Case Study

The economic benefits of vocational education and training in the UK
Introduction

Over the past few years, the profile of vocational education and training (VET) in the UK has skyrocketed. This has been largely driven by businesses, particularly due to concerns around skills gaps, as well as cross-party political support. As a result, this led to a number of reviews of the UK’s VET system – such as the Wolf Review and Richard Review – which have placed it into the spotlight. The current government has pledged to deliver three million apprenticeships by 2020.

Yet Britain is still battling the stigma that university is the best route to employment. In 1999, former Prime Minister Tony Blair announced his plans for 50% of young people to go to university. This, coupled with schools being measured on how many students attend university, has led to young people being pushed to pursue academia. In the 2013/14 academic year, the Higher Education Initial Participation rate stood at 47%.

Meanwhile, the British economy is suffering from a skills mismatch, and subsequent skills gaps in important growth industries. As recent City & Guilds research demonstrated, 68% of young people plan on going to university, and yet only 30% of the future jobs require a degree. In addition, insight from the CIPD highlighted that over half (59%) of graduates hold non-graduate jobs.

A further challenge is the frequent change and churn in England’s VET system, which we previously explored in our report, ‘Sense & Instability: three decades of skills and employment policy’ (2014). In many cases, we also identified a ‘collective amnesia’ around past policies. This has generated instability in the system and hindered the establishment of a high-quality, highly valued skills system.

When skilled jobs go unfilled, the UK’s global competitiveness and productivity suffers. The importance of investing in VET and ensuring a stable, effective system has never been clearer. This case study explores the current VET system in the UK, including its potential, but also the challenges it faces.
Key findings

Cebr estimates that a 10 percentage point increase in the number of upper secondary school pupils enrolled in vocational education could lead to a 1.5 percentage point reduction in youth unemployment rates in the UK. viii

Apprenticeships have an economic return of £16-£21 for every £1 of government funding. ix

Level 3 apprenticeships or vocational qualifications may increase wages by up to 20% and employability by up to 14%. x
In the United Kingdom, the main tracks for vocational education and training comprise classroom based education, workplace education, and apprenticeships which combine the two. In 1994, responding to the skills shortage, the UK government announced the implementation of the modern apprenticeship scheme, which has been subject to ongoing developments.

Today, apprenticeship uptake is on the rise, as is investment into these schemes. In 2015, around half a million people started apprenticeships; this is 14 times as many as in 1994. Both systems are flexible, offering different qualification pathways and modes of study. The system as a whole is highly complex, with more than 20 different quasi-governmental agencies being responsible for different parts of vocational and educational training in the last decade, and a diverse range of qualifications on offer.

### UK has relatively low participation in vocational education

<table>
<thead>
<tr>
<th>Country</th>
<th>% of students in upper secondary education enrolled in vocational education programs, 2012</th>
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<tr>
<td>Malta</td>
<td>80%</td>
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<td>Cyprus</td>
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<td>UK</td>
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<td>Romania</td>
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<td>Netherlands</td>
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<td>Croatia</td>
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<td>Czech Republic</td>
<td>90%</td>
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<tr>
<td>Austria</td>
<td>100%</td>
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Source: ONS. Data series starts in 2001. A recent graduate is a graduate who left full time education within five years of the survey date.
VET: challenges and developments

For vocational education to be successful, the OECD makes three recommendations that are of direct interest to the system in the United Kingdom:

1. Both classroom and workplace-based systems need to be in place and support one another;
2. These systems have to be flexible; and
3. There must be a clear framework for recognisable qualifications.

The UK government has highlighted its intentions in recent years to engage employers. A recent IPPR report indicates that more employers are still needed to meet the ongoing demand for apprenticeship roles from students and education providers. Recruiting employers to offer apprenticeships is critical to deliver government apprenticeship targets.

Efforts to develop and improve upon the current system include a focus on simplifying it, raising standards, and promoting employer engagement. Investment in vocational training is also crucial to its ongoing development. In 2013, public investment into vocational education stood at £4bn per year. In addition, employers invested an estimated total of £43 billion in wages, support and training costs.

Current developments include the following:

1. An important part of simplifying the system comes from streamlining the qualifications on offer. The number of recognised vocational qualifications is currently being reduced so that only ‘high-value qualifications’ are available. Since 2013, over 2,800 qualifications that were deemed to be low value have been axed.

2. Qualifications are being aligned with learning outcomes through the Department for Business, Innovation and Skills (BIS) to enable people and employers to make more informed choices. A number of other work experience and key skills education programmes are being trialled, such as Traineeships. There is equally a need, however, to ensure stability and continuity in the UK vocational education system.

3. Ofqual and the Skills Funding Agency have been asked to conduct a feasibility study on combining their databases of vocational qualifications to allow comparisons through a single access point. This may make it easier for employers and potential trainees to access information.

4. Existing apprenticeship frameworks are being replaced by employer-designed apprenticeship standards to ensure that apprentices and business are being best served by apprenticeships. The Richard Review has also suggested that a more diverse range of organisations could be encouraged to engage in apprenticeship training.

5. Schools, universities and employers are being engaged to ensure that vocational qualifications at one level provide a solid basis for advancement to the next level, via clear career pathways.

The UK can learn important lessons from its main European competitors. In France and Germany, for example, national VET centres are training and producing highly qualified workers and technicians. Output per hour in the UK is around 30% lower than its European counterparts, which may be connected to the initial skills training available. In high tech sectors, the UK has a far lower proportion of technicians than the European average. UKCES predicts an increase in demand for these positions until 2017 and an excess of 650,000 positions.
Economic Benefits of VET

Domestic economy
In recent years, a number of reports have highlighted the benefits of vocational education for the UK economy. These reports include the 2006 report by Lord Leitch, the Richard Review (2012), the Wolf Review (2011), OECD (2009), UKCES (2013) and most recently, the Cebr (2015).

At the macroeconomic level, research from Cebr (commissioned by the City & Guilds Group) estimates that a 10% increase in vocational skills over the next ten years would increase UK GDP by £163 billion by 2025.

Additionally, Cebr predicts that a 10 percentage point increase in the number of upper secondary school pupils enrolled in vocational education could lead to a 1.5 percentage point reduction in youth unemployment rates in the UK and US.

Historically, government investment in education creates clear returns for the economy. A Cebr analysis estimates that the return on investment from apprenticeships is between £16 and £21 for every £1 invested. This is commensurate with investment in other kinds of further education; the total for which is estimated to be £7 to £33 for every £1 invested. In 2010-2011, the UK government invested £1.2 billion into apprenticeships and in 2010 saw a total economic impact of £25.3 billion.

Diversifying investment into academic and vocational education provides more options for training, meeting the needs of a more diversely skilled youth. Moreover, in the long-term, more widespread levels of education are associated with increased tax revenue and lower levels of unemployment. There is also some, albeit limited, evidence linking education to health care savings and a reduction in crime.

Cultural bias in favour of academia is despite significant problem of graduate underemployment in the UK...
Percentage of recent graduates working in non-graduate roles

Source: ONS. Data series starts in 2001. A recent graduate is a graduate who left full-time education within five years of the survey date.
Individuals typically earn more after undergoing vocational training. According to analysis by the Cebr, the gains for a level 3 qualification or apprenticeship can be as much as a 20% increase in average wages and a 14% increase in employment prospects. Level 2 qualifications remain primarily a stepping stone to level 3 qualifications in terms of improving career prospects.

In the near future, the importance of vocational training for the economy may rise as demographic shifts and technological advances affect the industrial landscape.

The ageing population is projected to require an increase in vocational positions, especially in sectors such as health care. These are positions that cannot be easily replaced by machines, and need young, healthy, skilled workers in order to be filled.

UK apprenticeships deliver £16 - £21 for every £1 invested.
**Construction sector**

A review of the UK economy has shown the importance of construction as a growth sector, and one upon which many other UK sectors rely. The short term costs of investing in apprentices typically generate longer term gains for construction sector employers. While the costs for those taking on apprentices are initially high, they are typically recouped within two years of post-apprenticeship employment. Thereafter, apprentices tend to be more productive and easier to retain than staff recruited externally. The construction sector provides a valuable case study of high yield investment in vocational training. However, there has been a decline in the number of apprenticeships available within the sector in the wake of the financial crisis, resulting in ‘a growing skills shortage’ in the sector. Given the potential benefits to employers, trainees and the wider economy, particular attention needs to be paid to the construction sector in order to close the skills gap.

**Skilled labour migration**

There are good reasons to invite skilled migrants into the UK as workers. Skilled labour migration has been shown to be advantageous to receiving economies. A mobile migrant workforce can fill shortfalls in industries such as engineering and construction. Accepting immigrants who come to study allows UK companies to engage with well-trained individuals.

Challenges face migrants who want to pursue vocational education and training in the UK. These include unfamiliarity with a complex system of qualifications; language barriers for non-native English speakers; and the lack of traditional support structures accessed by students as part of their secondary schooling.

This complexity and corresponding lack of recognition can also prohibit UK citizens with vocational qualifications from emigrating in response to market opportunities abroad. In contrast, individuals with recognisable tertiary qualifications (namely, traditional academic qualifications) find overseas employment opportunities more readily accessible.
Conclusion

As the research shows, VET can significantly contribute to a sustainable, growing economy. It helps employers to fill skills gaps, and delivers productivity gains. And, as the Cebr’s forecasts show, increasing VET delivery has the potential to boost the UK’s economy through an increase in GDP and decrease in youth unemployment.

However, significant barriers remain: a failure to maximise the potential of skilled migrant labour, the complexity of the vocational qualifications system, and a lack of both employer and individual investment in vocational skills. Likewise the focus on targets risks sacrificing quality for numbers.

For the UK’s VET system to have maximum impact, firstly we need to see more stability in the skills and employment sector. Too much change causes confusion, uncertainty, and can deter both employers and individuals from engaging in the system. Instead, policymakers need to focus on the bigger picture, and align skills development to longer-term priorities and labour market information.

Additionally, the focus on targets can be detrimental to quality. Providing a high-quality learning experience must be the aim of VET. If the quality is right, trust and therefore participation in VET will increase. At the same time, considering the government’s current focus, it’s key to remember that while apprenticeships are important, they won’t tackle the UK’s skills gaps in isolation. Instead, there needs to be a holistic commitment to VET.

Finally, more needs to be done to inform young people about the opportunities VET provides. The governments – and indeed the education sector as a whole – has done well to boost the profile of VET over the years. But too few young people have access to impartial, effective careers advice, and therefore aren’t aware of the different career opportunities available to them.

Overall, the UK’s VET system has seen significant progress over the years. If the UK can overcome some of the challenges identified above, and continue to invest and champion VET, it can realise tremendous benefits.
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Methodology: The research was developed by the Centre for Economic and Business Research (Cebr) and research organisations Reputation Leaders and The Research Base.