between the public sector and not-for-profit organisations, where competitive pressures do not apply in the same way.

Through their campuses FE colleges then provide the main form of co-ordination in regard to training and skills. Campus-based training provides a major form of continuing implicit linkage between employers without direct lateral contacts, and this training forms a continuing point of translation between general skills standards and workplaces. Employers also told us how workplace assessors can convey best practice across businesses not just to apprentices but, through them, to workplaces more generally.

FE colleges have a number of ways in which they connect with employers, including dedicated employer engagement units. We found, however, that the different forms of employer engagement are dispersed across different areas of the colleges and are focused on separate, specific functions (e.g. apprenticeships, obtaining student work placements, maintaining occupational health and safety registers). Some staff expressed uncertainty about who was responsible, for example, for engaging with employers in their curriculum area. There is here scope for colleges to take on a stronger, more co-ordinated and better resourced employer engagement role which, as a credible third party, can contribute to creating better linkages between employers themselves.

One area where FE colleges could immediately contribute to better co-ordination between employers is the expansion of shared apprenticeship schemes. These schemes increase the number of apprenticeships available by enabling apprentices to be shared between firms which would not, on their own, be able to take on apprentices for the duration of their training. Wales has the first and largest shared apprenticeship scheme in the UK, currently employing over 120 construction apprentices and employing more than 650 shared apprentices to date ⁴³. It is led by key employers, but FE colleges

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⁴³ See http://cyflebuilding.co.uk; Roe, P. and Costello, M. (2014) Evaluation of Shared Apprenticeship Pilots, Welsh Assembly Government Social Research, Cardiff



play a critical role, including being on the Board and physically accommodating the staff, including placement officers. The scheme is, however, limited to only one region in Wales and an attempt to start a similar scheme through an FE college in another Welsh region foundered from lack of resources. FE colleges could help to initiate shared apprenticeship scheme as part of taking on a larger coordination role.

Limits to FE resources: The FE staff we spoke to appeared expert in their areas and very experienced. The staff were clearly highly respected by employers and relationships with local campuses, particularly at an individual level with key FE staff, were very positively described: 'her [Workplace Assessor] knowledge is massive...she's been a manager in the care system... I think she's integral to our staff team development'. FE staff we spoke to also, as discussed above, showed a strong values commitment to providing opportunities to young people in their communities to obtain the training they need to improve their lives.

FE staff are focused on a range of challenges. Most immediately there is an ongoing series of reforms to curricula, qualifications and registration requirements which is requiring intensive effort. More broadly, the expansion of the student population is bringing in an increased number of previously discouraged learners into FE which requires new pedagogic strategies. Additional forms of support are also being put into place for specific groups of students, such as those with mental health issues, which are being identified as an increasingly high priority. There are also challenges in trying to shift entrenched patterns of participation, particularly in vocational qualifications. Less than 8% of learning activities in the better paid areas of manufacturing, engineering and construction are undertaken by women, and BAME students remain under-represented in FE-organised workplace learning, including apprenticeships⁴⁴.

These and other challenges being faced by colleges require more resourcing. While this is being partially met, the expansion of the student population is being partly driven by the linkage of growth funding to increases in student numbers, rather than block grant funding for capacity building and maintenance. Staff talked to us about the significant growth in the size of classes, which, combined with changes in the student cohort, have meant in practice having to choose between agreeing to risk either a decline in standards or high attrition rates. The restrictions in funding also limit the capacity for innovation and building more embedded institutional arrangements. The capacity of FE colleges to help initiate and support shared apprenticeship schemes, for example, cannot be achieved without dedicated additional funding for that role.

⁴⁴ See Statistics Wales (2019) Learning program numbers by gender, ethnicity and provision type, https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Further-Education-and-Work-Based-Learning/Lifelong-Learning-Wales-Record/learningprogramme-by-genderethnicity-provisiontype



Part II – New Directions

Section 4. Further Education campuses as enablers

In Part I we described the ways in which Further Education in Wales is limited by the disorganised economy and splintered polity of Wales and also by a narrow focus on increased educational certification at the same time as employers are reducing their investment in training. We have also seen, however, that FE colleges are highly valued institutions and that there is a stratum of 'shining light' SME employers who combine commercial success with a dedication to place. In this part of the report we explore how FE could use its educational and organisational expertise to assist reforming labour demand through broadening occupational categories and coordinating local or district business communities.⁴⁵

A precondition for taking on this broader, enabling role is to change how we think about Further Education. We need to move away from seeing it as simply a reflection of the needs of business, and FE colleges as passive anchors within their local communities. Their campuses should instead be seen as active players, which are already shaping the supply of labour and could do more to shape supply, renew labour demand and enable 'shining light' business activity within communities.

FE as economic enabler

When viewed from a traditional economic perspective, FE is often seen as concerned with preparing people for work (what economists call developing labour supply). In performing this role, it is regarded as a passive agent: an auxiliary entity responding to the changing labour supply needs of employers. In a nutshell, it not perceived as an active agent helping shape the labour market.

We need to break with this passive, labour-supply focused stereotype and see FE as actively shaping the nature of work and jobs. This is, in fact, a more accurate understanding of the role it has performed. As the nature of work-life transitions change, there is a need for FE to take initiatives that help people handle these transformations better. Improving the quality and nature of labour supply increases choices not just for workers – but also for employers needing labour in production.

More importantly, however, Further Education needs to extend its ambition and help shape the demand for labour. In particular, FE should be helping shape job creation. While often portrayed as semi-natural or technical process, job creation is in fact dynamic and highly social. While employers ultimately create vacancies, they do so in light of how possibilities for work are defined — and these understandings are shaped by the environment in which they operate. As is well known, the key matters here concern demand for product or service produced and access to capital to get the wherewithal to meet commercial opportunities. But the creation of jobs also concerns matters such as how employment opportunities are defined and shaped by business models that guide how factors of production are mobilised to meet perceived service or product opportunities.

⁴⁵ Elsewhere in this report, we note the scale and challenge of the environmental crisis. The FE sector, including through its network of campuses, will be an important part of addressing this. However, greater exploration of this issue is outside the scope of the current report.



The FE campus as district enabler

What can FE colleges contribute to the local or district and regional economy and society? It is necessary to think analytically about the distinctive and important role that the distributed network of campuses already play in their districts; because this distinctive role is the base on which everything else is built. The main intellectual obstacle here is that when consideration is given to the potentially broader role in economic and social life of entities like FE campuses, they are conceived as being one amongst many so-called 'local anchor institutions' with essentially similar roles in the community. So we must begin with an account of where this overgeneralised concept of 'anchor institution' comes from and how it obscures the distinctive role of FE campuses, as well as how they might not be so much passive 'anchors' as enablers of economic and social renewal.

The 'anchor institution' term was popularised in the early 2000s to describe the universities and hospitals which could not leave American cities for low wage Asia as US corporates had done. It has since been extended, so that in current usage of the term we have long lists of (public and not-for-profit) anchor institutions. These now include cultural institutions like museums, religious establishments and military bases (but, not private corporates like supermarkets).⁴⁶

As these institutions are manifestly heterogeneous, the listing is unified by crediting all anchors with a set of general characteristics: anchors are substantial local employers, have significant purchasing power and own land and other assets.⁴⁷ Policy is then about how to use these resources as levers for development. In the radical Democracy Collaborative vision of community wealth building, the emphasis is on the power of local purchasing and creation of social enterprises; and, in the related anglicised CLES version of community wealth building, the municipality (as in Preston) plays an organising role.⁴⁸

Practically, it is difficult to shift the purchasing levers in ways which produce meaningful results. Thus, on purchasing, it is relatively easy to move contracts to local suppliers, as Preston and others have done. But postcode localism whereby anchors count invoices from local distributors is not the same as value added by local processors. Likewise, anchor purchasing preference for local suppliers is clearly zero sum in the larger economy unless it creates capable firms which can grow by finding new customers inside and outside the area. This is not easy, as we can see from the limited success of the Evergreen Coops in Cleveland which after ten years employ around 200 workers⁴⁹ in a metro area of 1.7 million, where private small businesses are dominant.

⁴⁶ Smallbone, D., Kitching, J., and Blackburn, R., (2015) Anchor Institutions and Small Firms in the UK, UKCES, Wath-upon-Dearne, page vii Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/414390
/Anchor institutions and small firms.pdf

⁴⁷ Centre for Local Economic Strategies (2019) *Anchor Institutions and Social Business in the UK*, CLES, Manchester https://cles.org.uk/wp-content/uploads/2019/02/Community-business-and-anchor-institutions-Digital.pdf

⁴⁸ Ibid.; Guinan, J., and O'Neill, M. (2020) The Case for Community Wealth Building, Polity, Cambridge

⁴⁹ Sheffield, H. 'How Cleveland Evergreen Coops created jobs...', *The Independent*, 3 April 2019



But there is also a more fundamental problem with this approach in that it obscures the point that various anchors have diverse public service functions. Individual anchor institutions are engaged in radically different ways and this is often obscured by loose usage of the term 'community' when there are several distinct communities in most districts and widespread car use has opened up all kinds of social and spatial dislocations. These broader issues about multiple communities are beyond the scope of this report but, in our view, public policy needs to start from consideration of the differences between anchors and their diverse engagement with social and business communities.

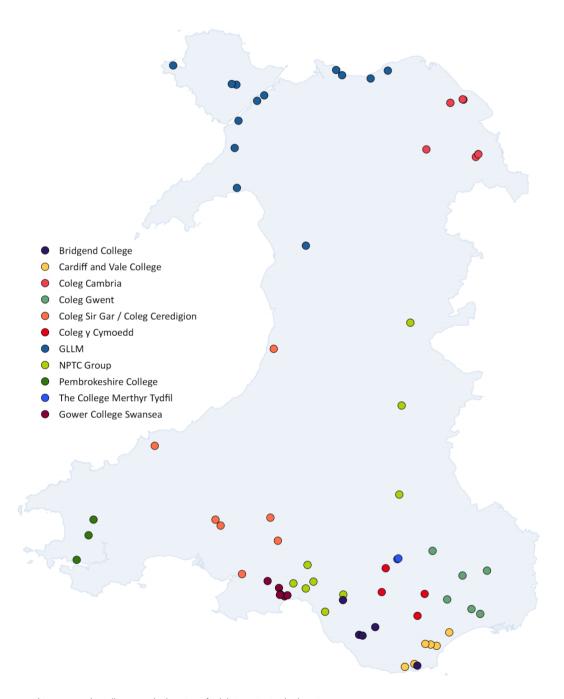
When we compare FE colleges, and particularly their campuses, to other anchor-labelled institutions, like hospitals or universities, it becomes apparent that they have a very different (service determined) relation to local society and the local business community. An acute hospital, for example, will disproportionately engage with older patients and engage with (local and national) business through contracts for service. And within education, there will be important differences in social and business engagement between secondary schools, the further education sector and universities. For example, in comparison to a university an FE campus is more likely to have:

- a diverse local student cohort, including young people and life-long learners, including some needing social support
- a dense network of relations with district businesses necessary to deliver core activities (e.g. apprenticeship and work placement)
- sometimes re-locatable facilities which could increase footfall in post-retail town centres and (in or out of town) are well placed to open and share facilities for districts.

The map on the next page shows Further Education campuses and facilities as of March 2020. Addysg Oedolion Cymru/Adult Learning Wales provides adult community learning in numerous additional venues across Wales and a map of these can be found in Appendix D.



Location of Wales' Further Education Campuses and Facilities*



 ${}^*\mathsf{A}$ separate chart illustrates the location of Adult Learning Wales locations

The implication of the comparison is straightforward. 'Anchor institution' is a limiting category because it obscures the diversity of engagement with local society and business communities. All anchors are, in their different ways, valuable insofar as they provide foundational services; but the intellectual and political task is to understand how they are valuable in different ways so that we can build on their diverse capacities. In further education, the key point is that vocational and further education cannot be delivered without a distributed network of FE campuses which are continuously engaged with occupational categories and their fluid boundaries and equally with the everyday choices of micro and SME business. The local FE campus then has a pattern of social and business engagement which gives



it the potential to act as an enabler of economic renewal through occupational and business community development.

The rest of this report will be concerned with how FE campuses and 'shining light' firms can be enabled to do more. From this point of view, 'community' in the singular without recognising plurality is as misleading as the idea of 'the economy'. What Wales has is a multiplicity of existing occupational and business communities and these are what we could begin to reconstruct economically and socially if FE campuses were empowered to act as enablers for renewal.

Section 5. Strengthen Further Education's ability to develop citizens and quality jobs

Before turning to how the Further Education sector and especially college campuses could play a larger role as an enabler of renewal, we must begin by insisting on the need for Welsh Government support of their efforts. Everything we propose in later sections requires further education capability and there is considerable scope for single institution experiment. However, in the aggregate, little can be achieved across Wales through bottom up boot strap strategies alone. The potential of FE colleges as an enabler of renewal will only be realised if Welsh Government and local authorities support FE campuses in an appropriate way and can then in return expect FE college commitment to a broad renewal mission.

The network of Further Education campuses in Wales is a shining light because, compared to equivalent vocational and further education systems in the English-speaking world, it is in comparatively good shape. It has good physical infrastructure. It is well-managed and staffed by teachers whose professionalism is valued. It has not been fragmented and downgraded by poorly conceived policy initiatives directed at shifting to inappropriate application of market ideas to this domain, as for instance in Australia and England. This legacy should not be taken for granted and needs to be recognised and affirmed. But, as with all our shining lights, if Further Education in Wales is to do more, it needs more support.

To begin with, support for vocational and further education needs to be recognised, as a whole Welsh Government responsibility (and not pigeon-holed as the funding responsibility of the Education and/or Economy and Skills Department). Sustainable forms of training and achieving effective return on investment in vocational training depend on the structure and organisation of the economy. If workplaces do not make full use of skills and/or they provide limited opportunities for initial and ongoing workforce development, then the ability of further education learners to contribute economically and grow personally will be stultified.

As noted in Section 2 above, this is already a problem throughout the UK, Wales included. This is not so such much a failing of the further education system, but rather a problem of the structure of businesses and the jobs they provide — what economists call, labour demand. Determining the level and shape of labour demand is challenging. Many of the levers (especially monetary, fiscal and industry policies) are determined at the level of UK Government. But the Welsh Government is not without power in this domain because it does have major influence through its procurement strategies. Problems arise from current government procurement arrangements in Wales based as they are on a



narrow 'transactional approach'. This is characterised by a pre-occupation with 'lowest cost pricing' and a predilection for bundling out project work at a scale often beyond the reach of local or district firms.

There is a need for public procurement to be reformed and organised on the basis of 'relational contracting'. Such arrangements would allow for the nurturing of grounded Welsh firms that provide district jobs and actively support broader approaches to education and training. Our existing public procurement problems are not just about the scale of business captured by local firms but about how contracts are designed. The difficulty is not simply the exclusion of Welsh headquartered firms but a transactional approach to procurement which undermines their training effort. It would be possible to give preference to Welsh headquartered firms and completely miss the point about the damage done by transactionalism.

The two most damaging design features of transactionalism are the preoccupation with 'lowest price' contracting and a predilection for bundling out project work at a scale often beyond the reach of local or district firms. The requirement to bundle a wide range of capital programmes into the requisite scale for the Mutual Investment Model (a half reformed Welsh version of the discredited PFI) is just the latest iteration of public — private policy failure. This is ironic when a key objective of the Welsh 21st Century Schools and Colleges Programme is to create new facilities for the teaching of vocational and technical knowledge.

The dysfunctional demand side effects of transactionalist public procurement were evident in the two sectors of care and construction where we conducted fieldwork. In care, the local authority price paid enforces low wages and workforce churn so that training in care is like pouring water into a leaky bucket. In construction, lowest price in public construction contracts enforces a system of sub-contracting which has undermined old style apprenticeships and choked off employer demand for higher level training. The box opposite provides examples of how problems with procurement impact on the shining light firms we studied in North Wales.

Changing these public procurement practices and the demand for training is just as important as putting more money into the provision of vocational education courses in

Problems with transactional public sector contracting encountered by Shining Light employers in North Wales

In the course of the field work it became very clear that many of the problems with skill formation in the workplace arose from funding arrangements beyond the training system.

In care work, local government procurement relations with care providers are transactional around a model which is about getting most hours for the lowest price. Within businesses this made it harder for companies to invest in their workers and to limit staff churn by paying a living wage. Public procurement practices in care do not allow decent margins over responsible cost incurred and punish employers with high training rates, unless they can find private customers who pay more for residential or domestic care.

It is also important to note that the issue is not just the squeeze on margins. The way contracts are packaged up can put important work beyond the 'bidding reach' of Shining Light employers. For example, one of the construction enterprises studied missed out because the health infrastructure funding body did not break the contract down into bits — instead had it contracted out one huge project that no Welsh construction firm could take on.

care and construction. Further, in planning for the future, new capabilities within FE need to be built and appropriately resourced so that FE personnel at college and campus level become active partners



in reshaping the flows of funds associated with reformed Welsh and UK Government procurement. On this basis, FE should step up and play an active role on the demand side as well as supply side of the labour market. More detailed proposals on how this can be achieved are provided in Sections 7 and 8 below.

Engagement with demand side factors must not come at the expense of neglecting or undermining FE colleges' core activity: the provision of quality education. For the supply side of the labour market, Welsh Government must provide appropriate funding for further education just as Welsh policy makers should abstain from hyper innovation and the disabling continuous reorganisation recently inflicted on the further education sector in England. But, like all such infrastructures, FE needs capital and revenue funding for maintenance and upgrade as publicly funded FE is and will be the platform which supports the changing educational needs of the citizens of Wales and communities over the coming decades.

The growth in participation in higher education has reached its limits after 50 years of nearly continuous expansion when nearly half the cohort now goes to university at age 18. But interest in and the need for FE in old and new forms will increase as life courses continue to change. People are staying in education longer —schools and universities are not necessarily the best place for them and progression from education into the workforce is precarious. The Covid 19 crisis has already resulted in job loss and will in due course accelerate changes in the nature of work.

Given changing life courses in the teen years, there is likely to be increased enrolment in courses currently undertaken by students interested in pre-university and second chance learning. And given the more fragmented careers of growing numbers of people, there is likely to be increased interest in accessing either whole or part qualifications in courses traditionally undertaken in support of trades level training, or higher qualifications that build on this level (e.g. Diplomas and Associate Diplomas). All of this will cost money.

The implication is that further education should be recognised as an equal – and not as an afterthought of the education system. Funding for the further education sector should be treated with the same degree of importance as that for schools and universities. And this funding should be for the whole FE offer.

The strength of the system comes from the full range of services it provides and these services include assisting students with course selection, support to enhance basic skills as well as curriculum and pedagogical development support for teachers. An emerging challenge is also that of holistic wellbeing of the FE learner. This includes individualised mental health support as well as assistance at a structural level to adapt teaching, assessment and examination and move away from the still present high-stakes winner takes all approach. FE colleges also have well established systems for employer engagement and tracking workplace health and safety (WHS) in work sites providing work placements for students.

All this requires consistent and reliable funding, balancing support targeted at the individual learner with that to the core public service that is the provision of further education itself. This change of approach is urgent. In assessing the challenges and opportunities identified in our case studies, our review shows that funding across the further education sector contains contradictions, which in turn leads to unnecessary competition. Promising initiatives are predicated on short-term grants or pilots and this creates instability and naturally short-term thinking. This can also create a culture of gaming



the system as institutions try to smooth out the peaks and troughs in financial allocations and clearly risks individuals falling between the cracks created by eligibility criteria.

There have been some improvements to the Welsh Government funding formula for FE in recent years which has helped to create an element of stability, most notably the policy of basing funding on discernible trends in demography. In addition, in funding for 16-19 year olds, there is an element of recognition for issues such as rurality and sparsity, Welsh language and the challenges caused by deprivation.

However, there is no automatic consideration and funding for mental and physical wellbeing, internationalisation and ensuring learners have opportunities to understand the wider, global context. These elements are important and should form part of the central funding to the FE sector. In addressing this topic it was discernible that the current procurement policy for programmes in these latter two categories has proved a significant barrier to targeting support to individuals in case in turn, it breaches the procurement process and confers additional support on the employer or the contractor.

In terms of the wider offering of further education, beyond 16-19 year olds, the Welsh Government needs to improve the funding methodology for adult learning. This includes the emerging Personal Learning Accounts (PLAs), where greater clarity is needed over how much funding is necessary to make the current model work effectively.⁵⁰ Serious investment is needed in a range of adult part-time provision which has been subject to severe cuts since 2012-13 and which requires greater funding security. Challenges remain over the best combination of funding to support this over the longer term with government, individuals and employers all needing to play a part.

The issue of funding insecurity in the further education sector needs to be addressed as a priority. But this must not be based on seeing the sector's campuses as merely factories for producing credentials or warehouses for unemployed young people. Equally, the answer is not to simply 'lump' FE into an amorphous 'post-16' category because that seriously risks compounding its historic disregard and low status. For the FE sector to be able to function as the public and universal basic service that is needed, and contribute to wider civic society, the sector in its entirety needs clearer and consistent funding from Welsh Government.

In line with this, currently every young citizen has the right to secondary schooling free of charge up to the age of sixteen, after that provision is free at the point of delivery for a further two years. These two years should be a right that is recognised legally, and as a lifelong entitlement, such that early school leavers could return to their studies at any time. The right should be to access courses free of charge; and for income support to complement this right of access. In thinking about the future, we should be extending this kind of entitlement to all Welsh citizens, though it is recognised that provision of such an entitlement would be costly.

As a first step, consideration should be given to extending the right to those adversely affected by current structural change, with an entitlement of one year's full-time equivalent education to retrain, ideally accompanied by income support. In the longer-term, the aim should be that every citizen can access a minimum of two years full-time equivalent education at various stages over their working lives

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⁵⁰ For more information on PLAs, see https://workingwales.gov.wales/personal-learning-account



at any FE college. Economies benefit by adapting to changed circumstances. Those adversely impacted by change need support. FE should become an integral part of the Welsh way of helping districts and individuals navigate transitions to new ways of working in the future just as is the case with the National Health Service. And just as the NHS is changing to engage with a broader notion of health, so FE should (in the longer term) be about supporting the development of citizens more broadly. This is not just for economic benefit but for the virtues that come from living in a society with better educated citizens.

To summarise: in the near to medium term the future of further education in Wales should not be conceived as merely about marginal changes to current arrangements. Rather, it is about evolving FE to help lift the quality of Welsh labour markets. On the supply side, it is about FE becoming integral to the changing flows of learning and work amongst Welsh citizens. On the demand side, it is about engaging more actively with the flows of procurement and investment that shape the number and quality of jobs. The next two sections outline specific proposals on how this can be achieved.

Section 6. Building better occupations: job clusters, vocational streams and future focused credentials

It is important that Further Education colleges do not see their role as passively accommodating changes in skill requirements as if they are inevitable and exogenously determined. As noted in Section 5, FE colleges have in the past, and can in the future, help shape how skills are defined and developed - and in that way increase choices open to individuals and organisations in how they define and meet labour requirements. Historically, FE played a critical role in the production and reproduction of skilled workers operating below the university-based professions. This was not inevitable - it has been the legacy of decades of activity directed at supporting strong and coherent occupational labour markets in areas including the engineering and building trades.⁵¹ This tradition needs to be embraced, updated and expanded.

In thinking about the role Further Education can play in shaping work in the future, it is important to acknowledge it is not the only - or indeed even the major - actor. In recent times much attention has been devoted to technology and its impacts. The 'robots are taking our jobs' narrative has become particularly prominent in recent times.⁵² Concerns that a wave of robotics and AI may cause sudden

⁵¹ See for example Gospel, H. (1994) Whatever happened to apprenticeship training? A British, American, Australian Comparison, Discussion Paper no. 190, Centre for Economic Performance, London School of Economics

⁵² See Frey, C. and Osborne, M. (2013) The Future of Employment: How susceptible are jobs to computerisation?, available at: https://www.oxfordmartin.ox.ac.uk/downloads/academic/The Future of Employment.pdf. Note also, however, the growing number of critiques of this alarmist paper such as Arntz, M., Gregory, T., and Zierahn, U. (2016) 'The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis', OECD Social, Employment and Migration Working Papers No 189 and Coelli, M. and Borland, J. (2019) 'Behind the headline number: Why not to rely on Frey and Osborne's predictions of potential job loss from automation' Melbourne Institute Working Paper No 10/19 October. Benanav, A. (2020), Automation and the future of



displacement are likely to be over-stated as evidence indicates employer investment is incremental rather than transformational. Of equal or greater significance are three other factors.

Aggregate labour demand:

The number of jobs in a particular territory at any one time is determined by the number of vacancies employers and governments create - what economists call the level of labour demand.⁵³ Since the onset of deindustrialisation and the pursuit of free market economic policies by successive UK Governments, Wales has operated in a situation of chronic (often hidden) unemployment and underemployment. The ensuring excess of labour supply has resulted in longstanding pressures that have reduced job quality for many workers.

Sectoral conventions and standards:

How sectors are organised and how the services and products they produce are defined also has a major impact. For example, if children's services are defined as primarily a problem of keeping infants safe while parents work, this leads to a lower level of skill requirement than if the issue is defined as one primarily concerned with early childhood development of future citizens.⁵⁴

Business organisation and strategy:

Another key factor concerns employers, especially their approaches to defining skill requirements and the wages they are prepared to pay. In situations of high unemployment and under-employment many service sector employers, for example, create jobs with low level skill requirements and low pay. This profoundly limits the type of vacancies they offer.⁵⁵

It is the interaction of these forces that constitutes the setting in which education operates and shapes jobs and skill requirements. For example, service work need not be low skilled, low waged in nature. As the attached extract shows, the way supposedly low skill jobs in a hotels are defined has varied dramatically between Britain and Germany – and fitness instructing also takes very different forms in Britain, France and Norway. These case studies show that many factors shape this outcome. Those factors include how sectors are defined, how employers approach business strategy, and work organisation as well as wage levels and associated productivity.

work, Verso, London highlights that the problem is not 'the robots' but deeper problems in modern market societies that do not prioritise fair and sustainable approaches to economic development in general and the distribution of productivity gains in particular.

For a short summary of a big literature, see Buchanan, J., Allais, S., Anderson, M., Calvo, R., Peter, S. and Pietsch, T. (2020) 'The futures of work: what education can and cannot do', Paper prepared for UNESCO's Futures of Education Initiative, 8-9.

⁵⁴ Evesson, J., Bretherton, T., Buchanan, J., Rafferty, M. and Considine, G. (2009) *Understanding vocational education and training, productivity and workforce participation: An issues paper*, National Centre for Vocational Education Research, Adelaide, <a href="https://www.ncver.edu.au/research-and-statistics/publications/all-publications/understanding-vocational-education-and-training,-productivity-and-workforce-participation-an-issues-paper

⁵⁵ Lloyd, C., and Payne, J. (2016) *Skills in the Age of Overqualification: comparing service sector work in Europe*, OUP, Oxford



Service work does not need to be low skilled and low paid: hotel workers in Germany and fitness instructors in France

It has long been recognised that the nature of work varies dramatically across the world — even between and within economies at the same level of economic development. For over 50 years extensive research has compared how the nature of skills and jobs differ and how this is associated with divergent productivity trends at workplace level. Initially the studies focused on Germany, France and the UK. More recent researchers have included a wider range of nations.

One of the classic studies concerned mid to high range hotels in the UK and Germany in the 1980s. It found that 'German hotels apparently require half (51%) of the labour per guest night as did the British hotels of the same quality-grading...'.[55] This was primarily a legacy of human rather physical capital factors. The key differences were:

- Higher levels of skills in German hotel (35% of German hotel staff had trade level qualifications compared to 14% of equivalent UK employees).
- Chambermaid productivity was higher in Germany mainly due to better work organisation by their supervisors.

 Nearly all German supervisors had trade level qualifications, compared to less than half those in the UK.
- German vocational courses offered training that tended to be both broader in issues covered and more comprehensive in terms of depth (included well-developed IT skills). This enabled German hotel workers to easily move between all work needs of the hotel front of house as well as back of house operations.
- German employers relied less on part-timers than their British counterparts (19% in Germany, 41% in Britain).
- 'About three quarters of the ...British sample were parts of larger organisations owning other hotels, almost all the [German sample] hotels were found to be independent and owner-managed.'

Despite decades of globalisation since the 1980s, deep national differences in the character of occupations and associated work organisation continues to this day. A recent detailed analysis of vocational teachers, fitness instructors and café workers found the level of cross national difference in occupations varied by skill level: it was highest amongst the vocational teachers and lowest amongst café workers — but differences still persist. The case of fitness instructors was instructive. In Norway this is an occupation populated primarily by part time students and underpinned by ad hoc skills and work organisation arrangements. In the UK over 26,000 thousand people take the relevant (low to middle level) qualifications annually and work in a very weakly regulated sector. In France, the Government, concerned with the quality of both the service and the workers who deliver it mandates higher level qualifications (baccalaureate-equivalent and university-based diplomas of between one and two years full-time) and the number of training places. The French arrangements support well rounded personnel who know all aspects of human movement and are prepared for progression into managing gyms - not just performing in them. Whereas UK and Norwegian fitness instructors earn roughly half of median earnings, in France they earn around 80 percent.

These differences in hotel and fitness workers are best understood as legacies of different labour management regimes. The elements of these include how their respective sectors are organised, especially how businesses are structured and work configured. Pay setting arrangements and the strength of national and local unions are also integral. Education and training arrangements are important, but they are not the only element shaping these outcomes.

Sources:

Prais, S.J., Jarvis, V. and Wagner, K, (1989) 'Productivity and Vocational Skills in Services in Britain and Germany: Hotels', *National Institute Economic Review,* November: 52 – 68

Lloyd, C., and Payne, J. (2018) 'Licenced to skill? The impact of occupational regulation on fitness instructors' *European Journal of Industrial Relations*, 24 (1) 91 - 108



What does this mean for further education? Training and skill formation arrangements are a necessary but not sufficient factor underpinning better quality work amongst German hotel workers or French fitness instructors. In thinking about its role in shaping the future of work, the Further Education sector needs to be very clear about what it is supporting and what it could enable. Historically, many employers have endeavoured to control how work is defined to meet immediate business preferences. For example, imposition of zero hours arrangements or reducing reliance on skilled labour by fragmenting work into low paid jobs.

In recent times some global organisations like the World Economic Forum (WEF) have proposed a more thorough going 'reform' of the fragmented training agenda.⁵⁶ In essence the WEF proposes shifting to a two-pronged educational regime. The first is based on so-called '21st Century skills' which are things like 'problem solving', 'creativity' and 'collaboration' conceived as content free, universally applicable capabilities. As workers also need specific skills to help them perform in particular jobs, it is assumed these will be acquired on a piecemeal basis as so-called micro-credentials. This is the second element of the skill regime they propose.

There are serious problems with this conception of knowledge, skills and education.⁵⁷ Skills at work become solely defined by business and there is an associated loss of any coherent notion of knowledge in education and of occupation in the labour market as skills at work become defined by business.

In thinking about further education's roles in the future it is important to consider how it engages with these kinds of pressures. In particular, consideration needs to be given to how it meets the ongoing calls for increased adaptability and responsiveness in the workforce. One way would be to focus on micro-credentials and attempt to parcel more skills out on an 'as needed' basis. This is not the only option. Consideration should also be given to nurturing new forms of occupational arrangement which would enhance workers' position in the labour market by giving them transferable skills that help them define work and not merely react to jobs as defined by businesses.

Insights into how coherent occupational labour markets operate are provided by the skilled trades (like those in engineering and construction) and professions (like teaching, law and accounting). At the core of such arrangements are workers with skill and expertise that are transferable between a variety of employers. Where they function well, workers have higher levels of productivity justifying both higher pay and the capacity to move between businesses, thereby limiting their dependence on any one employer for the provision of skilled work.

⁵⁶ World Economic Forum (WEF)/Boston Consulting Group (2015) *New Vision for Education – Unlocking the Potential of Technology*, https://widgets.weforum.org/nve-2015

⁵⁷ Buchanan, J., Ryan, R., Anderson, M., Calvo, R., Glozier, N., and Peter, S. (2018) *Preparing for the best and worst of times. A report for the NSW Department of Education on the key implications for school education of artificial intelligence and other emerging transformations*, Policy Lab, University of Sydney, Sydney, Australia; Wheelahan, L. and Moodie, G. (2019) 'A wolf in wolf's clothing – how micro-credentials undermine students' access to powerful knowledge', Notes for a symposium considering: 'Can educational knowledge be powerful? Addressing the challenges in the sociology of educational knowledge and curriculum theory' at the European conference on educational research, Hamburg, 4 September 2019.



Occupational labour markets of this type are a public good that bring significant benefits to all concerned.⁵⁸ Because they are a public good, they are vulnerable to under provision of workers with a high standard of skill. Government agencies or professional bodies specifying licencing requirements and/or multi-employer arrangements like labour standards or collective agreements can play a critical role in overcoming the collective action problem. Historically education bodies have helped in this process by providing the off the job training for socially recognised professions and trades like those noted earlier.

It is important to recognise that on their own, none of these factors is enough to lift job quality. That said, FE is not irrelevant. In particular, it is vital that it has an agenda on how to meet the looming push for micro-credentials. It is proposed here to think about preparing the educational support for more broadly conceived occupational labour markets.

How can the coverage of new occupations be identified? Traditionally occupations like the construction and engineering trades arose from long standing custom and practice built up over time. In Wales Further Education worked to support and reinforce these arrangements by providing the underpinning knowledge as these sectors became more technically advanced. Today implicit custom and practice shared across seemingly distinct domains of work can be identified with the help of empirical studies of how workers move between jobs. Such studies give insights into skills transferability already in place. Policy then becomes a matter of codifying and upgrading such labour flows.

Analysis of inter-occupational movements in places as diverse as Germany, Denmark and Australia reveals that these flows share many similarities.⁵⁹ For example, in the domain of lower to mid-level service work people, predominantly women, are rarely fixed as care workers, or clerical workers or customer services workers for extended periods. Instead they flow between these different occupational areas.

There is a huge opportunity here to create new occupational labour markets by reducing the number of qualifications and broadening their coverage. Taking the service work example, students could be given a core speciality in say, health and social care — but be given solid ancillary education in skills relevant to clerical and customer service activity. A particularly important ancillary skill relevant to all these occupational fields concerns IT and the use of and interpretation of data. In an area currently dominated by women, the way that the qualification is developed could also enable it to be more attractive to younger workers and to men, and form part of a collaboration with employers as to how to deploy their existing staff more fairly.

⁵⁸ Marsden, D. (1986) *The End of Economic Man? Custom and Competition in Labour Markets*, Wheatsheaf, Brighton; Freidson, E. (2001) *Professionalism, the Third Logic*, Polity Press, Oxford

⁵⁹ For Germany, see Maier, T., Neuber-Pohl, C., Monnig, A., Zika, G. and Kalinowski, M. (2017) 'Modelling reallocation processes in long-term labour market projections', *Journal of Labour Market Research*, [on-line, 5 April 2017]; for Denmark, see Toubol, J. and Larsen, A.G. 2017 'Mapping the Social Class Structure: From Occupational Mobility to Social Class Categories Using Network Analysis', *Sociology*, Vol. 5, No 6: 257–276; for Australian, see Buchanan, J. and Tierney, S. (2019), *Meeting changing skill requirements in NSW in the 2020s: Understanding and working with non-linear, lateral and upward inter-occupational labour flows*, Report for the NSW Skills Board, Department of Education, Sydney



In Denmark, for example, there have been initiatives directed at creating more broadly defined 'hospital support work'. In many countries cleaning, food service and basic patient care work in hospitals are organised as distinct roles. For well over a decade now the Danes have been integrating these roles. This has not just been undertaken to achieve the productivity gains that come from increased flexibility possible with such job broadening – it also improves the quality of patient care. Further details of the Danish experience and how they differ to similar, but less systemic changes in the USA, are provided in the box opposite

In pursuing occupational reform along these lines, students would have the basics in this broader vocational stream straddling care, customer service and clerical work, thereby also setting them up for easier redeployment into any one of the other two domains if their interest in (or jobs available in) care work changes. Having a strong grounding in related skills areas, specially from the clerical and IT domains, would help with upward career progression too.

In moving forward this needs an approach to change which we have elsewhere called the care-ful practice of policy. 60 We need to aim for gradual transition so we avoid the risk of attempts at transformation which often disrupt service delivery organisations and

Upgrading occupational breadth and depth for hospital support workers: different experiences in Denmark and USA

The key elements of this Danish innovation concerned the formation of hospital support workers. It involved a range of separate lower skills jobs being bundled together to create a new occupation. In essence this involved additional tasks being delegated to the role which had previously been undertaken by nursing assistants. The hospital service assistant role includes cleaning, making beds, linen service, serving meals, moving patients and patient personal hygiene. To shift to this role required 1 or 2 years training, undertaken at a vocational school, alongside working. Researchers investigating this reform found that this change increased the number of men working in the job (cleaning had previously been dominated by women) and improved job satisfaction, and reduced turnover.

An excellent example of how cleaners (or janitors as they are called in the USA) can, at their best, be part of a hospital's care regime has also been documented by North American researchers examining how Aristotle's notion of practical wisdom can be relevant to the work undertaken by those undertaking so-called low skilled work. The key difference between the Danish and US experiences is that in Denmark the linking of cleaning work with care work has been integral to health systems as well as health workforce reform, whereas in the US innovations of this nature occurs on an ad hoc nature, often highly dependent on the initiative of individuals and enterprises working in isolation.

Sources:

Eskildsen, J. and Løkke Nielsen, A. (2008) 'The upgrading of the skills of nursing assistants and cleaning staff in the Danish public-sector hospitals' in N. Westergaard-Nielson (ed.) *Low-Wage Work in Denmark*, pp218-257, Russell Sage Foundation, New York, 186–217).

Barry Schwartz and Kenneth Sharpe (2010), *Practical Wisdom: The Right Way to Do the Right Thing*, Riverhead Books (Penguin), New York, especially Chapter 2: What Wisdom Is: The Janitor and the Judge'.

⁶⁰ Froud, J., Haslam, C., Johal, S., Law, J. and Williams K. (2020) When systems fail: UK acute hospitals and public health after Covid-19, Research report: Foundational Economy Collective, pp 54-7. The argument here is that effectiveness in health care is about the practice of balancing objectives not about imposing discipline on agents or capturing power from special interests. It can be transposed to other domains. https://foundationaleconomycom.files.wordpress.com/2020/06/when-systems-fail-uk-acute-hospitals-and-public-health-after-covid-19.pdf



undermine administrative capacity. And the risks involve more than those of disruption arising from imposition of yet another 'top down solution' in the Anglo-Australia model of so-called VET reform.

As noted above, quality occupational labour markets in countries like Germany and France are not just an artefact of their training systems. Unless standards (concerning sectoral quality of the product/service produced) and approaches to business organisation and strategy change, qualifications reform could simply result in lifting formal accreditation requirements for relatively low paid work. Workers can move between service jobs as noted already. The last thing we want to achieve is a 'high skill, low paid' workforce. In addition to thinking through new qualification arrangements, it is equally important to change the business communities engaging workers with these qualifications – because it is employers who have considerable power in defining jobs and recruiting labour.

The remainder of this section outlines our distinctive approach to qualification reform. Section 7 takes up the issue of business community reform.

How would care-ful approach to policy practice occur here? Considerable work has already been devoted to reviewing and improving qualifications in sectors such as care and construction in Wales and the aim should be to ensure current qualification arrangements work well while beginning to think about how to structure reform which should be about shaping new options, not just rationalising and streamlining established arrangements.

This kind of reform, with a ten-year time horizon, is not a straightforward exercise. Defining – or redefining – domains of expertise is an inherently complex and potentially controversial matter. It involves analysis of current requirements for skills and how they are likely to change. It also involves engaging relevant stakeholders early and comprehensively. Two key matters need to be considered: clarifying the domains for foundational or core qualifications and using this frame of reference to develop quality micro-credentials.

a. Constructing future-focused core credentials

Within a ten-year timeframe, bigger questions than those commonly asked in the area of qualifications reform can and should be considered. What would a potentially more appropriate set of domains of expertise look like? Current configurations, as embodied in qualifications are generally quite specialised. Could broader vocational streams around the notion of 'modern services work' (like that noted above and involving job clusters and flows between care, clerical and customer service work) be devised? What would the content of this broader domain of expertise look like? Who are the relevant parties – or stakeholders – who should be involved in the deliberations about this matter? What other changes are needed to support the demand for workers with higher levels of skills – especially wage levels? How can opportunistic employers be managed so the reform process does not simply nurture more higher skilled, low paid workers? Appendix E outlines a potential process that could be initiated by college CEOs or principals if they are interested in pursuing this issue.



b. Micro-credentials to be devised in the context of deeper qualifications reform

Micro-credentials need to be devised as supplements to, and not substitutes for, quality foundational qualifications. And those new foundational qualifications should be designed around new, broader domains of work, such as 'modern service work'. This is important for meeting new training/education needs over the life course. As noted above, qualifications reform should support occupations that are more broadly defined than currently occurs. If this new kind of job cluster or vocational stream-based model of qualifications emerges there will be especially strong need for quality micro-credentials.

Developmental funds should be allocated to link long term qualifications reform and initiatives undertaken to meet the demand for micro-credentials. A working group in one or two disciplines (e.g. construction and care associated work) could be formed. As noted, in planning this work, attention should be given to not just re-badging elements of some current qualifications as micro-credentials. Instead serious consideration should be given to the nature of the core qualifications that provide the foundations for micro-credentials in the future. In many ways it is possible that work on micro-credentials could, ironically, be the starting point for thinking about the nature of core qualification over the longer term.

It is important that the nature and significance of qualifications reform is kept in perspective. The central argument of this report is that Further Education has an important role to play in the renewal of Wales — primarily as an enabling agency. There can be no 'education driven' road to economic prosperity. While a desirable social and economic future will require an active and expanded FE sector, further education cannot do this on its own.

If Wales is to break with its current status as a deindustrialised, disorganised economy and polity, something has to be done about overall economic policy in general and employers in particular. Under current constitutional and policy settings, Wales under its current home rule regime does not have much control over these key economic variables. It is not, however, totally powerless. The next section considers the room for manoeuvre in this domain and how the further education sector can help Wales get to a better place by helping with the reform of business communities.

Section 7. Building better business communities

Our field work uncovered a Welsh paradox. The legacy of industrial decline and half-hearted devolution is a missing middle of SMEs and a splintered polity. And yet, amidst that gloom, Wales has its 'shining lights'. Our fieldwork found successful small and medium sized firms that combined commercial acumen with social value, and FE campuses with clusters of exceptional educators and organisational capability. From this point of view the challenge is: can the shining lights shift from being isolated islands of excellence to being the defining characteristic of entire districts? If the shining lights were multiplied with suitable policy support, then district arrangements would ensure that the benefits of positive UK level shifts in fiscal policy or industrial strategy (if and when they happen) would be multiplied rapidly.



Transition can happen if we recognise that FE is part of the larger Welsh coordination problem which is complex and multifaceted. Current policies and funds devote most attention to executive level structures: i.e. enterprise level management in the economy or college level administrators in the education system. Instead, more attention needs to be devoted to deepening and broadening organisational capability at the local campus within FE and workplaces level within organisations — i.e. the where district business communities exist and need reform.

This approach necessitates a shift in policy design. In recent times, enterprises and, increasingly FE colleges too, have been encouraged

Agricultural extension services: essential features

Agricultural extension services have operated in many parts of the world, in some cases for over 100 years. They emerged to link the latest agricultural knowledge to everyday farm management. Black argues that today there are four models:

- Top down technological transfer (i.e. original model)
- Participatory 'bottom up approaches'
- One-to-one advice or information exchange
- Formal or structured education and training.

The best extension arrangements combine all elements. The agricultural extension experience is highly relevant to Wales in that it comes from a sector characterised by micro and small businesses (i.e. family farms) and for most of its existence it has functioned in the public sector. These arrangements also have the 'research-education-practice nexus' at the core of their operations. This is vital if we are to get the best of both evidence-based change and mass participation/collaboration in district renewal initiatives.

Source:

Black, A. (2000) 'Extension theory and practice: a review', Australian Journal of Experimental Agriculture, 40(4) 493 – 502

to perform as semi-autonomous entities charged with meeting outcome targets. A sense of system and network is at best weak amongst FE colleges, or at worst non-existent amongst many private sector enterprises. As a result, many of the possible benefits of inter-organisational coordination (especially concerning product and workforce development) are not captured. There is considerable potential for the FE sector, via its campuses, to play a more active role in renewal by helping overcome coordination failure.

But, how could this be done? Insights into processes for achieving improved coordination can be gleaned from three sectors in the foundational economy: health, agriculture and construction.

A defining feature of health systems the world over is the notion that improvements in practice are only possible if there is a close connection between education, research and service delivery. For example, doctors in their final years of training spend around 80% of their time in hospitals and clinics. Many health practitioners conduct and publish research derived from reflecting on their day-to-day work. Much of this knowledge is widely shared and the system underpinning its production and dissemination is publicly funded.

Modern agricultural sectors the world over are also organised to reap the benefits of a tight 'education-research-practice' nexus. Whereas the health sector builds this around professions anchored in entities like large scale teaching hospitals, agriculture does it in a context where small business (i.e. the family farm) is the dominant form of organisation. Farmers, with government support, have devised what are referred to as 'extension services' to address this situation. Such services often involve research labs that investigate problems afflicting particular farming communities. The findings of this research are



then communicated by skilled intermediaries (often called extension or field officers) who help farmers apply the results in their particular settings. More details about these arrangements are provided in the attached box.

Construction industries around the world are characterised by many small operators functioning on very small margins. Reproducing skilled labour in such settings is hard. Historically apprenticeship systems have worked to meet this challenge. As competition has increased and margins have fallen, the ability of small firms to carry apprentices has declined. Shared apprenticeships are one way construction employers have maintained training rates. In essence, these are ethical labour hire arrangements. Apprentices are employed by the Shared Apprenticeship Scheme and then hired out to employers who provide them with 'on the job' training while undertaking particular projects. Because of the volatility of the construction sector, it is often hard for any one construction firm to guarantee employment for the full two to three years needed. Shared apprenticeship arrangements, however, work to support apprentices by helping them find continuous work but across a range of employers during the training period.

A common thread to all three arrangements is a more expansive notion of what education entails. The implication is that FE needs to broaden its notion as well as to include helping workplaces and organisations, not just individuals, learn. Closely linked to this broadening, in all three cases we have coordination arrangements that pool risk, thereby increasing the choices of all involved in terms of both access to information (including practical know how) and employment-based learning arrangements (in the case of shared apprenticeships). In building such coordination arrangements, FE campuses would need to enlist local authority regeneration departments, Business Wales, FSB Wales and other stakeholders in alliance because duplication and competition would be counterproductive.

The question for that alliance is: how can FE campuses and personnel play a more active role in nurturing organisational learning and building up new capacity to improve coordination capability to increase the flow of information between workplaces? More and better jobs would of course be the likely consequence of a business community comprised of more capable and better networked firms.

Achieving change of this nature is a medium to long-term project and will take at least 5 to 10 years to see substantive progress. Two distinct stages of activity will be needed. The first should concern building up new capacity at the FE campus level. This will ensure FE campus-based personnel (including employees of FE and other agencies) can become respected contributors to business communities promoting more capable firms. Having established this capacity, FE will then be in a position to help facilitate the second stage. This concerns deliberations about how to better direct wider flows of funds that shape the level and character of employment and education, especially as it occurs in local or district workplaces.

It is also important that priority is accorded to sectors which are already important in terms of employment – and which need strengthening. It is for this reason most of our attention in the following sections is devoted to initiatives concerned with construction and the foundational economy.

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⁶¹ Buchanan, J., and Evesson, J. (2004) *Creating markets or decent jobs? Group training and the future of work,* National Centre for Vocational Education Research, Adelaide.



a. Building new capacity

Shared apprenticeships

During the field work in South West Wales the research team examined a very successful shared apprenticeship arrangement. The example studied had 120 apprentices. FE leaders should explore whether the sector has a role to play in expanding such arrangements in different parts of Wales. It may be the case that other colleges 'build, own and operate' such arrangements — or it may be that they simply provide space for a shared apprenticeship arrangement to function from. College CEOs and principals — in concert with relevant curriculum coordinators — are best placed to undertake initial developmental work and be provided with funds to ascertain how, if at all, such arrangements could work in particular districts.

How a Foundational Economy Extension Collaboration could potentially work for a Welsh FE college and its associated campuses.

- Identify a college that has a network of campuses deeply committed to experimenting with identifying ways FE campuses can help with the reconstruction of the foundational economy. Funds should be allocated for up to five years to establish a new entity to help with this venture. Within a region of Wales, preference would be given to the college which has the largest number of campuses already deeply embedded with local or district foundational economy workplace managers, unions and professional associations (where relevant).
- The new entity would be called the Foundational Economy Extension Collaboration (College name).
- While there would be a small research nucleus, this would be primarily a clearing house of all relevant research. Its primary aim would be to draw out the best of what is already known in terms of service design and provision in Wales and more broadly globally.
- It would have a budget to run and evaluate pilots on issues identified as important for workplaces in the district.
- At least half the funds would be available for a network of field officers. For example, each different college campus would have at two least outposted field officers. The field officers would help with:
 - o Building an active and informed network of employers in the foundational economy across the district. Sectoral specialisations would differ by area: some campuses will have expertise in things like animal care, mixed farming, horticulture, agricultural engineering as well as forestry and wood processing in rural areas. In urban areas some are likely to have expertise in engineering and construction while others will be stronger in social care and health.
 - o These networks could host experimentation with developing new vocational streams, for example, around modern rural operations and modern service work along the lines noted in Section 6.
 - o In concert with other interested parties such as the area Public Service Board and officers from Business Wales and the relevant Council's regeneration department, the field officers could also explore how best to build college level capability to support 'one stop shop' services concerning business advice, performance and social audit reviews as well establishing and supporting peer learning networks.

The underlying ideas are, in principle, relevant to any college and its associated campuses.



Foundational Economy Extension Collaborations (FEEC)

While extension arrangements have a long track record in agriculture, their operation in other sectors is rare. Development funds should be available to trial such arrangements. The organisational nucleus for such an initiative should be built around a network of campuses engaged with elements of the foundational economy in their associated districts. The core features of such arrangements are summarised in the box below. To help bring these ideas to life we have outlined how they could potentially work in one college whose campuses we studied in North Wales.

It is vital to appreciate that the objective in developing and supporting such a collaboration is not to have this initiative provide 'a service' which local or district workplaces 'consume'. Rather, the aim is to build connection between workplaces at the district level to help share both learnings and capabilities. Such arrangements would provide a means for shining light workplaces to offer systematic guidance to others, and for them to learn from the broader information flows in which the extension collaboration would be involved. Moreover, Covid 19 has highlighted the need for surge capacity in sectors like elder care. The organisation and coordination of such capacity could be an aspect of the Foundational Economy Extension Collaboration's operations that could be built up over time. Development of this capability would help overcome current problems in the limited coordination of the development and utilisation of capacity that is currently a characteristic of this sector.

b. Changing funding flows to improve the quantity and quality of jobs

District Employment and Education Accords

Getting policy right at the commissioning agent level is one thing; ensuring effective change actually occurs is another. That is why specialised capacity at the level of the FE campus is needed to follow through and ensure appropriate arrangements for proper levels of district employment and 'on the job' training actually occur. Such enforcement should not just rely on campus level personnel monitoring Welsh and UK Government level policies. To effect substantive change, the process of resource allocation needs to be governed less by a 'lowest contract price' vision of organisation and more by a notion of joint determination governed by accords reached by relevant players at the district level.

This will require change amongst a number of stakeholders. Within Further Education it will mean moving beyond traditional notions of how change is effected. What we need here is not a new procrustean national framework forcing reorganisation on everybody in a one size fits all way. We need a context sensitive district mechanism for empowering district actors to do relevant transition making things within an ambitious national programme. The vehicle that could be used for this is what we would call District Employment and Education Accords.

There would be two types. One setting up a framework for all foundational activities within the whole (whose boundaries would relate to FE campuses and district authority boundaries). This would support coordination of generally available services associated with business development provided by Welsh and Local Government agencies. The framework could also be a vehicle for the development of district strategies for the provision of skills for new green occupations and greening existing jobs, similar to



current initiatives in Liverpool and South-West England.⁶² The second type of accord would be sectorally based within the district. Financial support for these should not just be from the funders of education. Welsh Government procurement policies should also be changed to support employers (such as those in construction and care) involved in such accords.

Given the weight and significance of the foundational economy in Welsh local economies we believe priority should be given to developing a pilot accord for this sector in the district that has the Foundational Economy Extension Collaboration. Our work on construction also highlighted significant potential benefits of piloting an accord (or accords) in this sector as well. Preference should be given to districts with shared apprenticeship arrangements, given this provides supportive organisational infrastructure for quickly expanding quality employment-based training arrangements. Examples of how these arrangements could potentially work are provided in Appendix F.

Enabling Renewal:

⁶² Cedefop (2018), *Skills for green jobs in the United Kingdom: an update* [unedited proof copy]. Available only at: http://www.cedefop.europa.eu/files/uk green jobs 2018.pdf, 26-7.



Conclusion

Wales, like all nations, faces pressing challenges. Those associated with Covid 19 and its consequences are merely the most immediate. Before the pandemic hit, the polity had struggled to get a disorganised economy onto a different trajectory. Inequality and unemployment will rise in the aftermath of Covid 19 if action is not taken. Most significantly, the carbon constraint on the future will continue to tighten.

Unlike many parts of the English-speaking world, Wales has a strong Further Education sector. It also has some hidden treasures, the 'shining light' employers in the private, public and non-government sectors who combine commercial acumen with deep commitment to place and social purpose. This report has identified how these institutional shining lights could and should work better together to help with the renewal of Wales.

Further Education was not a cause of Wales' problems – and on its own it cannot 'solve' them. That said, it is important that we raise our ambition for the FE sector in Wales. Further Education does not have to play its traditional role of passive auxiliary which provides the economy with the supply of skills needed by business. Operating FE on that basis and assumption has resulted in the confused legacies noted in Chapter 2: increased certification combined with chronic skills under-utilisation, declining employer investment in training and qualifications based on narrowly defined competencies.

The paradox is that further education in Wales needs to become both more realistic and more ambitious. Increased realism means confronting the fact the current 'FE as auxiliary' policy assumptions – especially the assumption that increasing skills will reliably boost economic success – are plain wrong. While this assumption has made 'sense' to generations of economic policy makers in recent decades, it makes no sense given recent policy outcomes and current Welsh economic realities.

Against this background, it is time to deal with the specifics of the contemporary Welsh economy as it is; not as the past generation of policy makers have wished it would become. And this is where the need for increased ambition emerges. FE campuses in Wales are a rich institutional resource that can help with a national renewal project through acting on labour demand (i.e. job creation) as well as labour supply (i.e. educating workers).

Further Education in Wales needs to build capabilities not to create jobs directly, but build what we call 'enabling capacity' — the ability to help districts become more than the sum of their currently fragmented parts. Work on building this new capability needs to start today so that a broader range of policy options become possible in the next five to ten years.

Part II of this report outlined where to start. First, and most importantly, FE's core functions in Wales need to be strengthened. Everything proposed in this report builds on current arrangements. Maintenance of quality education in support of trade training, initial vocational education, a route to higher education, and access to learning and work courses are vital. Given the changing flows of work and learning, this infrastructure needs to be extended for people undergoing transition at various stages of their working lives. As we noted in Section 5 – ultimately there should be a right for citizens to retraining and education for up to two years during their post-19 lives.



Consolidating and upgrading the core function is only the beginning of the care-ful policy agenda proposed in Part II. Wales needs to find new ways to lift the level and quality of labour demand (i.e. the creation of new jobs). Sections 6 and 7 provided considered ideas on how FE campuses in Wales can help. Two communities rarely considered in debates around vocational education were identified as requiring priority attention: occupational communities and business communities. Unless something changes the quality of both communities, Wales is set to drift at best – and at worst deteriorate.

The idea of Further Education as enabler of occupational and business community renewal is ambitious. But if FE does not take on this enabling role, who else will? Personnel at FE campus level are well placed to help nurture the relevant networks of trust needed to build up new occupational domains, supported by appropriate underpinning knowledge.

Building quality occupations is not, however, simply a matter of having better vocational education. Employer support is vital. And given the reality of contemporary Wales, local, national and UK Government are key players (through funding and regulation), first, in foundational sectors accounting for just under half the employed; and, second, through relational public procurement, Welsh Government could use its leverage over sectors like construction and care to help renew economies at the district level.

It is for this reason Section 7 proposed nurturing new resources like shared apprenticeships and an ambitious Foundational Economy Extension Collaboration that will help increase the number and quality of jobs at the district level.

With these new, more comprehensive foundations, FE campuses could grow to become honest brokers for District Employment and Education Accords. These would engage more actively with the local, Welsh and UK Governments to help embed these more expansive arrangements in activities and projects funded on their behalf in construction, care and health especially.

In time, it is conceivable Wales could show the world how it is possible to move beyond the free market experiment of the last forty years which leaves behind a legacy of disorganised post-industrialisation in so many newly peripheral areas. This will require moving from a situation where the shining lights are isolated organisations in a sea of disorganised post-industrialisation, to one where whole districts attain shining light status, showing the way to effective social and economic renewal in a carbon constrained future.



Appendix A

Research Strategy

This report represents the findings of an applied research project undertaken to generate new ways of thinking about Further Education in Wales.

The problem of interest

ColegauCymru was keen to have a 'support paper' prepared ahead of the May 2021 elections to the Welsh Parliament. The charity wanted the paper to deal with the current situation and emerging possibilities in Welsh FE. It was especially interested in how improvements in FE could contribute to economic and social renewal of Wales more generally. ColegauCymru was not just interested in how vocational education reform can lift the quality of labour supply – it was also interested in how it could assist in improving the quality and scale of labour demand in Wales. (Given the composition of the research team ColegauCymru was especially open to ideas of how FE could help revitalise the foundational economy and through that the Welsh economy and society more generally).

Key matters of concern and guiding research questions

The key matter of interest was improving economic and social development (and especially increasing employment levels and job quality) in Wales. The guiding questions were:

- (a) How, if at all, is Welsh Further Education contributing to this?
- (b) How, if at all, could it contribute better in the future?

Analytical anchors

As a team the researchers brought deep expertise to this task. This has meant this project drew on (and marks a contribution to) three research literatures:

(a) The History and Political Economy of Wales

The most relevant source from this analytical current is Brill, L., Cowie, L., Folkman, P., Froud, J., Johal, S., Leaver, A., Moran, M., and Williams, K. *What Wales could be*, FSB Wales and Centre for Research on Socio-Cultural Change, September 2015 https://foundationaleconomycom.files.wordpress.com/2017/01/what-wales-could-be.pdf



(b) The role of the foundational economy in contemporary capitalism

The most relevant sources from this analytical current are from the foundational economy collective:

JE, JF, CH, SJ, LC, KW (2020) 'The foundational approach', https://foundationaleconomycom.files.wordpress.com/2020/08/fe-approach-2020.pdf

Foundational Economy. The Infrastructure for Everyday Life, Manchester University Press, Manchester, 2018

(c) The changing nature of skills and workforce development and options for the renewal of vocational education in the English-speaking world.

The most relevant sources from this analytical current are:

Buchanan, J., Allais, S., Anderson, M., Calvo, R., Glozier, N., Peter, S. and Pietsch, T. (2020) *The futures of work: what education can and cannot do,* Paper prepared for UNESCO's — Futures of Education Initiative - Background Paper for UNESC Futures of Education initiative (Topic 4: *Work and Economic Security,* 'What role can education play in ensuring the human centredness of the future of work?') https://unesdoc.unesco.org/ark:/48223/pf0000374435

Buchanan, J., Wheelahan, L. and Yu, S. (2018), 'Increasing young people's adaptability and mobility: from competency approach and twenty-first-century skills to capabilities and vocational streams' in Sakamoto, A., and Sung, J., *Skills and the Future of Work: Strategies for Inclusive Growth in Asia and the Pacific*, ILO, Geneva, 2018: 125 – 160, available at: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms_650239.pdf

Lloyd, C. and Payne, J. (2016) *Skills in the Age of Over-qualification: Comparing Service Sector Jobs in Europe*, OUP, Oxford

Stages in the research process

Stage 1: Clarifying guiding concepts and new data collection priorities

This involved a number of Skype workshops involving the research team undertaken to devise an operational conceptual framework and field work strategy. This framework was informed by the key sources noted above. It was decided to collect original data on how FE works well in two contrasting regions in two contrasting sectors. The field was not so much about generating exhaustive original data – but rather to gain insights and test ideas with strategically selected key informants. As such the field was to help generate new policy insights and not just new understandings for the purpose of analysis alone.



Stage 2: Initial 'skirmishing' with key informants

These were mainly done from Australia by John Buchanan and Bruce Smith in late October and November 2019. Interviewees were key informants – not official stakeholders. The aim was to have the field work guided by respected practical intellectuals in Further Education in Wales in the selected localities and sectors.

Stage 3: Conduct of field work with strategically selected practitioners

All interviews were conducted with at least two researchers present. After gathering initial contextual information, the interviews usually took the form of an extended engagement probing as to what works well now and what might work better in the future of relevance to the research questions. All interviews were recorded with consent.

Stage 4: Initial processing of data and distillation of working findings

Three preliminary workshops were held on the basis of a first consideration of the data. One in Wales, two others via Skype. Once transcript was obtained, more considered reporting of the field work was prepared. The initial set of findings was shared with College principals in January 2020.

Stage 5: Rounding out analysis by deeper engagement with relevant scholarly and applied literature

Preparing the final report was a choppy affair. Initial findings needed to be refined in light of consideration of the transcript and consideration of earlier reports prepared by other researchers. Extensive work was undertaken getting across the details of current Welsh Government policy – especially its recent initiatives to organise funding support for Further Education around what it describes as the three regions of Wales. Extensive secondary literature (especially from economic geography) was processed to sharpen the argument.

Stage 6: Drafting and report finalisation

The final report was produced on the basis of producing three distinct drafts. Refining of the final draft occurred in an iterative process, thrashed out in a series of Zoom meetings.

Stage 7: Reporting back and dissemination of findings (yet to be completed)

A series of online meetings and discussion events are planned with sector representatives, policy makers and interested parties in late 2020 and early 2021.



Appendix B

Glossary: A guide to some key terms used in this report

Capabilities approach/Human capabilities approach (as contrasted to competency-based approach to vocational education and training) – In recent decades there has been increasing questioning of the core assumptions underpinning mainstream economic reasoning and policy objectives. Researchers working in the 'capabilities approach' tradition have cogently identified the problem of assuming economic growth is the self-evident paramount goal of economic and social life is problematic. As they put it: what is the utility of growth if large segments of the population do not flourish? Bryson⁶³ notes, the capabilities approach "puts people at the centre of analysis"⁶⁴. In Amartya Sen's formulation, it is "the opportunity to achieve outcomes that [people] value and have reason to value"⁶⁵. Building vocational education around a notion of capability ensures the key objective is to give people the capacity to engage with and adapt to changing circumstances in ways that they value. It provides a more coherent point of reference for human development than the current 'competencies' based approach. In this latter approach the primary units of concern in vocational education are highly disaggregated units of competence derived from close analysis of the tasks undertaken in current jobs. Such an approach to vocational development is flawed because it is based on a fragmented notion of skill and is backward looking as it is based on extant employment.⁶⁶

District and locality: 'District' in this report mainly refers to the territory within the administrative boundaries of one College and this district is the space of College strategy and managerial initiative in Further Education (FE). Within each FE College district there are several distinct localities defined by patterns of settlement and transport links, so that a locality is a space of movement and interaction defined by activities like travel to work or patterns of socialising. Practically, the catchment area of an FE campus is a locality and that is the sphere of operations and delivery where FE engages with businesses and communities. More generally, 'district' can refer to other administrative areas, whose meaning should be obvious from context. Political entities like local authorities, NHS Health Boards and housing associations all operate in administrative areas of territory. The complication is that these political entities and service organisations have different boundaries so that many of the 13 FE Colleges work across two or more of the 22 Local Government Authority Boundaries. The territorial system is further complicated by multiple levels so that Welsh Government, for example, adds a national dimension but also now seeks to operate on a regional basis. For example, elements of FE funding are distributed on the basis of three 'Regional Skills Partnerships': North Wales Regional Skills Partnership,

⁶³ Bryson, J. (2015) 'Putting skill in its place', Journal of Education and Work, 28(5): 551 – 570 at 556.

⁶⁴ Oliver, D., Yu, S. and Buchanan, J. (2019) 'The Political Economy of Vocational Education and Training' in Unwin, L and Gailie, D. (eds), *Handbook of Vocational Education and Training*, Wiley, London, 115-136 at 128

⁶⁵ Sen, A. (1999) *Development as Freedom*, OUP, Oxford at 291.

⁶⁶ Wheelahan, L., Buchanan, J. and Yu, S. (2015) *Linking qualifications and the labour market through capabilities and vocational streams*, NCVER, Research Report, Adelaide, June. https://www.ncver.edu.au/publications/publications/publications/all-publications/linking-qualifications-and-the-labour-market-through-capabilities-and-vocational-streams



Regional Learning and Skills Partnership South West and Mid Wales and Cardiff Capital Regional Skills Partnership. These mega regions encompass many, many districts and have more an administrative rationality that often lacks organic connection with the districts in which FE Colleges are embedded.

Extension and Extension Service – These terms come from the agricultural sector. In many countries farmers, with government support, have devised what are referred to as 'extension services' to generate and share knowledge to overcome common problems. Traditionally such services have involved research labs that investigate problems afflicting particular farming communities. The findings of this research are then communicated by skilled intermediaries (often called extension or field officers) who help farmers apply the results in their particular settings. There is now some interest in extending this model of knowledge-based innovation to other sectors. (Further details provided in Section 7 of this report.)

Foundational Economy – This refers to those aspects of everyday life that are the preconditions not just for survival but flourishing. The Foundational Economy Collective notes that there are two parts for this economy: the material and the providential. As they put it: 'Our list of foundational activities is defined pragmatically by including the goods and services which provide daily essentials whose absence or interruption causes immediate crisis in all households. On this basis, we have systems of provision which provide *material services* through pipes and cables connecting our houses, as system of networks and branches distribute water, electricity, gas, telecoms, banking services and food; and also the *providential services* of primary and secondary education, health and care for adults as well as income maintenance.'67

Further Education (FE) and FE Campuses – At its broadest further education is that realm of skill development that covers all formal education and training that is not in school or universities. In Wales, FE concerns full time and part time institution-based education and formal workplace-based learning. This is provided by FE Colleges – who are defined as "non-profit institutions serving households" (NPISH bodies) and who receive public funding to carry out many of their activities - as well as local authority and not-for-profit community educators.

Other organisations, mainly private training companies, also provide formally recognised and often publicly-funded workplace learning. In the 2018/19 teaching year the distribution of learners by different types of provider was as follows:

Further Education Colleges	114,100 (63.5%)		
Adult and Community Education	22,790 (12.7%)		
Other (mainly workplace) training providers	42,670 (23.8%)		
Total Learners	179,560 (100%)		

⁶⁷ Foundational Economy Collective (2018) *Foundational Economy. The infrastructure of everyday life*, Manchester University Press, Manchester, Chapter 2 and Foundational Economy Collective [JE, JF, CH, SJ, LC, KW] (2020) 'The foundational approach', https://foundationaleconomycom.files.wordpress.com/2020/08/fe-approach-2020.pdf

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(Further details on nature of Welsh FE are provided in Appendix C)

As these data make clear, the fly-wheel of the FE sector is provided by the Colleges. In this report, when we refer to Further Education or FE in general, it is this segment of the sector that we have in mind. Colleges are usually comprised of a number of specific physical sites called campuses. Many of the recommendations in this report are concerned with strengthening these campuses and building new capacity at this level to help with economic and social renewal.

Occupation – Terms surrounding notions of jobs, work, employment and occupation are used loosely and often interchangeably. In this paper we are especially interested in the creation of quality paid work understood as coherent, dynamic occupations. Standing has noted 'the idea of "occupation" should be contrasted with the notion of a "job". Historically, the latter is a pejorative term, suggesting [transient] activity, limited and limiting. People do jobs; people are occupations. A job is [limited], its end is defined in its beginning. An occupation is [more open], constantly becoming and "unbecoming". An occupation suggests a career and a niche – occupying a space'. ⁶⁸ As such 'an occupation consists of an evolving set of related tasks based on traditions and accumulated knowledge...'69. Occupations are constructed through policies pursued by workers, employers and government, often supported by educators. There is nothing inevitable in how different domains of work are organised. 'Thinking of work in terms of occupations sets off a different train of thought than thinking in terms of sectors or industries, or employers and employees, for firms and employees^{'70}. Historically FE has provided underpinning knowledge for skilled craft workers in sectors like construction and engineering. As new possibilities concerning paid work emerge, choices need to be made as to whether new types of occupations are to be nurtured or if the nature of work is to be essentially defined unilaterally by business need. (See also vocations/vocational stream.)

Relational contracts – it is increasingly recognised that contracts that are based on lowest prices are not conducive to nurturing sustainable relations between all parties involved. Relational contracts involve agreements that move beyond short run maximisation concerns because they are 'sustained by the shadow of the future'⁷¹. They are concerned with building and nurturing adaptive capacity over time, not just meeting short-term needs.

Shining lights – this is a term used in this study to describe organisations which combine business acumen with social value, especially a commitment to nurturing the localities in which they operate. It is different to the modern business notion of 'best practice' or 'social enterprise'. These latter notions see organisations as essentially economic machines mobilising and deploying resources to optimise performance on standard metrics such as 'Return on Investment' or 'productivity' defined in any number of ways. 'Shining light' organisations are not just outstanding economic entities – they are also

⁶⁸ Standing, G. (2009) Work after Globalisation: Building Occupational Citizenship, Edward Elgar, Cheltenham: 13

⁶⁹ Standing, Work after Globalisation... 11

⁷⁰ Standing, Work after Globalisation... 28

⁷¹ Gibbons, R., and Henderson, R. (2012) 'Relational contracting and Organisational Capabilities' *Organisational Science*, Sept – Oct : 1350–1364 at 1350



deeply embedded in their local social settings and are appropriately defined in both social and commercial terms.

Vocations/Vocational Streams - Historically the idea of vocation referred to the Christian notion of 'God's call to men and women to serve him.' Since the reformation theologians have reflected on how a 'person might have several "callings" in [their] work, at home, in the church, and so on. '72 In the realm of mass education it has referred to education concerned with work and usually been defined as a more practically relevant curriculum that provides an alternative to 'academic' education. In recent Australian research on the link between qualifications and work the notion of 'vocations' refers 'to ... the nature of practice, that is, what people do in occupations and the knowledge, skills and attributes they need to work in those fields. Vocational streams refer to the structure of occupations and the way they are linked horizontally and vertically [based on] common practices and with similar requirements for knowledge, skills and attributes ...'73. For example, the notion of 'care work' is proposed as a vocational stream that encompassed related occupations such as personal care attendant, assistant in nursing, aged care work, drugs and alcohol support work, youth work etc. Broader streams such as those concerning modern service work could extend to encompassing customer service and clerical, as well as care work. Vocational streams are similar in nature to the notions of 'skill clusters' as used by Geet et at⁷⁴ and 'job clusters' as used by Foundation for Young Australians⁷⁵ (2016) and 'job transition pathways'76. Researchers such as Glasman⁷⁷ have argued that reviving a notion of vocation and quality vocational expertise at all levels of the labour market is critical for political and social as well as economic renewal.

⁷² Moynagh, M. (1995) 'Vocation' in Atkinson, D. J. and Field, D.H. (eds) *New Dictionary of Christian Ethics and Pastoral Theology,* Inter-Varsity Press, Leicester, 882–883 at 882

⁷³ Wheelahan, L., Buchanan, J. and Yu, S. (2015) Linking qualifications and the labour market through capabilities and vocational streams, NCVER, Research Report, Adelaide, June.
https://www.ncver.edu.au/publications/publications/all-publications/linking-qualifications-and-the-labour-market-through-capabilities-and-vocational-streams at 19 - 20

⁷⁴ Geel, R. and Backes-Gellner, U. (2009), *Occupational Mobility Within and Between Skill Clusters: An Empirical Analysis Based on the Skill-Weights Approach*. Working Paper No. 47, September 2009 (from The Swiss Leading House on Economics of Education, Firm Behavior and Training Policies, a Research Programme of the Swiss Federal Office for Professional Education and Technology (OPET). www.economics-of-education.ch Leading House Working Paper No. 47) and Geel, R. and Backes-Gellner, U. (2011) 'Occupational Mobility Within and Between Skill Clusters: An Empirical Analysis Based on the Skill-Weights Approach', *Empirical Research in Vocational Education and Training*, 3(2011)1: 21-38

⁷⁵ Foundation for Young Australians (2016) *The New Work Mindset: 7 new job clusters to help young people navigate the new work order*, Foundation for Young Australia, [Sydney] https://www.fya.org.au/wp-content/uploads/2016/11/The-New-Work-Mindset.pdf

⁷⁶ World Economic Forum/Boston Consulting Group [with Burning Glass] (2018) *Towards a reskilling revolution: A future of jobs for all*, WEF, Geneva file:///C:/Users/jbuc5058/Downloads/WEF_FOW_Reskilling_Revolution%255b1%255d%255b1%255d%255b 2%255d%255b2%255d%255b1%255d%255b4%255d%20(2).pdf

⁷⁷ Glasman, M (1996) Unnecessary suffering. Managing market utopia, Verso, London



Appendix C

Further Education in Wales in numbers

Further education is primarily organised around three distinct types of educational provision: general, second chance and vocational.

In much of the English-speaking world that part of the education system that sits between schools and universities has not fared well. Ewart Keep, for example, has noted that in England it has suffered from so many 'restructures' he has dubbed it 'the world's largest policy trainset'⁷⁸. The situation in places like Australia, New Zealand and South Africa is very similar. Wales, since devolution, has been more mature and consistent in its approach to Further Education. Compared to many other English-speaking countries its FE system is in good shape⁷⁹.

Commonly FE is considered to be primarily concerned with what is referred to as Vocational Education and Training (VET). This type of training, however, accounts for a little over a third of Welsh FE learning activities. Learning activities, however, are a limited and not particularly useful measure of what happens in FE colleges, as many students undertake multiple activities. For example one student might take two A Levels and a BTEC (three activities), another student might take a hairdressing diploma, a GCSE in English and an access to IT short course (three activities).

The lack of publicly available data on this 'pick and mix' of learning activities severely limits the ability of policy makers and colleges to analyse and plan provision. The publicly available information on distribution of learning activity by general type of education is summarised in Table C 1. Given that students can undertake different types of course for different types of qualifications (e.g. students study maths in both trades and preparation for work qualification, it is difficult to report on how learning is apportioned between the general types of education offered).

⁷⁸ Keep, E. (2006) 'State control of the English education and training system – playing with the biggest train set in the world', *Journal of Vocational Education and Training*, 58, (1) 47–64

⁷⁹ Hodgson, A. and Spours, K. (2019) 'Further education and skills across the UK: new opportunities for policy learning? An introduction to the special issue', *Journal of Education and Work*, Vol 32: 3, 215 – 223, James, D. (2019) 'Learning in and learning from FE and skills policy in Wales: a relational approach' *Journal of Education and Work*, 332: 3: 251–265 and James, D. (2019) 'Learning in and learning from FE and skills policy in Wales: a relational approach' *Journal of Education and Work*, 332: 3: 251–265



Table C 1: Learning activities in FEIs by sector subject area, Academic year 2018/2019.

Type of education	Field of study	All Wales	Sub-total
(a) Preparation for Work or FE	Preparation for life and work	172,655	172,655 (46.3%)
(b) General education (e.g. GCSEs, A-Levels)	Science + Maths	20,655	
	History, Theology, Philosophy	5,985	
	Social Science	4,715	
	Language, literature, Culture	17,965	
	Arts, Media, Publishing	12,565	61,885(16.6%)
Vocational			
(a) Services	Health, public service + care	38,125	
	ICT (note 50% is about learning to use)	12,720	
	Leisure, tourism, travel	7,315	
	Education and Training	4,650	
	Business, Admin, Law	20,735	
	Retail and Commercial	15,100	98,645(26.5%)
(b) Non-services	Engineering + manufacturing	19,830	
	Construction, Planning + Built Environment	14,355	
	Agriculture, Horticulture, Animals	4,500	38,685 (10.4%)
Total		372,595	

Note: categorisation is not exact as some broad areas include both general and vocational qualifications.

Source Statistics Wales, https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Further-Education-and-Work-Based-Learning/Learners/Further-Education/learningactivitiesfurthereducationinstitutions-by-sectorsubjectarea-domicile

FE has long played a role in the training of skilled trades people. But it does far more than this. Access to basic skills, second chance learning and A level education are also all significant parts of the FE offer. Most of this report has been concerned with work related training, building off — and extending the tradition associated with the traditional trades. Continuation of the support for the other categories of education is vital in terms of social and educational progression for the students involved. The proposals outlined in this report are about upgrading and expanding FE capacity. Nothing in them should be taken as implying FE Colleges withdraw from providing these core educational activities.

In recent years enrolments in FE have been falling, especially amongst those studying part time.

Table C 2 summarises the trends in FE enrolments between 2012/13 and 2018/19. During this period full time enrolments fell a little and work-based enrolments rose a little. The big change has been the fall in part time enrolments: down from 110,080 in 2012/13 to 56,290 in 2018/19. These shifts have coincided with the reduced budgets Wales received from the UK Government as a result of austerity measures.



Table C 2: Learners at FE institutions, Wales, 2012/13-2018/19

Year	Learners	Full-time	Part-time	Work-based	
2012/13	174 925	48 340	110 080	16 505	
2015/16	129 550	48 270	65 345	15 935	
2018/19	122 040	45 875	56 290	19 880	

https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Further-Education-and-Work-Based-Learning/Learners/Further-Education/uniquelearnersenrolledfurthereducationinstitutions-by-age-modeoflearning-level

The bulk of enrolments are amongst full time teenagers and prime age part-time students.

Table C 3 reveals that just under two thirds of all FE students in Wales fall into three broad categories:

- Full time teenagers (30%)
- Part timers aged 25–39 (18%)
- Part timers aged 40–59 (16%)



Table C 3: Learners at FE institutions, age, gender and full/part time study status, Wales, 2018/19

	Full-time	Part-time	Work-based	
Male 16-19	19,715	1730	4235	
Female 16-19	17,895	1735	1390	
Male 20-24	1920	3090	2950	
Female 20-24	1945	3585	1545	
Male 25-39	1185	9190	2660	
Female 25-39	2265	12505	3410	
Male 40-59	250	7925	1105	
Female 40-59	600	11700	2220	
Male 60+	20	1920	55	
Female 60+	40	2735	80	
Total (row %)	45, 875 (37%)	56, 290 (46%)	19,880 (16%)	

https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Further-Education-and-Work-Based-Learning/Learners/Further-Education/uniquelearnersenrolledfurthereducationinstitutions-by-age-modeoflearning-gender

There is a close association between the type of provider and mode of delivery in Welsh Further Education.

Table C 4 reports on the different modes of teaching delivery (i.e. full time, part time and work-based learning) and how this is distributed between different types of provider. The flywheel of the system is provided by the 12 FE Colleges which account for nearly all the full time, most of the part-time and a sizeable proportion of work-based learners. Adult and Community educators provide the remainder of the part time publicly funded FE. Private providers are only involved with work-based learning.



Table C 4: Further Education provider learners by provider and mode of delivery, Wales, 2018/2019

Provider	Full Time	Part Time	Work-based learning	All modes of study	(Column %)
FE Colleges1	46,930	47,255	19,920	114,100	(63.5%)
Adult + Community Education ²	-	22,790	-	22,790	(12.7%)
Other Training providers	-	-	42,670	42,670	(23.8%)
All Providers	46,930	70,045	62,585	179,560	(100%)
(Row %)	(26.1%)	(39.0%)	(34.9%)	(100%)	

Source: Statistics Wales: https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16- Education-and-Training/Further-Education-and-Work-Based-Learning/Learners/Time-Series/numberoflearners-by-provider-modeofstudy

Notes:

- FE Colleges refers to the 12 colleges that provide full time and part-time institution-based education, often supported by work placements and/or workplace based learning. It includes Bridgend College, Cardiff and Vale College, Coleg Cambria, Coleg Gwent, Coleg Sir Gar and Coleg Ceredigion, Coleg Y Cymoedd, Gower College Swansea, Grwp Llandrillo Menai, Merthyr Tydfil College, NPTC Group and Pembrokeshire College. Details about how these colleges were formed out of pre-existing colleges and campuses can be found at
 - https://www.aoc.co.uk/sites/default/files/14%20colleges%20in%20Wales.pdf
- 2. Adult and Community Education refers to learners enrolled in either courses run by Adult Learning Wales (Addysg Oedolion Cymru) or Local Education Authority Community Providers. Note that Adult Learning Wales is often included in official statistics concerning FE Institutions.
- 3. Other training providers are predominantly private training companies that deliver workplace learning. These are often publicly funded qualifications such as apprenticeships and traineeships and basic skills. (We assume it will only be for recognised qualifications or for publicly-funded training, otherwise the learners would not get unique learning reference numbers which underpins the data.) Some training under the heading 'other' will be company-based formal qualifications with in-house training departments but most organisations will use private training companies or will have a link with a FE college.



Appendix D

Map of locations showing provision by Addysg Oedolion Cymru/Adult Learning Wales



Source: Map provided by Addysg Oedolion Cymru/Adult Learning Wales



Appendix E

Creating Future Focused Credentials: a suggested process

In Section 6 it was proposed that consideration be given to planning for a comprehensive revamping of Welsh FE qualifications. This was suggested so that all interested parties would have the chance to proactively shape the domains of expertise covered by credentials. Without such a planning process, qualifications will be rationalised on an ad hoc basis. Given the current tendency for fragmentation of expertise and the rising interest and potential popularity of micro-credentials, it important those interested in quality vocational education start planning now to avoid large corporations and others with limited interest or expertise in education taking the lead on qualifications reform. Qualifications reform is, however, a complex process.

This appendix outlines a potential four stage process that could be pursued if stakeholders are interested in maintaining qualifications of relevance but also open to recasting the core categories of domain expertise that are covered by them. A summary, with analytical framework underpinning, of this process of work was recently completed for the New South Wales Government – custodian of the largest vocational education system in Australia.⁸⁰

Stage 1 - Building a research base: clustering job vacancies, labour flows and competency standards

There is an emerging 'grey literature' on job clustering. This is generated from 'big data' analysis of vacancies listed by employers. This work identifies commonalities in jobs based on the content of key features listed in job advertisements. While rich in potential, this material identifies textual commonalities – not actual flows of people between jobs. The findings of this work need to be tested in a number of ways. The first would compare the findings about theoretically possible potential labour flows with what actually happens. Such work requires the clustering of people's common interoccupational labour flows. This provides insights into how people actually move between jobs. Comparing how people actually flow with what is, theoretically, possible, would provide pointers as pathways needing to be opened up as well as ones that should be supported. It would also enable us to challenge restrictive patterns in job movements, for example women moving between similar low paid work.⁸¹

A complementary process could involve analysing commonalities in competency standards currently spread across a wide range of vocational qualifications. This is likely to identify clusters of qualifications

⁸⁰ Buchanan, J., Wheelahan, L. and Yu, S. (2018) 'Increasing young people's adaptability and mobility: from competency approach and twenty-first-century skills to capabilities and vocational streams' in Sakamoto, A. and Sung, J., Skills and the Future of Work: Strategies for Inclusive Growth in Asia and the Pacific, ILO, Geneva, 2018: 125 – 160 available at: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms 650239.pdf

⁸¹ An example of this type of analysis is provided in Buchanan, J. and Tierney, S. (2019), Meeting changing skill requirements in NSW in the 2020s: Understanding and working with non-linear, lateral and upward inter-occupational labour flows, Report for the NSW Skills Board, Department of Education, Sydney (21 October).



that share many units of competence. In many ways this would help identify the 'low hanging fruit' relevant to rationalising vocational qualifications in the medium term. It could also enable a 'rebadging' of qualifications, that could encourage less gender segregation within vocational routes.⁸²

Stage 2 - Refine/test out ideas for broader definitions of appropriate qualifications

Once a range of potential vocational streams had been identified using data from the three sources noted above, the next activity would involve undertaking the design work necessary for devising appropriate qualifications. The first key issue to settle would be: just how would the different domains of intermediate skilled expertise be defined? And once they were identified, what would be the relevant underpinning knowledge? What would be the precise content for modules linked to the associated course look like? How would teachers be supported to be able to teach the new course? How would appropriate workplace learning arrangements be established and supported to help support education around the new qualification?

These are questions that should be settled by communities of trust interested in these domains. Such communities would involve employers, worker representatives, educators and any government officials involved in the domain – especially if they provide funds associated with its operation. FE has a critical role to play in brokering these communities and supporting their ongoing operation.

Stage 3 - Conduct pilots in one or two areas interested in trialling new ways of defining expertise (e.g. modern service work, urban operations, rural operations, data science operations).

Broadening the range of expertise covered by qualifications is a big step in how we think of the intermediate skills area. Before adopting wholesale change, there would be significant value in conducting pilots in one or two areas. Given the activity undertaken for this project, focusing on domains involving care and construction would appear to be potentially good places to start. Such work would require engaging with a relevant community of trust to help guide and, hopefully, embrace the reform process.

⁸² For an overview of initiatives of this nature in the UK, New Zealand, the Netherlands and Finland see Wibrow, B. and Waugh, J. (2020) International models to rationalise VET qualifications, including occupational clusters: case studies – support document, National Centre for Vocational Education Research, Adelaide

https://www.ncver.edu.au/ data/assets/pdf file/0037/9662419/International models to rationalise VET qualifications support document.pdf



Stage 4 - Devise an implementation strategy with change to be delivered over a 5–15 year period.

Having a clear specification of the domains of expertise of interest and pilots of how to potentially carry the reform process forward will not guarantee successful reform. If the change proposed is to have any chance of success, great care will be required in thinking through how change can be implemented at the level of the entire FE sector – as well as at local campus level. Given the timeframe of 5–15 years envisaged, this leaves considerable time to think this matter through.



Appendix F

How District Employment and Education Accords could look: suggestions based on field work undertaken in North Wales.

In Section 7 it was proposed that consideration be given to settling Accords between key stakeholders with an interest in employment and education in particular districts. As noted, a key objective of these Accords would be to help shape how resources flow in production networks and supply chains, especially those involving Welsh and UK Government procurement. The material laid out earlier in the report provides some ideas on what these Accords could be like – including who would be party to them and what the content of them could be. To help get a sense of specificity, examples of how they could work are provided. Details are provided based on experience in North Wales because that is where the research team undertook some of its fieldwork. The core ideas could, however, be applied to any district in Wales. As noted in Section 7, these Accords could be of two general kinds: ones that provide a framework for employment and education in the district in general, and others that would be specific to particular sectors at district level.

Framework Accord for the district generally

These Accords would be coordinated by the Local Council and the FE college CEO/Principal with district employers in the district. There is also a role for district union representatives — especially those covering construction and care/clerical/customer service workers. There would be a small group of district employment and economic development field officers. Learning from initial work done with the Foundational Economy Extension Collaboration they would help establish and support in the following kind of initiatives:

- Peer learning network for businesses
- Extending the scope of the assessor network
- Be a focal point for the building responsible and sustainable business initiatives within the FE student population and the employer community more broadly. Networks concerned with climate change initiatives would have a key role to play in this aspect such Framework Accords
- Support a one stop shop business support function
- Support the district audit capacity around responsible and sustainable business.

District Accords at the sectoral level

District sectoral Accords would be coordinated by a disciplinary lead within the college. This lead may not necessarily be the relevant Curriculum Coordinator or Coordinators. Indeed, extra staff resources would have to be allocated to ensure the FE representative had sufficient time and other support to negotiate such agreements.



Example 1: for construction, the Curriculum Coordinator would need to be supported by an employment and skills development officer – or group of officers, to do this.

- Employment dimension, linked to relational contracting. The core agenda would be boosting good quality apprenticeship levels possibly with the support of a shared apprenticeship arrangement and appropriate procurement policy changes agreed with the Welsh Government. Resources would be devoted to monitoring outcomes to track completions and the quality of the training provided.
- Educational/skills dimension and vocational streams. In terms of qualifications reform in the longer-run, look at working up of a modern Urban Operations support worker (i.e. move between plant operations, logistics, driving, trades assistant work, etc). This could be a new foundation qualification at level 2 which would be relevant to sectors beyond construction (e.g. agriculture, logistics and parts of engineering). This could provide a platform for quality microcredentials and for later progression to a level 3 qualification, and a trade/craft-level position.

Example 2: for care, the Curriculum co-ordinator would need to be supported by an employment and skills development officer – or group of officers to do this.

- Employment dimension, linked to relational contracting. Again buy-in would need to be obtained from leading employers and better contracting arrangements negotiated to increase the amount of time available for training and to enhance employment standards to reduce churn.
- Educational/skills dimension and vocational streams. The distinctive agenda for this group
 would be not just getting a better care workforce but exploring professionalisation/elevation
 of modern service work that straddles care, customer service and clerical work.



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