ASSOCIATION OF COLLEGES

The impact of competition in post-16 education & training

A study on sufficiency, efficiency, and effectiveness of Post-16 provision

December 2020

The Association of Colleges (AoC) represents nearly 93% of the 266 colleges in England incorporated under the Further and Higher Education Act 1992.

Contents

If you have any questions or queries about this report, please do not hesitate to contact David Corke, Director of Policy via david.corke@aoc.co.uk.

Foreword

Several years ago I was invited to participate in some research commissioned by the government into post-16 education and training market. I was interviewed and participated with others from the sector in a workshop designed to assess how well the post-16 sector operates as a market. I spent most of the interview and the workshop railing against the whole concept of the research because there are so many fundamental characteristics of education which are clearly not like any market.

The report [1]was quietly published and I suspect and hope has had little impact.

Hope, because on page 9, it sets out why looking through the market lens is really not appropriate. The section admits that post-16 does not operate as a market for the obvious reasons that government is the main purchaser, people do not consume education in the way they do other goods and services, nor do employers and because competition is mainly on quality and not on price. Despite that, the report carries on for over 150 pages to "investigate the effectiveness of the FE market through an economic lens."

I don't blame the company contracted to carry out the work, and the over-arching question the work purports to answer is an important one: "Ultimately, the question that government would like to be able to answer is whether the FE market is delivering the most appropriate outcomes for learners, employers and the economy more generally." And to be fair, one of the main conclusions is central to this report – that the market approach leads to "more choice for general courses than they do for more specialized courses."

The rest of the report is a painful read as it attempts to offer recommendations which use the fundamentals of a market to improve the market efficiency – all in a sector which the report admits is not like a market. It didn't help that the report landed at a time of fierce cuts to post-16 funding, making delivery more difficult and the sector more unattractive to new provider entrants.

So it is with great pleasure that we are able to publish this report, based on analysis which appreciates the true nature of the current quasi-market in post-16 education. The report debunks a number of lazy assumptions – that more competition leads to more choice, better quality and greater efficiency and that supply-side planning gets in the way of 'what is needed.

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1 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/544310/bis-16-360-fe-market-england.pdf

I just hope that the government does read this report and work with us at AoC and with others to bring more incentives for coordination and collaboration to secure more choice, better quality and the delivery of specialisms to meet need and demand.

David Hughes

December 2020

Executive Summary

This report considers how competition between providers has undermined sufficiency, efficiency, quality and equality. The current market-based model has supported our post-16 system's relatively low performance in meeting the education and skills needed, compared to other European countries with reduced choice of options, lower quality and less efficiency.

We recommend a whole-market and place-based approach which incentivises co-ordination between providers to address insufficiency, inefficiency, inequity, poor quality or any combination of these. We discuss what type and scale of coordination might be appropriate while sustaining an environment of autonomy, accountability, trust and stability for providers.

We conclude by recognising that even in the post-16 market system, students benefit from stable leading institutions. Rather than undermining their leadership in the system, we should be aligning incentives in such a way that market leaders drive the coordinated outcomes we seek.

Government's role is to manage a system of clear and robust accountabilities, setting rules and mechanisms (such as a duty on colleges to establish network strategies) and allowing places to develop the education and training market which deliver to meet local needs and demands.

Strong, well-resourced colleges with clear missions, working collaboratively with others within a wider network are a vital to the future success of the people, places and businesses they serve.

Dimensions of a successful system:

- **Sufficiency:** the extent to which students can choose from the full range of approved options for them regardless of geography.
- **Efficiency:** how effectively available resources are used to achieve choice and quality outcomes.
- **Quality:** whether outcomes and progress are improving or at least as expected.
- **Equality:** the extent to which routes provide opportunities for progression at all levels and to all types of student.

Each of these dimensions has its own metrics.

Analysis:

Our landscape analysis is based on a competition index and market typologies which are used to generate a 16 to18 competition measure for each local authority district in England. We have analysed the impact of different patterns of provision on efficiency, sufficiency and quality of that provision and suggest that local competition and 16 to18 structures are important factors influencing the breadth of offer, financial health, inspection grades and thus reputation.

Working hypotheses:

- Greater co-ordination of the post-16 system could ensure that investment is applied more efficiently, deliver substantial economies of scale and support greater choice and quality.
- Colleges have rationalized and become highly efficient but the policy emphasis on easy market entry has cut the returns on investment and the proliferation of smaller providers has kept average provider size down and led to less choice and worse outcomes.
- With the right incentives and network strategy (Independent Commission on the College of the Future, 2020), markets can be supported by bottom-up coordination mechanisms, reducing the need for top-down, bureaucratic control mechanisms.
- Greater stability and greater trust can reduce the need for external intervention.
- The web of overlapping accountabilities, pulling in different directions, can create incentives for risk avoidance and compliance-driven behaviours which are not conducive to collaboration and innovation.

Key recommendations for 16 to 19 provision:

- A single post-16 commissioning and regulatory process to promote, efficiency, sufficiency, quality and equality.
- Clear conditions for funding, market entry and continued market presence based on strong local co-ordination.
- Investment in anchor institutions as hubs for specialist and 'minority' provision.

We recommend a whole-market and place-based approach which incentivises co-ordination between providers to address insufficiency, inefficiency, inequity, poor quality or any combination of these. We discuss what type and scale of coordination might be appropriate while sustaining an environment of autonomy, accountability, trust and stability for providers.

Conclusion:

We conclude by recognising that even in the post-16 market system, students benefit from stable leading institutions. Rather than undermining their leadership in the system, we should be aligning incentives in such a way that market leaders drive the coordinated outcomes we seek.

Government's role is to manage a system of clear and robust accountabilities, setting rules and mechanisms (such as a duty on colleges to establish network strategies) and allowing places to develop the education and training market which deliver to meet local needs and demands.

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Section One: The challenge

1. Introduction

1.1 When we started this report the British labour market was tight: record numbers of jobs; unemployment at its lowest level for 40 years; only 1 in 5 working age people not in work or looking for it.[2] Yet for all its success at getting people into work, there remain persistent problems in employers finding the right skills to deliver on their business plans. The latest Employer Skills Survey reported a 9 per cent increase in vacancies over two years, with a third of them considered hard to fill, primarily because of a lack of skilled applicants.[3]

1.2 We completed most of this report before the covid-19 outbreak. Whilst labour market demand has changed, this will not yet have radically altered the number of 16 to 19 providers on the supply side.

1.3 Employers report a range of disruptive consequences from these skills shortage vacancies: increased workloads for other staff; loss of business or orders to competitors; delays developing new products or services; and difficulties introducing new working practices.[4] International evidence across 19 OECD countries finds that skills mismatches, including underqualification, are associated with lower labour productivity, with a lack of qualified and skilled workers being linked to lower productivity within firms.[5]

1.4 If the British labour market is successful in getting people into work, our track record on productivity is a better indicator of our difficulties in matching skills supply to skills demand. In 2016, an hour worked in Germany, France, the US or Italy was worth significantly more than an hour worked in the UK: 37, 30, 29 and 12 per cent more, respectively.[6] Concern with skills mismatch is consequently a priority for economic policy, not

[2] ONS (2019). Labour market overview, UK: August 2019. Newport: Office for National Statistics.
[3] Mark Winterbotham et al (2018). Employer skills survey 2017. Research report. London: Department for Education.
[4] Mark Winterbotham et al (2018). Employer skills survey 2017. Research report. London: Department for Education.
[5] Müge Adalet McGowan and Dan Andrews (2015). Labour market mismatch and labour productivity: evidence from PIAAC data. Economics Department Working Papers No.1209. Paris: Organisation for Economic Co-operation and Development.
[6] ONS (2018). International comparisons of productivity. Newport: Office for National Statistics.

simply academic interest; and trends in migration and higher education suggest that the problem may become more acute in the years ahead.[7]

1.5 The further education and training system has a central role in any discussion about improving the alignment between the supply and demand for skills in the labour market. But the shape of that system does not exist in isolation: the better able young people and workers are to get the skills they need, and the better able providers are to respond to students and employers, then the better skills supply and demand will be likely to align.

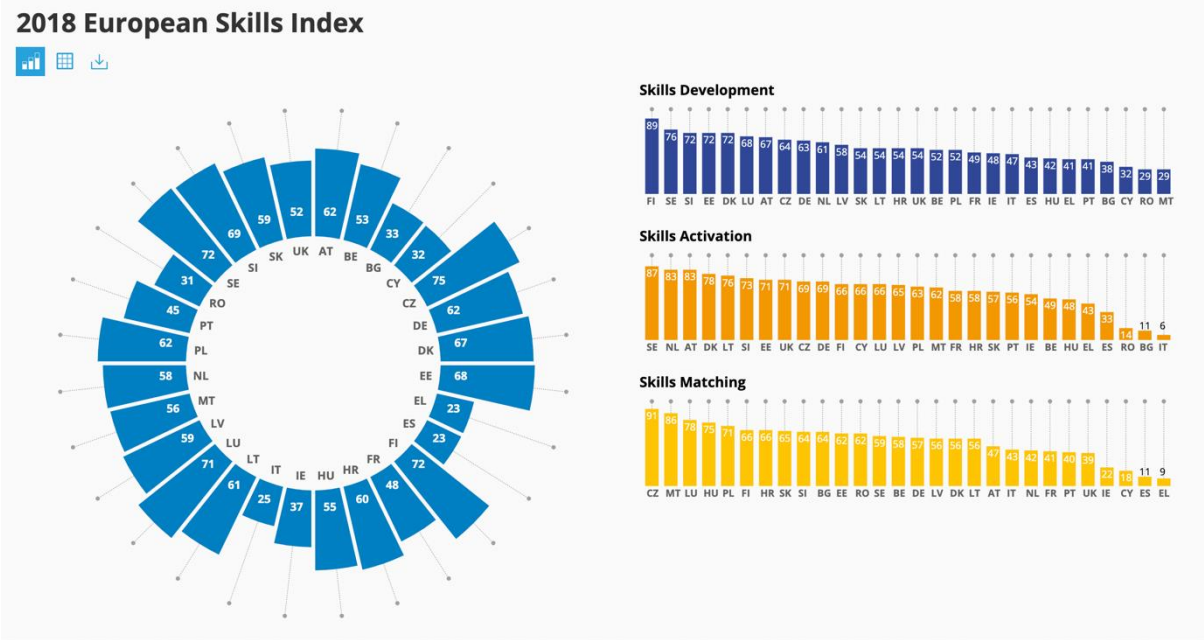
1.6 For that reason, it is worth looking to see if we can compare not only our performance in skills matching internationally, but also differences in the education and training systems with high performing countries, to see if there are lessons to be learned. While no other country's system can ever be easily replicated – reflecting as it does a wide range of cultural and historical factors – there is always the potential to identify the enabling factors which could benefit the development of our own system. The European Skills Index provides a mechanism for just this kind of analysis, measuring 28 European states on skills development, activation and matching.[8]

1.7 Overall, the UK does not score poorly in the European Skills Index; at 19th place, it is counted as a 'middle-achiever', but this reflects a wide difference between the three pillars: high achieving on skills activation, middle achieving on skills development and crucially for our discussion here, poorly performing on skills matching, ranking 24th even though it leads all states on one of the indicators (long-term unemployment); poor performance on qualification mismatch and graduate overqualification make the UK a poor performer on skills matching.[9]

[7] AoC (2019). Skills shortages and funding gaps: An analysis of the costs of under-investment in skills. London: Association of Colleges.

[8] Cedefop (2019). 2018 European skills index. Luxembourgh: Publications Office of the European Union. Cedefop reference series no.111. http://data.europa.eu/doi/10.2801/564143

[9] Cedefop (2019). 2018 European skills index. Luxembourgh: Publications Office of the European Union. Cedefop reference series no.111. http://data.europa.eu/doi/10.2801/564143



1.8 It should be said that while the further education and training system's role is central to improving skills matching, it can only ever be part of the story. As the UK's poor performance on measures such as qualification mismatch and graduate overqualification hint at, some of the problem lies in the workplace too; how employers conceive of job roles and develop existing employees to make full use of their skills also play important roles. But our concern in this paper is with the role further education and training can play in ensuring that new employees are equipped with the skills they need to succeed.

1.9 For comparing systems, what matters more than the UK's performance are the persistent high achievers, including for example Sweden, Denmark, and Austria. Again, those countries' systems – and their consequent performance – will often reflect cultural and historical idiosyncrasies, but there is the potential to identify some factors which make for better labour market outcomes. Our observations of systems that perform well focus less on the specific policy measures or particularities of institutions, and on two commonalities successful systems seem to share:

a. **Getting the scale for decision-making and co-ordination right:** every system relies on some degree of devolution to local decision-makers – learners, employers, providers – but also some mechanism to coordinate decisions to achieve valuable social and economic outcomes. But how to balance local decision-making and co-ordination is difficult, and these systems – often, it should be said, in smaller countries – seem to be much more successful at finding that balance.

b. **Sustaining an environment of autonomy, accountability and trust:** closely linked to finding the right balance between local decision-making and system co-ordination is that these countries seem to be more successful at fostering institutions which sustain high delivery performance and support co-ordination without an expansive array of external monitoring and control from the centre.

1.10 In this section, we aim to explore how the English further education system compares on these two criteria, and how differences from them translate into inferior outcomes for skills matching in the labour market. We start in the next section by sketching the goals for a successful further education system and using the resultant framework to offer some hypotheses as to why the present English further education system does not perform as we would like it to do. In the sections following, we explore some of the performance symptoms of the present English system, before investigating two main causes: a confused approach to institutional design and expectations, and the interaction of shrinking funding with the inherent economies of scale in further education delivery. We then conclude with a section on some concrete steps to tackle these problems and move us to a more effective, successful education system, pursuing the advantages we see in models elsewhere.

2. Effectiveness: sufficiency, efficiency and efficacy

2.1 An effective further education system is one that delivers the best possible outcomes given the available inputs. Effectiveness is tricky because there are no direct levers to control outcomes, only outputs. Outcomes are learners gaining skills that enable their future career progression, and employers better able to find the skills they need to realise their business plan – and in both cases, the decisions and factors involved go far beyond the remit of a college.

2.2 But that doesn't mean that what a college does isn't significant: far from it, the outputs they control will be critical in determining these prospects. The right skills and the right qualifications, as well as a range of supporting and enriching services complementing learning delivery, all maximise the prospects for learners and employers to realise these outcomes. But as that discussion suggests, it is not just a question of efficiency – delivering more outputs for available inputs – but also of efficacy – delivering the right outputs to realise desired outcomes.

2.3 At the system level, economists speak of productive and allocative efficiency. Productive efficiency is the kind we traditionally mean when we talk about something being 'efficient': producing goods and services at the

lowest cost; maximum outputs given available inputs. Allocative efficiency concerns whether we're producing the right kinds of things – could we improve matters by delivering a different mix of goods and services; there are parts of the market where marginal benefits exceed marginal costs (and vice versa) and changing the mix can realise net benefits for society.

2.4 In the context of skills mismatch and further education, this question of allocation is particularly significant. Labour markets are local, determined by the willingness of workers to find work across a geography.[10] Within a local labour market, current and future workers will have differing aptitudes and aspirations for their careers, and employers too will have a range of different skills needs to support their business. An effective system doesn't just deliver 'qualifications', but has to meet the required variety in level, content and mode if it is to facilitate learners' life chances.

2.5 At the local level, we therefore need a sufficient curriculum, enough approved options for all those who qualify for them, delivered efficiently while ensuring an element of student choice and of course quality. Where a college achieves both, it achieves both productive and allocative efficiency: not only the maximum volume of outputs given available inputs, but the right kinds of outputs as well. Raw productive efficiency without a sufficient curriculum means that a college is always doing too little (much) of the right (wrong) things, and the system is not achieving allocative efficiency. If a college can achieve and sustain sufficiency and efficiency, efficacy then hinges upon the college's quality, not just in delivery process, but with excellent teachers using world-class infrastructure and matched by engagement and enrichment support services.

2.6 The further education system will be making its greatest possible contribution where it can provide local learner populations across England with that combination: a sufficient and efficient curriculum, delivered to the highest standards of quality and enhancing equality of access.

2.7 The English system has seen substantial improvements on a number of these dimensions. The acute pressure on funding over recent years has necessitated substantial improvements in productive efficiency, as colleges have sought to squeeze every possible saving in their operations. Inspection has played its part in improving expected standards of delivery quality. But as we shall explore, there are signs that sufficiency has declined, inhibiting allocative efficiency. At the same time there is a question as to whether gains on inspected quality are offset by losses in

[10] ONS (2016). Travel to work area analysis in Great Britain 2016. Newport: Office for National Statistics.

other dimensions of quality, as the sector struggles to retain and motivate its workforce, or to match teaching with the right infrastructure and support services, hindering efficacy.

2.8 Our approach here is to explore where the system succeeds in terms of sufficiency, efficiency, equality and quality, and our framework for understanding the system is emphatically market-based. Delivering further education to a country of 56 million people can never be successfully planned and directed from the centre; the continuing decisions of individual providers, learners and employers will always be the critical drivers of how the system works.

2.9 But further education is not an ordinary market trading in simple commodities. In England as in every advanced economy, the government is active as purchaser, provider or regulator, reflecting some clearly identifiable problems: first, credit market imperfections mean that learners alone cannot access the funds to invest, leading potentially to underinvestment. Second, education is a credence good: its value – e.g. its impact on future career and earnings prospects – is extremely difficult to judge in advance of purchase, and often for some years after delivery.

2.10 To tackle these market failures, we have evolved a complex set of interventions, to fund learning and to ensure its quality. Over time, these interventions have in turn been used to pursue a range of adjacent social policy goals and have also been subject to continuing changes to work against unintended and undesirable outcomes resulting from them. The result is, as we shall detail later, a highly complex operating environment for further education, with overlapping and sometimes conflicting requirements placed on those delivering it.

2.11 As our framework is market-based, we see that market structures shape provider conduct which result in performance outcomes – these outcomes can be negative as well as positive, but market structures are typically their primary cause. Public interventions in the further education market do not sit outside that market structure; they become a central part of it, shaping how providers and learners behave. It is with this approach that we explore the further education system here – as a highly-intervened market, where providers are subject to a range of controls as well as receiving funding subject to rules which themselves become a key influence on the provider operating model.

2.12 Driving our exploration are a set of hypotheses we have arrived at from reflection on the English further education system, and comparison with

the right-scaled and high-trust models we see in the most successful economies for skills matching:

a) **Colleges have rationalized and become highly efficient but the policy emphasis on easy market entry has cut the returns on investment and the proliferation of smaller providers has kept average provider size down and lead to less choice and worse outcomes.** Policy interventions have for some time sought to lower barriers to entry and exit, in the hope that new market entrants would challenge existing business models and lead to creative destruction. But few market entrants have seen sustained success – partly because growth is achieved by chasing funding imperatives rather than sustainably winning learner custom – and the constant churn and threat from new entrants have created substantial 'noise' in the market, reducing the value of reputation and those other market-generated mechanisms for improving coordination.

b) **With the right incentives, markets can generate bottom-up coordination mechanisms, reducing the need for top-down, bureaucratic control mechanisms.** As lower barriers to entry and exit have hindered market coordination, poorer outcomes result in an increased appetite for top-down regulation, with an increasing array of monitoring and control placed on providers. But because of the wish to maintain low barriers to entry and exit, most of the pressure of these controls is placed on established providers, not new entrants – further stifling established providers' ability to perform better as their operating model becomes more and more determined by managing compliance than establishing reputation and sustaining it through quality delivery.

c) **Greater stability and greater trust can reduce the need for bureaucracy**. Viewed as a system, the further education market should value stability, trust and reputation at local scale – so that leading providers can establish reputations through longevity, scale and local concentration. But in practice, the lowering of barriers to entry, aided by the separation between payment and consumption, has hindered the development of stability, trust and reputation. The consequences of this in terms of higher risk for funders and learners has been to increase the regulatory burden – but primarily on leading, established providers rather than raise barriers to entry. Yet barriers to entry are valuable in a market characterised, like education, by a credence good rather than a physical product . Barriers to entry assure customers – as they do in professional services, skilled trades, medicine, financial services – that the downside risk is minimised. That creates a more stable market,

which then encourages providers to invest in their reputation and service performance (the two are complementary) which improves outcomes and creates an environment where providers can invest in collaboration and innovation, because they have security and they know their reputation will ensure they secure the benefits of those investments.

d) **The current web of overlapping accountabilities, pulling in different directions, can create incentives to risk avoidance and compliance-driven behaviours which are not conducive to collaboration and innovation and do not promote equality of access.** By reducing barriers to entry and exit while increasing the compliance load on established providers, we are making it harder for providers to gain reputation and release those economies of scale in consumption. At the same time, the high level of competition in the market, together with a funding squeeze for nearly a decade, has brought operating scale for many providers down, leaving much of it on the brink of viability, and with little room for operating manoeuvre, let alone innovation and collaboration.

Greater co-ordination of the post-16 system could ensure that investment is applied more efficiently, delivers substantial economies of scale and supports choice and quality for all.

3. Symptoms

3.1. That financial squeeze, together with the compliance burden on established providers, means that the further education system is no longer able to realise those economies of scope. The combination of excess competition and a static base rate makes any course difficult to sustain. The high compliance load means that the apparent economies of scope of offering more courses from the same provider are outweighed by added bureaucracy. That results in an incentive for a further education system focused on low cost, high volume courses, balanced only by colleges' commitment to their mission. The temptation for colleges – especially amidst squeezed funding – is to pare back provision of low-popularity or high-delivery cost courses in favour of those which will have greatest popularity for minimal delivery cost; there are signs of this across the system, although mitigated by colleges' efforts to retain a broad curriculum to aid their students. We have discussed elsewhere the consequences for the labour market if the new technical education reforms cannot be

sustained because colleges cannot make high value courses financially viable and afford to run loss leaders.[11]

3.2. The same circumstances make it **increasingly difficult to attract, retain and motivate the teaching workforce needed to deliver high quality further education – especially in more technical courses.** Staff turnover has increased across all categories – in 2017/18, 18 per cent of staff had to be replaced, rising from 17 per cent a year earlier.[12] According to the latest College Staff Survey, construction, engineering and digital have the highest vacancy rates (4 per cent or higher) and are identified as the most difficult to recruit to. 1 in 7 FE teachers see themselves as 'very like' to leave FE in the next year, rising to 1 in 5 for construction and engineering. Higher salaries in industry (22 per cent) and schools (17 per cent) are cited by college principals as critical challenges for recruitment and retention; for those teachers leaving FE, 42 per cent attributed it to low pay in the sector.[13]

3.3. And while core teaching delivery has to be maintained to some level to remain an operating provider in the further education system, it is inevitable that peripheral areas see the consequences of straitened finances. **The pressure is especially acute in 'minority', specialist or low-enrolment programmes and enrichment activities, personal and social development activity and supporting services like careers advice – all those things which matter greatly to efficacy, as they help learners align with and transition into the labour market and life and citizenship in modern day Britain**.

3.4. These symptoms – diminishing curriculum sufficiency, difficulty maintaining a quality teacher workforce, and falling investment in support services – all result in falling efficacy for the further education system.

4. Coordinated outcomes and creative destruction?

4.1. Further education as a market

4.1.1. As with any extended form of service delivery, the further education system functions through market relationships; a range of autonomous provider organisations seek to serve the needs of individual learners and

[11] AoC (2019). Skills shortages and funding gaps: An analysis of the costs of under-investment in skills. London: Association of Colleges.
[12] AoC (2019). AoC College Workforce Survey: Summary of findings – 2017/18. London: Association of Colleges.
[13] Alex Thornton et al (2018). College staff survey. Research report. London: Department for Education.

employers. But as already noted, for very good reasons, in all advanced economies the government takes an active role in that market, to ensure the coordination of outcomes which would not occur under laissez-faire because of certain market failures.

4.1.2. Chief amongst these is that education is a credence good: it is difficult for customers to know how well any provider, course or mode that they select will improve their career and earnings prospects. There are a range of reasons for this: it is difficult to evaluate quality in a subject you don't know; it is difficult to predict whether the course content will be relevant; it is difficult to know whether a qualification will be valued in the labour market.

4.1.3. Education is not unique in this; professional services and skilled trades exhibit similar tendencies, where a non-expert customer needs to assess the likely service outcome, and that outcome is often not evaluable until sometime later. In these settings, the social capital of service providers becomes all important – they invest in their reputation, growing it slowly over time, demonstrating their performance through past customers' outcomes.

4.1.4. Reputation works through a combination of longevity, scale and concentration. Longevity matters because it provides a sustained track record through which to assess performance. Scale matters because it provides a wider range of examples of performance. Concentration matters – in concert with scale – because it allows a reputation to be known about.

4.1.5. At the highest level of education, we know how important reputation is: Oxford, Cambridge and Harvard all have a combination of longevity, scale and concentration on which their reputation depends. For professional services, we see a combination of 'big four' global accountancy firms, 'magic circle' law firms, and a large number of small and medium local partnerships, often with deep roots. For the skilled trades, 'word of mouth' is all-important, with tradespeople often working in concentrated local markets over long periods. For colleges too, reputation matters: in many of the recent college mergers, local identities have been retained even within a group, because of the value placed on the name by learners past and future.

4.1.6. Reputation alone is not always enough to protect customers; in many of those markets, Government has intervened – for example, regulating legal firms and restricting entry to gas and electrical trades to those demonstrating the necessary skills and knowledge. But these

interventions tend to reinforce reputation rather than replace it; they provide a minimum requirement, raising the barriers to entry so that consumers know that when they hire a lawyer or a gas engineer, they can remove the worst risks.

4.2. **Policy driving down barriers to entry**

4.2.1. In further education, the approach over several decades has been the reverse of this: although a market characterised by a credence good, Government policy has sought to lower barriers to entry, opening up funding opportunities to new providers and lowering the regulatory compliance burden.

4.2.2. In many markets, a high inflow of new entrants can be invigorating: new entrants can experiment with new operating models, offering new service approaches and more efficient delivery methods. Their competition can promote innovation and raise overall standards of quality and efficiency for consumers; for that reason, there is often a policy bias in favour of reducing barriers to entry.

4.2.3. But in a credence good market, barriers to entry can serve a purpose: helping customers to have greater certainty over their purchases by limiting their downside risk. Lowering barriers to entry means less assurance about service providers, and new entrants do not have the reputational track record customers can use as a proxy for their likely performance. At the same time, by putting pressure on existing providers, reduced barriers to entry can lower the returns to investing in reputation, leading existing providers to neglect their long-term performance to defend their short-term market position.

4.3. **A high turnover market in further education**

4.3.1. Lower barriers to entry have had a material impact on provider turnover in the further education market. Although there has been a net exit from the market during the difficult funding environment of recent years, there continues to be a regular inflow of new providers into the system – around 5 per cent of providers each year are new entrants. More important, while typical new entrants are small, their market share has increased significantly in recent years, moving from 2 per cent in 2014/15 to more than 3 per cent in 2017/18, for both students and funding; market shares for those exiting have risen more sharply.

4.3.2. A substantial share of the market is therefore changing hands each year simply because of the turnover of new providers entering and exiting the market – only half of the providers operating 2013/14-2018/19 have

operated throughout that period, and a quarter have been operating for only one or two years during that time.

4.3.3. If reputation is so important, how can new entrants – many of them fairly transient – have such an impact on customers? The reason in part is the division between payment and consumption: further education is primarily paid for out of the public purse, commissioned by the Education and Skills Funding Agency (ESFA). Reflecting its role as protecting taxpayers' money, the ESFA's incentives are not perfectly aligned with those of learners, and where new providers can demonstrate they are delivering as expected for public funds, they can grow rapidly.

4.4. **Bureaucracy as a sticking plaster**

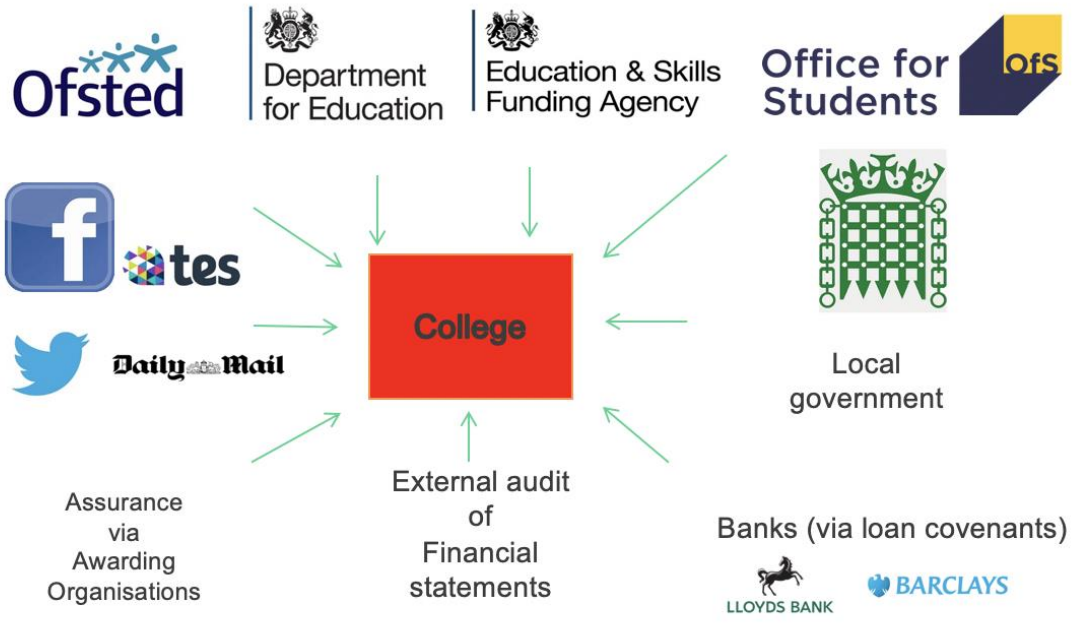
4.4.1. Growth through gaining and delivering on funding doesn't always seem to be sustainable. From Carter & Carter to 3aaa there is a history of new entrants rising rapidly to national prominence and coming to a difficult end, with success against funding goals not matched by performance in other dimensions. The most aggressive attempts to transform learning provision through radically reducing barriers to entry have often resulted in controversies to the detriment of the public purse as well as to learners' best interests: from the ILA scandal in England in the late 1990s, through the periphery of Train to Gain in the late 2000s, and most recently, the controversy over Australia's VET-FEE-HELP loans system, where providers signed unwitting learners up to income-contingent loans on the promise of a free laptop.[14]

[14] Farrah Tomazin (2018). How Australia's education debacle is still creating victims. April 22. Sydney: The Sydney Morning Herald. https://www.smh.com.au/politics/federal/how-australia-s-education-debacle-is-still-creating-victims-20180419-p4zal3.html

4.4.2. Taken together with the wider instability caused by reduced barriers to entry and the pressures placed on existing providers, it is no surprise that stories like these result in an increasing appetite for regulatory accountability. Because of the wish to keep barriers to *entry* low, paradoxically the regulatory burden caused by a high turnover market is imposed upon the more stable providers – especially colleges.

4.4.3. Colleges are hybrids: private sector actors with heavy public service obligations. As private sector organisations, they must manage their finances and operate on a commercial basis. But a large part of colleges' funding is grant-based; they face public procurement rules; they use public sector pensions; and they face a range of public accountability measures.

4.4.4. The mix of public and private at its best should combine ambition with accountability, energy with equality; but the mesh of overlapping accountabilities, pulling in different directions, can create incentives to risk avoiding, compliance-driven behaviour – hardly conducive to collaboration and innovation. Colleges have to ensure alignment with funding rules, often for different funders (ESFA, OfS, LEP); maintain preparedness for inspection by Ofsted; submit to financial monitoring by DfE; comply with assurance requirements for awarding organisations; and work within often fast-changing central and local government policy frameworks. As part of these, they have a range of data collection obligations, ranging from the Individualised Learner Record to the Self-Assessment Report to the Staff Individualised Record, as well as financial information.



4.4.5. Enhanced accountability is to be expected when public funds are involved. But the thick mesh of accountabilities goes far beyond that and reflects a perception of widespread risk in colleges' operations. But the kinds of top-down monitoring and controls used on colleges is a very blunt instrument: it carries a high cost of compliance, and has a much wider burden, changing behaviours under threat of sanctions. Yet its positive effect is often one-dimensional: colleges seek to comply but are displaced far from what should be their core role, of delivering a sufficient and efficient curriculum.

4.4.6. The combined effects of competition from new entrants, and the costs of compliance with an intense regulatory burden have their consequences for college conduct and performance. Compliance significantly raise the costs for new product innovation: any new course subject, level or mode has to offer sufficient revenue to manage the additional compliance burden it carries. Competition cuts down the size and predictability of the market and makes it more difficult to establish viable markets for new products.

4.4.7. Such top-down monitoring is also often ineffective when it matters most, particularly if naturally higher risk new entrant providers have a greater freedom from it as a matter of policy. As was found in Australia in the wake of the VET-FEE-HELP system, the sheer scale of a market with thousands of providers is always going to be difficult to regulate on a continuing basis.[15] Also, while barriers to entry are low, and new entrants are spared the much deeper burden of compliance and monitoring, the sheer volume of turnover results in an £8.8m annual cost for Ofsted in inspecting new providers.[16]

5. The wrong kind of efficiency?

5.1. Further education has economies of scale

5.1.1. As already noted, further education has clear economies of scale: at the classroom level, the costs of a teacher's employment as well as classroom infrastructure will all be lower if spread across a higher headcount. At the provider level, maintaining the organisation and its wider facilities again will cost less if spread across a larger number of learners across those classes. Not all learners and courses cost the same; some courses require teaching knowledge and equipment with a premium price tag.

[15] Francesca Saccaro and Robyn Wright (2018). VET FEE-HELP: What went wrong? Melbourne: University of Melbourne. https://melbourne-cshe.unimelb.edu.au/__data/assets/pdf_file/0012/2845776/Final-VET-FEE-HELP-.pdf

[16] Estimated figure.

5.1.2. AoC research suggests that 50 per cent of college funding is needed to operate a college as a viable business: covering the range of management, administration, estates, enrichment, engagement and support outside of the classroom. The remaining half has to cover the 'classroom' cost: teaching and materials, with viability highly dependent on class size and utilisation. Failure to cover these costs will make the college financially unsustainable; classes which cannot generate the necessary margin are therefore always at risk of closure.

5.1.3. Given that funding for further education is set through the base rate, it is possible to estimate some of the parameters of the further education cost curve, and in particular to identify, with allowances for course composition, viable class sizes. For example, the Sixth Form Colleges Association estimates that viable class sizes for its provision are at least 16 students.[17] Yet the mix of providers can stretch typical actual class sizes some way below that; research for the Department for Education in 2017 found that while FE and sixth form colleges have "an average class size of just under 19 students … school sixth forms [have] an average A level class size of just under 11", with less popular subjects typically having even smaller average class sizes.[18]

5.2. **Substantial squeeze on further education funding**

5.2.1. Funding has been subject to a sustained squeeze throughout the 2010s. As noted, funding across providers is estimated to have fallen 13 per cent from 2013/14 to 2018/19. While some of the fall in total funding has been reflected in a fall in overall student numbers, the base rate of funding per student has also been frozen at £4,000 through this period.

5.2.2. Within that funding envelope, it is becoming increasingly hard to sustain many types of provision. Naturally, less popular subjects result in small class sizes, making them hard to sustain except on grounds of mission – but this can only stretch so far against financial pressures. While that alone threatens curriculum variety, the economic consequences may be much greater within technically specialist areas. Recent work by the AoC has found that given largest-in-subject class sizes, only two of five technically specialist areas – digital, business administration but not engineering, construction, science – deliver the 50 per cent contribution

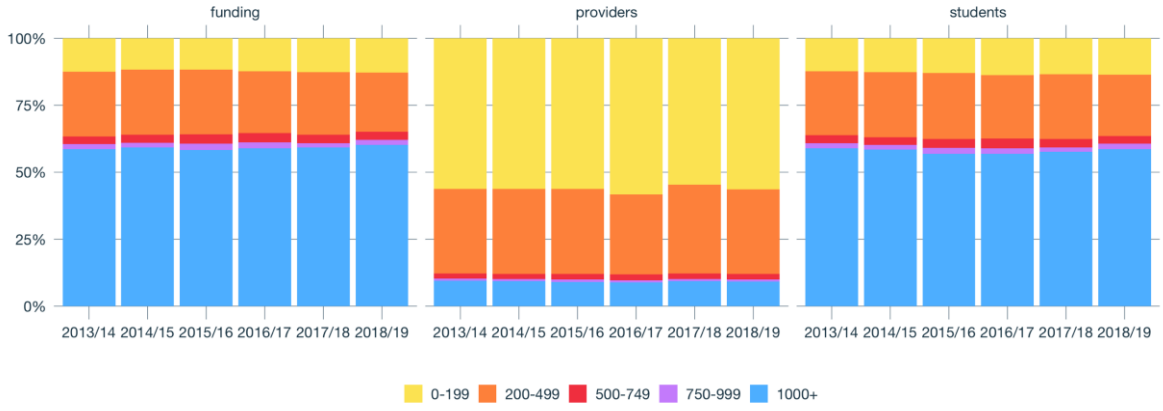
[17] SFCA (2015). Costing the sixth form curriculum. London: Sixth Form Colleges Association.
[18] Natalie Parish, Verity Prime and Simon Day (2017). Understanding costs of A level provision via the decision making process behind class sizes. Research report. London: Department for Education.

needed; on typical class sizes, none of these subject areas achieve the necessary contribution.[19]

5.2.3. And while funding has declined in real terms, costs have risen; nearly 8 per cent CPI inflation since 2013, while real pay in other industries has risen faster than CPI over this same time period, as have other costs. The combination of declining funding and increasing costs makes for a particularly difficult decision-making process for college leaders, wishing to maintain curriculum sufficiency while contemplating potential financial unsustainability.

5.3. Consolidation has reduced provider size as well as the number of providers

5.3.1. The headlines are of rationalisation and consolidation: a 14 per cent fall in provider numbers since 2013/14 (from 3,317 to 2,857 providers), an 11 per cent fall in student numbers (from 1.29m to 1.15m) and a 13 per cent fall in nominal funding (from £5.9bn to £5.1bn). But rationalisation has been spread evenly across the market, with as much reduction in medium and large-sized providers as among small providers – the median provider size has declined in funding if not in students (173 to 174 students, but £796k to £755k funding), and remains small. The chart below shows the relative stability of the small (sub-200 learner) group in the share of students, funding and provider numbers, despite the overall reductions in each total.



5.3.2. While class size is the critical variable for viability, with subject differences, small providers typically make for small class sizes. Within A level provision, there is research evidence of a strong correlation between

[19] AoC (2019). Skills shortages and funding gaps: An analysis of the costs of under-investment in skills. London: Association of Colleges.

the provider's overall learner number and the average class size.[20] At a provider with fewer than 200 learners any varied subject offer will result in small class sizes, leading to questionable financial viability.

5.4. **Squeezing the further education business model**

5.4.1. Low barriers to entry have meant the further education system maintaining a long tail of small providers, many of them (see section 4) with relatively short and unpredictable lives within the system. The squeeze on funding over the past five years has reduced the *total* number of providers, but it has not reduced either the market share of small providers, or their turnover from entry and exit.

5.4.2. Within a diminishing funding envelope, the sustained presence of that long tail means that demand has shrunk across all providers: smaller volumes, smaller class sizes, resulting in more low-viability provision. In order for those smaller providers to maintain their presence, larger provider provision has become marginal. That in turn means that for all providers – large as well as small – the funding squeeze has drained the resources available to maintain organisational capacity, including widening the curriculum; recruitment, retention and motivation of the workforce, and investing in support services.

5.4.3. The squeeze on funding has therefore exacerbated the effects of excess competition from reduced barriers to entry. Competition for students is a key barrier to increasing class sizes for providers operating below capacity, with unpredictable student numbers exacerbating the problem. Nearly half of providers studied in research for the Department for Education in 2017 reported making changes to increase class size to improve efficiency.[21]

6. Trusted colleges as the centre of a thriving local learning market

6.1. **Performance in context**

6.1.1. The further education system does not exist, and cannot be evaluated, in isolation from the labour market; it supplies future employees to the labour market and reflects the signals that labour market sends about

[20] Natalie Parish, Verity Prime and Simon Day (2017). Understanding costs of A level provision via the decision making process behind class sizes. Research report. London: Department for Education.

[21] Natalie Parish, Verity Prime and Simon Day (2017). Understanding costs of A level provision via the decision making process behind class sizes. Research report. London: Department for Education.

skills in demand. In that setting, it is important to set ambitions which are achievable given further education's role. For the largest part of its efforts, further education provides the new margin of skilled labour supply each year – most of the workforce have long since gained their education, and only some will be returning to full-time education in any one year.

6.1.2. Around further education colleges, many actors are making decisions which set labour market signals, but also determine the outcomes of different paths for students. How employers shape their business models and organise their workplaces – the balance between capital and labour, between skilled and unskilled work, between autonomy and supervision – is of decisive importance in signalling skills demand, but also translating skills use into productivity and prosperity.

6.1.3. Even within their own environment, further education colleges have to balance guiding and leading students according to labour market demand, with a recognition that students have their own ambitions and aspirations. Even where local employers are exceptionally clear on their demands for new workers and skills, it is not a straight line to getting students to follow that path – young peoples' aspirations are always decisive in determining their course selections and cannot simply be ignored by colleges.

6.1.4. It is in this setting that we consider how to improve the further education system: it can certainly be much improved, and improved as a system, but it is not, on its own, the answer to all of our labour market problems. Employer practice, employer investment, and the balance between student and employer expectations, are all of great importance in determining labour market outcomes.

6.2. **Two linked problems**

6.2.1. We argue here that the surface symptoms of the further education system's performance – curriculum homogenisation; workforce weakness; diminishing support services – reflect two linked problems in market structure. The first is more general: that a market that needs coordination resting on stability and trust is undermined by the lowering of barriers to entry and the attempt to restore coordination through increasing bureaucracy (applied paradoxically to the established providers, not the entrants). The second is specific: that the real-terms reduction in funding has cut against the system's economies of scale, pushing more and more provision into financial unsustainability and making investment in improved and enriched delivery impossible.

6.2.2. The second problem has its own remedy, but also a remedy shared with the first problem. It is now widely recognised that the financial squeeze has gone as far as is possible without doing permanent damage and raising the base rate will be essential if we are to make progress. But its effect will be accelerated if funding favours larger provision and bears down on smaller, less viable provision; doing so will leverage any funding increase with enhanced economies of scale, resulting in significant improvements in provider capacity.

6.2.3. That will, in itself, be an increased barrier to entry for smaller providers, and that will start the process of tackling the first problem. But to be successful, this should be part of a wider, conscious move to favour successful, local, trusted provision and give it the room to invest in reputation and the capabilities which will drive its performance.

6.3. **Accountability for outcomes; autonomy for operations**

6.3.1. While further education is publicly funded – as it should be, given financial constraints facing learners – it needs to be accountable to the taxpayer. But the top-down, bureaucratic environment faced by colleges goes against all best practice in regulation: it is compliance-based, not principles-based; the emphasis is on demonstrating procedural adherence, not the delivery of desired outcomes.

6.3.2. The result is a college sector where the operating model too often starts with compliance with the mesh of accountabilities, not with delivering for the learner. Paradoxically perhaps, the policy strategy of lowering barriers to entry – promoting market competition – has resulted in intense central control of much of the provider landscape, because of the panoply of 'sticking plaster' interventions designed to ensure certain market outcomes.

6.3.3. Devolution is superficially attractive but is not alone the answer to the problems set out here. While in principle, devolution may provide for improved local coordination given the smaller distance and scale between planning and action, the evidence is not so strong: for example, the devolution of Apprenticeship Grants for Employers (AGE) to city-level had zero effect.[22] The risks of more variable performance, along with limited overall effects, suggests devolution should only be used with caution – but the challenge from this paper is that maybe top-down

[22] Chiara Cavaglia, Sandra McNally and Henry Overman (2019). Devolving skills: the case of the Apprenticeship Grant for Employers. Centre for Vocational Education Research Discussion Paper No.18. London: London School of Economics and Political Science.

planning, whether from Whitehall or within the region, are not the best destination.

6.3.4. Our approach is to move away from such centrally planned systems, which will only ever necessitate further 'sticking plasters' as new unintended consequences emerge – and which seem increasingly out of step in an era of devolution to cities and regions. But at the same time as moving away from central planning, there also needs to be a recognition that co-ordination – essential to the delivery of the outcomes that public policy needs to secure from further education – means a market structure which allows strong, anchor institutions which will lead provision and their area, and that seeking always to promote competition can weaken these institutions and their ability to coordinate.

Section Two: The landscape

7. Introduction

7.1. The analysis in this section attempts to quantify different local 16-18 structures and competition levels and assess the impact that these have on the sufficiency, efficiency and effectiveness of 16-18 provision. This, we believe, is a new and potentially interesting way of looking at the further education system.

7.2. Most of the existing data about the further education system focuses on individual providers, the courses they offer and their learners and does not take into account the context in which these providers operate. This includes both performance data (e.g. Ofsted grades, national achievement rate tables) and participation data (i.e. information about learners and the courses that they are taking).

7.3. Recent research studies on competition in post-16 education either have a broad national perspective or focus on a single local area. *Understanding the Further Education Market in England* (BIS Research Paper 296, July 2016), for example, provided a broad overview of the Further Education Market. The report included some measures of local concentration for a selection of qualifications (number of providers offering the course within a 10km radius) but did not attempt to provide a comprehensive measure of competition at a local level.

7.4. The recent policy drive towards localism and devolution[23] has led to a great deal of research and analysis at a Combined Authority level. The research generally focuses on adult skills rather than 16 to18-year-olds as Combined Authorities now have devolved responsibility for the adult skills budget. There has also been growing research interest in local learning ecosystems[24]. These studies, however, are primarily concerned with the inter-relationship between learning and skills provision and the local community and economy.

7.5. Our research attempts to develop a new standard competition index at local authority district level, quantifying how the structure of 16 to18 provision varies between the different districts in England. In some areas there are large numbers of school sixth forms, whilst in others there are very few school sixth forms and most learners are attending sixth form colleges or general further education colleges. For historical reasons

[23] https://www.aoc.co.uk/sites/default/files/The%20Long%20Term%20Implications%20of%20Devolution%20and%20Localism%20for%20FE%20in%20England%20September%202016.pdf

[24] https://www.wise-qatar.org/app/uploads/2019/05/wise_report-rr.1.2019-web.pdf

variations in competition tend to be happening at Local Authority or Local Authority District level (prior to 1992 local authorities had responsibility for all 16-18 education including colleges).

7.6. The research then attempts to assess the extent to which different levels of competition have an impact on the range of courses available, the efficiency of the provision and the quality of provision across General Further Education, Sixth Form College and school sixth forms.

8. Analysis

8.1. Our analysis has generated a 16 to18 competition measure for each local authority district in England based on a derived HHI index, a measure of the size of organisations in relation to the market and an indicator of the amount of competition among them.

8.2. The simplest competition model would assume that providers only recruit learners from within the district and learners who live in the district would not be travelling outside of the district to study. In practice this is not the case and various approximations or assumptions need to be made.

8.3. We have assumed that schools recruit learners from the local authority district in which they are based. Whilst this will introduce some inaccuracies, previous research suggests that travel distances to individual schools are relatively small in comparison to colleges.

8.4. A local authority district might contain a large number of school sixth forms each with a relatively low share of learners but a high combined share. We have used the combined share of schools within the HHI index calculations. School sixth forms will, in general, be recruiting most of their learners directly from their own Year 11 within a fairly small geographical footprint. Also, in many cases groups of schools will be part of a multi-academy trust. As a first approximation, choice for learners will be between either their own school sixth form or different colleges.

8.5. Postcode data for college learners was available from the ILR allowing us to calculate the share of learners for individual colleges for all of the different districts in which they operate. However, where learner numbers (or share of learners) were very low, individual colleges were excluded from the HHI calculation for that district in order to get a more realistic representation of competition.

8.6. Within a local area the level of competition is dependent not only on the number of distinct providers and their share of learners but also the Provider Type – specifically general further education college, sixth form college and school sixth form. Each of these provider types has a distinct character, curriculum profile and geographical reach. A highly competitive district may include some or all three of these provider types but a district that lacks competition might be largely made up of a single provider of a certain provider type (e.g. a single college or predominately school sixth forms).

8.7. Each local authority district was assigned an HHI score and a primary provider type (the provider type that had the largest share of learners). Local authority districts that had an HHI score between 0 and 0.38 were classified as highly competitive, those that had a score between 0.38 and 0.53 were classified as medium competition and those that had a score between 0.53 and 1 were classified as low competition. Equal numbers of districts were assigned to each competitiveness category.

8.8. The analysis ranked local authority districts from those where a single college has a large share of learners to those where school sixth forms (as a combined group) have the highest share of learners in the district. Between these extremes are highly competitive environments where several different colleges and school sixth forms each have similar shares.

8.9. Sixth form colleges only exist in certain areas of the country. The analysis was therefore separated into separate sections looking firstly at districts without a sixth form college and secondly districts which do have a sixth form college.

9 Findings

9.1 The analysis investigated the relationship between competition at a local authority district level and the sufficiency, efficiency and effectiveness of 16 to18 provision.

9.2 Focusing on sufficiency, efficiency and effectiveness within a local geography (rather than the performance of individual providers) is a new and potentially interesting way of looking at 16-18 education. This type of analysis can highlight similarities and differences between learner experiences and how these experiences might be influenced by local 16-18 structures.

9.3 A number of interesting findings have emerged from this initial study suggesting that local competition and 16 to18 structures may be important factors influencing the sufficiency, efficiency and effectiveness of 16 to18 provision. Whilst further research would be required to determine the strength of any relationships and the statistical significance, the initial analysis has highlighted the following issues:

- The number of subjects on offer per provider is lowest in areas of high competition, where colleges have a relatively low share of learners.
- The financial health of general further education colleges tends be worse in areas where competition is high.
- General further education colleges tend to have lower Ofsted Grades for Overall Effectiveness where school sixth forms recruit a large proportion of 16 to18-year-olds. This may be because the school sixth forms tend to select students with higher prior achievement and facing fewer barriers to success.

The analysis suggests that variations in sufficiency, efficiency and effectiveness at a district level may be related to the following:

- The largest providers in deprived areas tend to be general further education colleges and in affluent areas school sixth forms.
- General further education colleges tend to focus on courses at level 2 and below where competition is high and school sixth forms have a high share of learners.
- Competition levels tend to be higher in rural areas than urban areas.

10 Conclusions and principles for a new approach

10.1 Our proposed approach is market-driven but place-based: but whereas at present that is taken to mean opening up opportunities for new contestants in the market, the approach here is to look at the *total place-based managed market* and regulate to achieve the best combination of outcomes within that domain, accepting the trade-offs between accountability and autonomy, trust and competition. That approach will mean, rather than seeking to tackle the uncertainty created by low barriers

to entry with excessive regulation of incumbents, a more balanced approach where market leadership is recognised as offering benefits, and not undermined.

10.2 In terms of a total market approach, an essential step is to address the market without creating siloes between different kinds learning – recognising that a common approach to commissioning across post-16 learning will allow the right mix of leadership and collaboration between providers to emerge.

10.3 Combining the total market and the place-based approach, there is a need to allow the different regional economies to flourish with their own ways of doing things – affording greater flexibility on both the supply- and demand-sides of the market. Different areas have different histories, with leading institutions having emerged over many years. There is an extensive literature on the idea of anchor institutions, which combine three features: (1) spatial immobility, with strong ties to the local area; (2) large size with significant purchasing power so that they can lead and impact the local market; (3) non-profit, with a commitment to using their leadership capability to deliver on a social purpose within that local market.[25]

10.4 Anchor institutions exist within the education and training systems of most of the regional economies in England: as noted in this paper, there are substantial economies of scale and scope which favour larger providers in education and training provision. The approach set out here is that, rather than seeking only to challenge leading providers through competition, we should look to match their market power with market responsibility: putting in place the accountability for outcomes but then giving the autonomy, secured by their commitment to social purpose to use their own resources and collaboration with partners to drive those results.

10.5 Regulation should move from central planning to a rules-based model. With public funds at stake, there remains a role for government in ensuring accountability – but rather than specifying and directing outputs through a central plan, Government's role should be to create and police the accountabilities, setting transparent rules and measures by which anchor institutions' leadership and delivery can be judged. FE Commissioners – in a total market approach, cutting across all siloes – would be involved in anchor institutions' developing outcomes agreements with funders and

[25] David Smallbone et al (2015). Anchor institutions and small firms in the UK: A review of the literature on anchor institutions and their role in developing management and leadership skills in small firms. London: UK Commission for Employment and Skills.

local stakeholders to set out a clear statement of investments and intended results.[26]

10.6 Shifting to a model like this, characterised by transparency and accountability, recognising that market power must be matched with market responsibility, has several implications for how markets must evolve. First, barriers to entry will be higher than they have been before, as we allow market forces to operate in favour of anchor institutions – but this recognises that they have been kept artificially low, with deleterious consequences for variety and viability in delivery.

10.7 Second, the greater autonomy and accountability for leading FE providers will offer the right climate for rationalising the complex web of overlapping regulations currently used to squeeze established providers – reducing compliance costs and creating greater space for innovation. A simpler accountability environment can also be much sharper – reducing regulation is about improving its effectiveness, not only increasing reducing costs.

10.8 Third, while some regional education and training economies already have market leaders clearly positioned to take on the anchor institution role, some will not. In many cases, the sheer range of provision is causing viability concerns, and it may be that as part of moving to the new system there needs to be a rationalisation in the volume and shape of provision – and an area review process across the market, and including the school sector, will be required.

10.9 To sum up, the framework we set out here is about recognising that further education and training exists as a market system, but recognising – on the basis of robust analysis – that that market benefits from strong leading institutions. Rather than attempting to erase their leadership, we should be aligning incentives in such a way that market leaders drive the coordinated outcomes we seek from further education and training. Government's role – taking a view across all parts of the market – is to ensure clear and robust accountabilities, setting rules and mechanisms, but allowing regional education and training economies to evolve in response to changing local demands.

[26] UKCES / AoC (2015). Local action, national success: how outcome agreements can improve skills delivery. London: UK Commission for Employment and Skills.

Section Three: Recommendations

11 Policy Recommendations

We recommend a place-based, whole-market approach which incentivises co-ordination between providers to address insufficiency, inefficiency, inequity, poor quality or any combination of these. We discuss what type and scale of coordination might be appropriate while sustaining an environment of autonomy, accountability, trust and stability for providers. Excessive provision can destabilise and fragment the post-16 education system at area level. Small, inefficient providers often deliver poor learner outcomes and too many of them in an area can jeopardise the efficiency and sufficiency of provision across the area.

11.1 Area co-ordination of provision to support sufficiency, efficiency, quality and equality:

- A single post-16 commissioning and regulatory process which applies to all providers and promotes efficiency, sufficiency, quality and equality and ends siloed regulation.
- Clear conditions for funding, market entry and continued market presence based on strong local co-ordination.
- A co-ordination process designed to protect successful specialist or 'minority' provision using a rules-based framework.
- Cohort growth seen as an opportunity to promote efficiency and sufficiency with a temporary moratorium on 16 to 19 market entry.
- Clear conditions for continued market presence based on the current size requirement for new sixth forms.
- Where more provision is needed, commissioners to be required to formally agree that any new provider should meet these conditions without destabilising or fragmenting existing local provision in a way which jeopardises efficiency, sufficiency, quality or equality and has appropriately qualified staff, equipment and resources to do so in a viable fashion at both course and cohort level.

11.2 Investing in anchor institutions as hubs for specialist or 'minority' provision

- Providers which have the track record and capacity to deliver specialist or 'minority' programmes successfully and efficiently to have 'first call' on investment.
- Successful colleges are anchor institutions in their local economies but require significant capital investment to remain so, starting with

a £240m capital injection[1] followed by recurrent, formula driven building and equipment budgets.
- A challenge fund to be put in place to support start-up costs for new areas that are highly specialised.

11.3 **A rules-based framework**

The Department for Education (DfE) should:

- develop a rules-based framework to include:
    - target minimum and average class sizes for all providers.
    - subject level viability models based on cohort size.
    - ringfencing of 16-19 funding for 16-19 learners.
- require providers to engage with area coordination, with a duty to establish network strategies.
- use its powers to review and consolidate the most inefficient providers.
- undertake a back-to-basics review of the post-16 funding formula to determine if block, cohort or student funding (see case studies in Annex A) drive the behaviours which optimise efficiency, quality and sufficiency.
- define sparsity as a new element in the post-16 funding formula for areas that are extremely rural.

Ofsted should:

- inspect against such a framework to ensure that public resources are being deployed efficiently and responsibly.

[1] https://www.aoc.co.uk/news/the-september-spending-round-college-checklist-treasury-and-dfe-0

Annex A: - International case studies

International Funding Models for Post-16 Education

Guernsey Case Study

Introduction

1. Guernsey is a self-governing British Crown dependency and island. At the end of September 2018, its population was 62,754.[27] The education system in Guernsey is currently going through a transformation. This will lead to mergers and a reduction in the number of education institutions. It is not anticipated that this will have a major impact on the funding model for post-16 education.

2. The state funded post-16 further education providers are Guernsey Grammar School and Sixth Form Centre (Sixth Form Centre) and Guernsey College of Further Education (Guernsey FE College). Both institutions have a similar size cohort of 16 to 18-year-olds and offer different provision. The Sixth Form Centre offers the International Baccalaureate Diploma and A level programmes, neither of which are offered at the FE College. Some of the same subjects are offered in the two institutions, but they use different qualifications and offer different learning experiences.

Type of Funding Model

3. Post-16 education institutions receive block funding in Guernsey. There are however some small differences in how the Sixth Form Centre and FE College are funded.

Description of Funding Model

4. The block funding model is used in Guernsey. Due to the small size of Guernsey, competition between providers would be unhelpful. Although funding is allocated in a similar way for the Sixth Form Centre and Guernsey FE College, in the past the funding for the Sixth Form Centre was calculated on the pupil/teacher ratio. In more recent years it has been calculated on a historical legacy basis i.e. the same allocation as the previous year. This is the same funding model as for Guernsey FE College.

[27] Guernsey Quarterly Population, Employment and Earnings Bulletin (Population At September 2018, Employment and Earnings at March 2019), States of Guernsey

5. Currently education in Guernsey is free up to the age of 22. The new law will probably reduce this to the age of 19. For the last few years Guernsey FE College has received the same block grant of £8 million. The amount received by the College doesn't depend on student numbers or performance. Funding is by provision type and covers core full-time provision, Special Educational Needs (SEN) full-time provision, apprenticeship provision, school partnerships for 14 to 16-year-olds and English and Maths for those under the age of 22.

6. In addition to its core provision, Guernsey FE College also offers responsive provision. This in theory should be full-cost recovery. The reality is that some of the responsive provision supports policy priorities. For example, early years education is a policy priority and those working in early years education need to have certain qualifications. Individual learners on these programmes can receive a subsidy. The responsive courses which are subsidised are funded by any surplus made on other responsive programmes offered by Guernsey FE College.

7. It is anticipated that a commissioning funding model will be used in future. This will still be based broadly on a block funding model, but with more flexibility through the ability to negotiate.

Funding Formula

8. There isn't a funding formula for post-16 further education in Guernsey, as institutions receive one main funding pot based on legacy funding. In recent years this has meant that the two post-16 further education institutions in Guernsey have received the same funding as for the previous year. If student numbers increase the total allocation remains the same.

9. Trend data shows that fluctuations in total numbers and numbers on specific programmes have been minimal. If a learner moved to Guernsey with significant needs, it may be possible to make a case to receive additional funding. Education buildings in Guernsey are owned by the State. The structure of the buildings is maintained by the State, with minor internal works and operating costs funded by the overall funding allocation of the education institution.

10. Although there isn't a funding formula, Guernsey FE College models the budget as part of its three year business plan, using budget assumptions and taking account of overheads. This also involves looking at projections for student numbers and course demands and undertaking curriculum modelling. Areas with skills shortages may result in the offering of responsive provision which is subsidised. Tight internal management and detailed planning is important in this funding model.

Impact of Funding Model

11. It is difficult to assess the strategic impact of the funding model in Guernsey. The education system in Guernsey is currently undergoing a transformation programme and there will be some changes to how the funding model works. There are two main further education institutions for 16-18/19-year-old learners. These two institutions co-operate and are not in competition with each other. Funding is therefore not used to drive competition, although indirectly it does lead to some efficiencies. This is because the overall amount of funding has tended to be static, even where there have been increases in student numbers or in requirements to offer more expensive courses. There is some flexibility for institutions, but this must all be within the overall budget.

12. As there are only two main further education institutions, they work collaboratively to ensure there is no duplication in the programmes they offer. This is a sensible approach and means that funding is targeted where it is needed and helps to avoid an excess of provision and unfilled places. Conversely, an operational decision must be made if there are more students than places available on specific courses. This occasionally results in a necessarily rigid approach where students are placed on a waiting list. Guernsey FE College is mandated to provide core and responsive provision. Apprenticeship provision is responsive to the needs of the labour market. For this reason, the range of Apprenticeships offered by Guernsey FE College is expanding and will be offered across a wider range of industries.

13. Guernsey FE College has relatively poor facilities and as these are owned by the State, they do not have the funding to make substantial changes or investment in infrastructure. These facilities could have an impact on student choices, although trend data illustrates that fluctuations over time are limited. The Sixth Form Centre was completed in 2005 and it therefore has a more modern building and fit for purpose facilities.

14. In recent years the college has been "doing more with less" by working hard to be financially prudent and efficient. If the college was self-governing, it is possible that it would close some provision which is not financially sustainable. The provision offered is agreed with the State, but in future it is likely that the case for developing new provision will be more rigorous and part of the commissioning arrangements.

Finland Case Study

Introduction

15. The post-compulsory education system in Finland consists of an academic track and a vocational track, with both usually taking three years. These are offered at different institutions. As the education system in Finland is going through a reform programme, this case study explores the previous and current funding models, as well as the future funding models.

16. General upper secondary education in Finland is well-established and has a strong reputation internationally. The post-compulsory education system in Finland has flexible pathways through to higher education. Despite this, general upper secondary education is the main route to higher education. Although it is a high-performing system, general upper secondary education in Finland is currently being reformed. The aim of the reforms is to increase its attractiveness, enhance quality and learning outcomes and improve the transition to higher education. A new curriculum for general upper secondary education will be offered in Finland from 2021.[28]

17. The Vocational education and training (VET) system in Finland has been reformed, with the reforms implemented by 2018. VET education policy, funding and provision for young people and adults were merged in the beginning of 2018. The separate Vocational Education and Training Act and Vocational Adult Education act were unified into one new act. The objectives of the VET reforms include improving efficiency, providing one framework for young people and adults and enhanced co-operation between VET institutions and industry. The funding model for VET has also been reformed, but the change from the old to the new funding model is happening transitionally between 2018 and 2022.

Type of Funding Model

18. The funding model for post-compulsory education in Finland has two distinct approaches. The funding for general upper secondary education is primarily a cohort funding model. The funding for VET in Finland is a learner funding model.

Description of Funding Model

[28] Key Figures on General Upper Secondary Education in Finland, Finnish National Agency for Education, 2018

19. Upper secondary education in Finland is funded by the Ministry of Education and Culture. The funding for general upper secondary education is based on the number of students reported by providers, as well as on the unit prices set by the Ministry of Education and Culture.

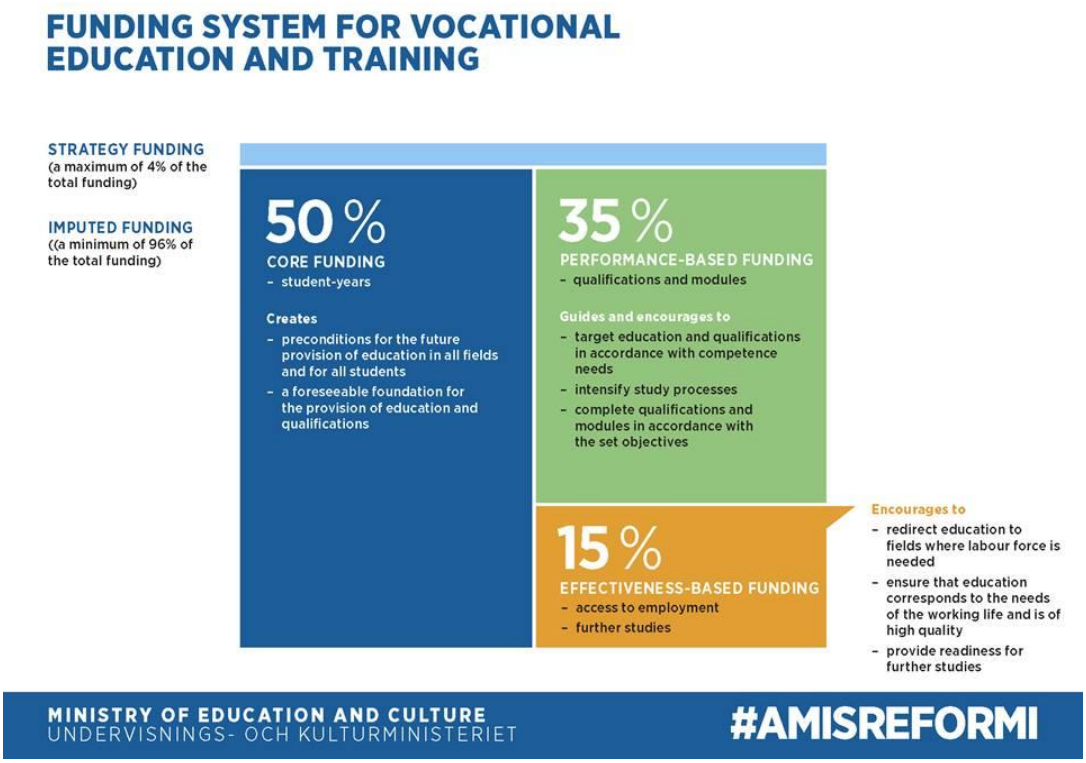
20. General upper secondary education funding is relatively simple. All general education finance is at the same rate, with a limited number of exceptions. In general education there are two factors which may increase the level of funding. Firstly, if the institution is small, it may be eligible for additional funding. Secondly, if the institution has living accommodation for students, they receive higher funding based on the number of students living in the accommodation. There is no performance element for the funding of general upper secondary education.

21. Up until 2018, 95% of funding for VET institutions was core funding and 5% was performance-based funding. This funding model is transitioning to a new model by 2022. In 2020 it will be 70% core funding, 20% performance funding and 10% effectiveness funding. By 2022, core funding will only represent 50% of total funding for VET. This will broadly align VET funding with higher education funding.

22. Initial VET (IVET) tuition and meals are provided free of charge to students. In continuing VET (CVET), students can be charged tuition fees. These are relatively low and represent a maximum of 25% of the average cost per student. The provider can choose not to charge a tuition fee.

Funding Formula

23. The diagram below summarises the new funding system for VET in Finland, which will be fully operational from 2022.



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24. The core funding budget for each VET provider is a weighted sum which considers the providers objectives, students/year and the providers profile co-efficient. The performance based funding considers the performance points for qualifications and qualification units. The effectiveness based funding element takes account of employment and further study rates for students, student feedback and feedback from employers.

25. The Ministry of Education and Culture can decide to increase core funding to providers. This would be by application for reasons such as very high costs of specific qualifications and training, special conditions in providing VET or the financial situation of the provider. Through a small strategy funding element, additional funding can also be provided which supports strategic priorities.

Impact of Funding Model

26. The education system in Finland has performed highly in PISA education assessments, although results have slipped in recent years. There are different views on why Finland's education system, including its general upper secondary education, has been successful. The funding model has not normally featured as a critical factor, which may be because it is a core funding model. However, the amount of funding could be a factor, as this is indirectly related to the quality of teachers.

27. The new funding model for VET in Finland has coincided with new VET legislation, a transformation of VET programmes and a reduction in overall funding. The new funding model and approach should bring increased competition and this in turn should lead to increased effectiveness. Under the previous funding model (95% core funding), providers were not under pressure and this may have resulted in them not taking students through the system as quickly or effectively as they could have done. Conversely, the new funding model could encourage providers to try and fast-track students through their programmes, which could have a negative impact on employment options. Ideally, the number of students graduating from VET programmes needs to be in balance with the needs of the labour market in Finland. It will take time to see how well this happens in the new funding model.

28. One possible concern about the new funding model is in relation to the youth guarantee. This aims to ensure that young people have access to education, training and employment and are not excluded from society.[29] For providers doing good work with young people who may be struggling and at risk of dropping out, the funding model may not incentivise the provider. This is because providers will only receive the performance element of their funding if students successfully complete their qualifications. It is not yet clear how the new funding model will help providers to take an inclusive approach.

29. The new funding model could also have implications for smaller providers. When VET providers were operating in a system with a 95% core funding model, they had more certainty about their funding during the year and from year to year. When the funding model has fully transitioned to a 50% performance element, smaller providers may struggle with the potential variations in funding. Small providers receive the same funding proportionally as larger providers.

[29] The Youth Guarantee in Finland, Ministry of Education and Culture, 2012

30. The true impact of the funding model for VET may not be apparent until at least 2025, when there would have been a full three year programme cycle following the transition to the new funding model in 2022.

Switzerland Case Study

Introduction

31. This case study presents the funding model and funding context in the French speaking cantons in Switzerland. In Switzerland's federal system, the cantons oversee education policy and funding. Only the overall framework and pedagogical content are controlled by the Swiss Confederation. This results in a diverse and complex education and funding system in Switzerland.

32. The State (canton) has an obligation to provide a free education to all learners aged under 16 (compulsory education) and to provide an almost free post-compulsory education to all interested people. There is an age limit of about 22 for education leading to the Matura Diploma. Most young people in Switzerland follow a general education pathway in an upper secondary school or a vocational pathway in a technical school or college. The general education pathway includes Baccalaureate schools and upper secondary specialised schools. The technical pathway consists of a classroom-based route and a work-based route.

33. Programmes in each of the technical routes have the same content and end-point assessment. Most technical colleges refer to full-time learners as "apprentices". The apprenticeship can be done in two different ways. It can be done in dual mode with three to four days a week in a company and one to two days in a VET institution. It can also be undertaken on a full-time basis at a VET institution. The education provided at the VET schools is free to learners and the dual mode apprentices also receive a salary from their companies.

34. For all these schools and colleges, the State has an obligation to provide education and the schools are not only funded but also run directly by the State. As these institutions are public, the State is responsible for the quality of education and guarantees the contents, according to federal laws and descriptions. All educational institutions must be reviewed and "recognised" by the Swiss Confederation on a regular basis.

Type of Funding Model

35. The funding for post-compulsory education in Switzerland is broadly a cohort funding model. The federal system in Switzerland has led to diversity in the

implementation of education policy and how education is funded. This means that there is considerable variation between cantons.

Description of Funding Model

36. The funding model in Switzerland is complex as it is devolved to the canton and managed at the cohort level. This means that funding averages for each occupation differ from occupation to occupation, college to college and canton to canton. For technical education, the cantons are responsible for the implementation and supervision of technical pathways and pay 75% of the public sector costs. The Confederation makes lump sum contributions to the cantons for the funding of VET. The Confederation also provides funding for specific innovation projects and services, where these are deemed to be in the public interest. This includes VET research and the Swiss Federal Institute for Vocational Education and Training (SFIVET).

37. State funded education institutions are not independent entities. This means that all staff are employed by the canton and paid directly as employees of the state. In practical terms, this means that a principal of a technical college is responsible for managing the budget for the building, equipment and running costs. The budget is negotiated on an annual basis. The business sector also has an important role to play in the funding of VET. This includes providing training places for in-company VET.

Funding Formula

38. There is no National funding formula for education in Switzerland. The State provides infrastructure (buildings, equipment etc) and pays the salaries of all the staff members (teachers, technical services and administration). The amount of funding is set by the level of "need", as the State has an obligation to provide education to all individuals who fulfil the conditions to receive it. Consequently, funding is not linked to performance or outcomes. Social grants for students from low income families are funded by the Ministry responsible for health and social affairs.

39. The number of programmes and classes offered is a negotiation between the VET institution and State. An estimate is usually made in advance which is based on the overall number of projected students and previous take up of different programmes. The number of students influences the number of classes, although some important trades may have smaller numbers of students on their programmes. Some institutions are very specialist, with only one school for watchmaking but several schools for business and administration. Where there are a number of schools for the same trades, the

schools have a meeting about specific students and who will host them. Classes for Matura programmes almost always have 20-24 students.

40. Students normally do work experience at the end of their courses and often have a small salary when they are on their work experience. Dual system apprentices are paid by the employer. There is special funding for international mobility which provides work experience, and the rate varies according to the host country destination.

41. Every vocational course is funded according to the specific needs. For example, business and administration apprenticeship programmes are lower cost to deliver than watchmaking or mechanical engineering, as these need expensive machinery and infrastructure. The demand for apprentices is made by companies and, in turn they expect education institutions to deliver the relevant courses to their apprentices. There is some flexibility in the provision of full-time VET programmes e.g. where there are not enough apprenticeship places. However, these are less cost-effective than the company-based training route, as significantly more public money is needed to deliver school-based VET.

42. For all courses, the major cost is for teachers and staff. The individual cantons are responsible for setting the salaries for teachers, leading to significant variations between different cantons. This reflects differences in the cost of living in different parts of Switzerland and the fluctuation in education spending from canton to canton.[30] Some cantons are experiencing increasing immigration. There is generally enough funding for education provision but in some cases education infrastructure is becoming inadequate. In the canton of Vaud, many education institutions have temporary buildings and although there are currently enough teachers, this could become a challenge in the future.

Impact of Funding Model

43. The education system in Switzerland, including technical education, has a strong reputation and good results. Funding is used in a positive way to provide post-compulsory education to all of those who want it and meet the required standards (subject to in-company places being available). Funding is not used to punish or reward institutions. The funding model is not perceived as having a major impact on performance, except for ensuring that there are enough teachers, suitable infrastructure and classes.

[30] Swiss Education Report, Swiss Coordination Centre for Research in Education (CSRE), 2018

44. The whole education system operates under federal rules and regulations and is monitored accordingly. Institutions are given a permit to teach and in theory this permit can be taken away. Although there is a monitoring system and federal controls, very few cantons require external school evaluations. The ongoing commitment of employers to VET is seen as a more accurate indication of the value of VET.

45. Although there is a comprehensive monitoring system, institutions are not usually benchmarked. Externally set targets are not given to institutions: the goal is for students to be successful, not just in their courses and exams, but in their future careers. Vocational exams are held by the professional associations, and these operate independently of educational institutions. There is a strong role for industry in the dual system and this probably has far more impact on the success of the system than the funding model. Programme content is regularly reviewed, and this brings improvements and ensures that courses are relevant, up to date and meet the needs of the labour market.

46. According to CSRE, it is difficult to assess the effectiveness of baccalaureate school education as there are no standardised measurements of attainment and it is difficult to make comparisons across different cantons. As these schools self-select their learners, this also makes it problematic to assess their effectiveness.[31]

47. The culture in Switzerland means that where there are rules and regulations, these are generally respected and acted upon. This results in high compliance rates and is perhaps one of the reasons why there is less focus on benchmarking and inspection regimes. Another reason is probably because of the strong role of unions in Switzerland, including the teaching unions. This may be a factor, along with the overall education system and funding model, in there being a lack of competition between educational institutions. This makes it difficult to put pressure on schools and colleges. They are not independent and operate like small companies run by the State. They can choose to develop new ideas and set internal targets and stretching ambitions, but they don't have to.

48. The aim of the education system is to have a good average level for everyone. The funding model therefore supports this inclusive approach.

[31] Swiss Education Report, Swiss Coordination Centre for Research in Education (CSRE), 2018

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