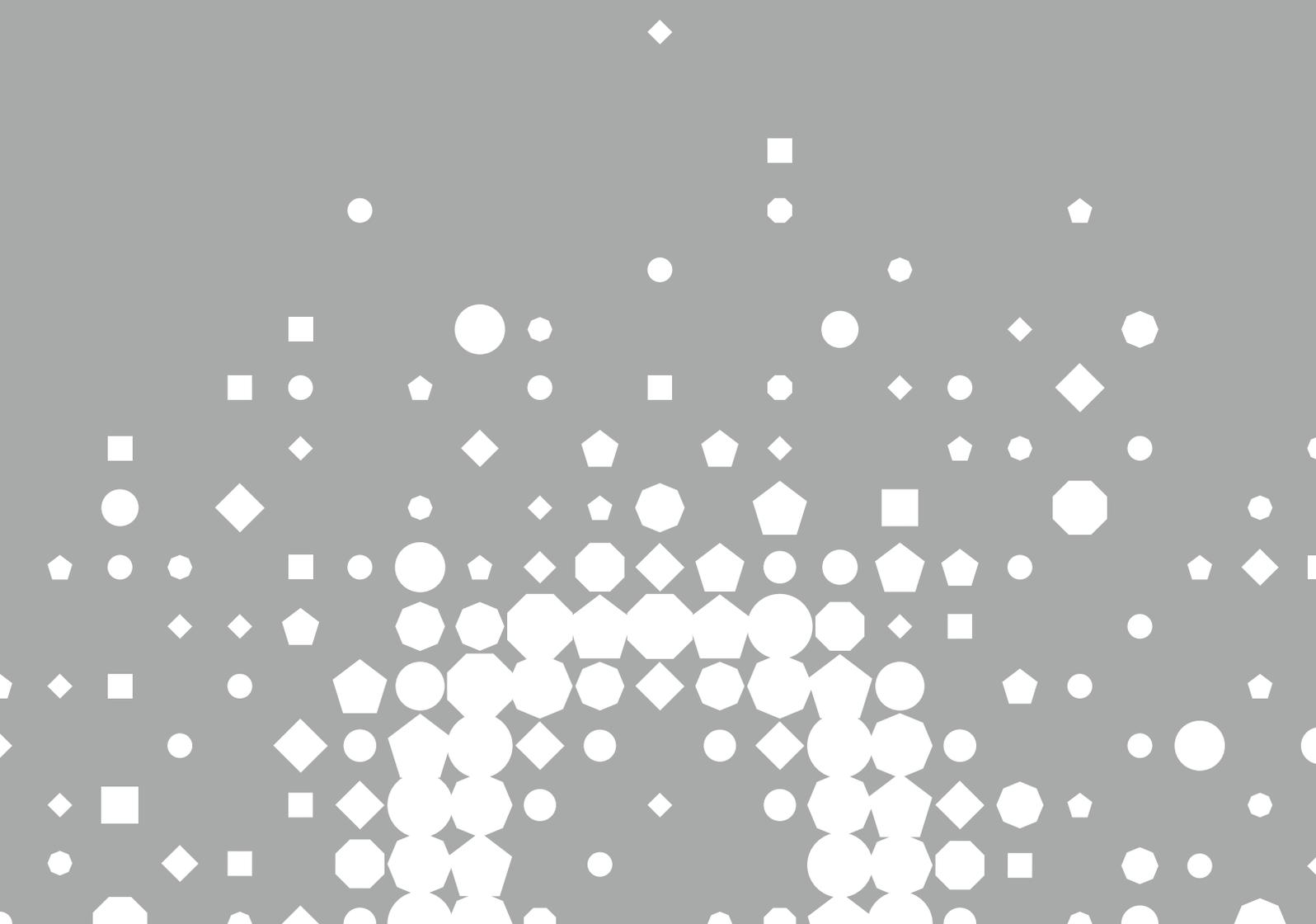


Summary Report

Global economic benefits of investment in vocational education and training



Introduction

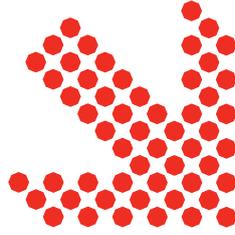




Vocational education and training (VET) refers to the acquisition of practical skills, attitudes, understanding and knowledge relating to a job or work. At a time when skills gaps threaten businesses and economies across the world, VET has never been more important.

As a global leader in skills development, the City & Guilds Group recognises its role in helping to connect governments, employers, education providers and individuals to ensure people have the skills they need to succeed in the future. That is why we commissioned this report – to better-understand the economic benefits of investing in VET, by drawing together various studies and reports into one place, and using economic modelling to predict the potential return.

This study has looked at four very different countries and their approaches to vocational education: the United Kingdom, the United States of America, India and South Africa. We have studied the state of VET in each country, and explored current in-country initiatives and challenges in more detail in the case studies accompanying this report.



Key Findings

Vocational education and training boosts economic growth

- Increasing vocational skills by 10% could boost UK GDP by £163 billion by 2025.ⁱ
- 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 and US.ⁱⁱ
- UK apprenticeships have a return on government investment of £16 to £21 for every £1 invested.ⁱⁱⁱ
- India is in a unique position demographically to provide skilled labour where the rest of the world is forecast to experience a skills shortage; as such, there is an active target to upskill 500 million workers by 2022.^{iv}

Vocational education and training benefits employers and individuals

- The net annual business benefit of training an apprentice in the UK in 2013/14 was £1500 per annum.^v
- UK businesses see average annual productivity gains of over £10,000 per hired apprentice.^{vi}
- Nine years after enrolment, US apprentices will have earned \$60,000 more than their similar counterparts who did not participate in an apprenticeship.^{vii}
- In the UK, level 3 apprenticeships or vocational qualifications may increase wages by up to 20% and employability by up to 14%.^{viii}
- Those who earn a certificate or diploma level qualification (in any subject) in South Africa can expect average wages that are twice as high as their peers who only complete high school.^{ix}

Vocational education and training is often a small proportion of overall education

- Less than 1% of 15-24 year olds in the US are involved in an apprenticeship scheme.^x
- According to one estimate, only 6.8% of India's labour force has received or is receiving vocational training of any kind.^{xi} Only 2.3% of the workforce have undertaken formal skills training.^{xii}

There are significant obstacles to vocational education and training

- Globally, the stigma of vocational education often reduces it to a second choice to academia.
- There is a lack of data proving the benefits of vocational education in many contexts around the world.
- Complex systems like those in the UK, US and South Africa may hinder employer involvement and deter candidates.
- In India, key challenges to implementing VET include a lack of coherent delivery mechanisms and 'narrow and often obsolete skill curricula'.^{xiii}

Increasing vocational skills by 10% could boost UK GDP by **£163 billion** by 2025.

Vocational education and training benefits national economies, employers and individuals in almost every situation

The overwhelming conclusion of this report is that vocational education and training can benefit national economies, employers and individuals across the countries that were studied.

Different economies enjoy great benefits from investment into vocational education and training.

UK government investment into apprenticeships returns £16 to £21 for every £1 invested. Between 2010 and 2011, the UK government invested £1.2 billion into apprenticeships and in 2010 saw a total economic impact of £25.3 billion.^{xiv}

At the macroeconomic level, a 10% increase in vocational skills over the next ten years could increase UK GDP by £163 billion by 2025.^{xv} While no national data is available in the US, in Connecticut every public dollar invested in a state community college earns the state over 16 times as much over a student's career. In Washington that amount is calculated to be \$9 for every public dollar invested, earned through revenues and benefits and in Tennessee more than \$5 for every \$1 invested.^{xvi}

India has an impending skills gap that may severely impact the economy. The National Skills Development Policy in 2009 set the target of upskilling 500 million workers by 2022 to meet this skills gap, despite problems with capacity.^{xvii}

Across these nations, one of the most startling factors was the effect on youth unemployment, especially as it relates to total unemployment. Where vocational education is strong, the gap between youth unemployment and total unemployment is often much smaller; and the opposite holds true. Cebr estimates that both in the UK and US, a 10 percentage point increase in the percent of upper secondary school pupils enrolled in vocational education would lead to a 1.5 percentage point reduction in youth unemployment rates.^{xviii}

This implies that increasing vocational education could have a significant impact in countries where youth unemployment is high. In South Africa, for example, the unemployment rate in 2013 was 25% - five times the world average for unemployment.^{xix} Youth unemployment, at 54%, was more than double the general rate.^{xx}

Employers feel the impact of skills gaps the most, and in each of the countries studied, major reasons for being unable to fill positions were a lack of appropriate skills and a mismatch of skills. PwC's most recent case study of South African CEOs found that 36% were 'extremely concerned' about the availability of key skills, compared to a global average of 17%.^{xxi}

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In contrast, those companies that take on apprentices, or are involved in the training process, report high satisfaction with those that they train and the benefits that go with them. Where data is available, companies that take on apprentices are shown to either benefit financially from their investment immediately, or recoup their investment within a short amount of time. In the UK, firms see average annual productivity gains of £10,000 per apprentice.^{xxii} The productivity benefits associated with training apprentices in the US are thought to be as high as an additional \$60,000 after 10 years of hiring an apprentice, and double that after 36 years.^{xxiii} In India, an International Labour Organization cost-benefit analysis, based on several case studies of small businesses, found that the increased earnings associated with apprenticeships typically outweighed the associated costs.^{xxiv}

Individuals who complete vocational education can expect higher wages over those that did not complete any form of higher education, and in many cases vocational education provides a further education option to those for whom the academic university option is not appropriate.

Individuals in the UK see higher earnings of up to 20% from level 3 vocational qualifications;^{xxv} in the US, apprentices can expect to have earned a cumulative \$60,000 more after nine years than peers with similar backgrounds who did not enrol in an apprenticeship scheme.^{xxvi} In South Africa, one study finds that those who earn a certificate or diploma level qualification (in any subject) can expect average wages that are around two times more than peers who only complete high school.^{xxvii}

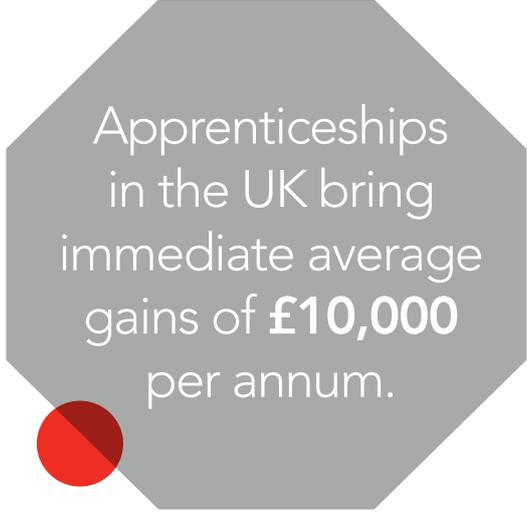
However, there was one case where these wage benefits were not realised; in India, several studies have failed to demonstrate the positive impact of vocational training on job prospects, and indicate no discernible difference in wage expectations;^{xxviii} employment rates are higher for VET graduates than the average for their age group, but lower than those who have graduated from general secondary education.^{xxix} Increased employment opportunity was, however, found to be true in the other three countries of study. Skilled individuals are sought after, and more likely to find work than their unskilled counterparts. In the UK, employment prospects can increase by up to 14% for those with a vocational education.^{xxx}

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36% of CEOs

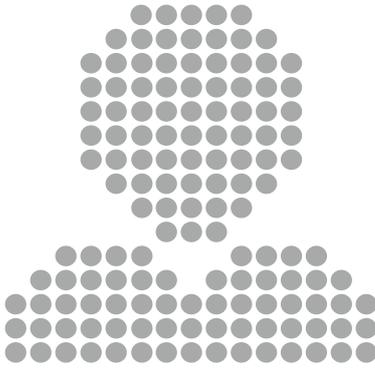
in South Africa were extremely concerned about key skills availability, compared to 17% globally.



Apprenticeships in the UK bring immediate average gains of **£10,000** per annum.



US apprentices earn **\$60,000** more than their counterparts in 9 years after enrolment.



Vocational education enrolment is a small part of education in general

In most countries, however, apprenticeships and vocational training make up a small part of overall education. Although accurate figures are difficult to acquire, one estimate is that only 6.8% of India's labour force have received or are receiving vocational training of any kind.^{xxxii} Less than 1% of 15-24 year olds in the US are involved in an apprenticeship scheme.^{xxxiii} Limited investment is a barrier to the expansion of vocational education.

In the US, less than 1% of 15-24 year olds in the US are involved in an apprenticeship scheme.

Governments are waking up to the potential of vocational training

Across the world, national governments have realised the significant role vocational education and training plays in their countries' futures. Speeches have been given and reports written on the dual dangers of the skills gap undercutting industry on the one hand, and the negative effects of being unskilled on the individual.

In response, ambitious goals have been set for vocational education enrolments and substantial investments made in vocational schools, apprenticeships and training schemes in all of the nations that were studied as part of this report. The UK government has set targets of three million apprenticeships over the next five years.^{xxxiii} President Obama's address to Congress in 2009^{xxxiv} included vocational education as part of the solution to his 2020 education goals and India, as set out above, has set goals of skilling or upskilling 500 million additional workers by 2022. ^{xxxv} The South African government intends to increase workplace

training, starting with government agencies and departments who will be encouraged to offer workplace training for vocational students. This is a first step towards fostering more workplace training in the private sector.^{xxxvi}

In many of those situations, and in many more across the world, governments have relied on international organisations to support them as they seek to raise the profile and uptake of vocational education. On one hand, countries such as the UK and US have invited the Organisation for Economic Co-operation and Development (OECD) to perform reviews of their current vocational context, and provide recommendations on how to encourage further growth of vocational training.^{xxxvii} In India, the Skill Development and Entrepreneurship Ministry is planning to raise \$460 million from the World Bank to increase the current levels of apprenticeship from 300,000 to 2.2 million over the next five years.^{xxxviii}

India has set goals of skilling or upskilling **50 million** additional workers by 2022.



Conclusion

As this report shows, VET helps to address skills gaps, boost productivity, enhance industries and increase employment – all of which have a significant impact on individuals and employers, and therefore economies and societies as a whole.

But there are still a number of barriers that need to be overcome; namely the stigma against vocational education – which is prevalent in all of the countries we explored – and the complexities of running an effective system that meets the needs of employers.

This will not happen overnight, but in each of the four countries covered in this report, investment and a focus on improving systems is increasing. This is a step in the right direction. Now, the challenge is building on this momentum, because if it continues, the payoff will be huge.

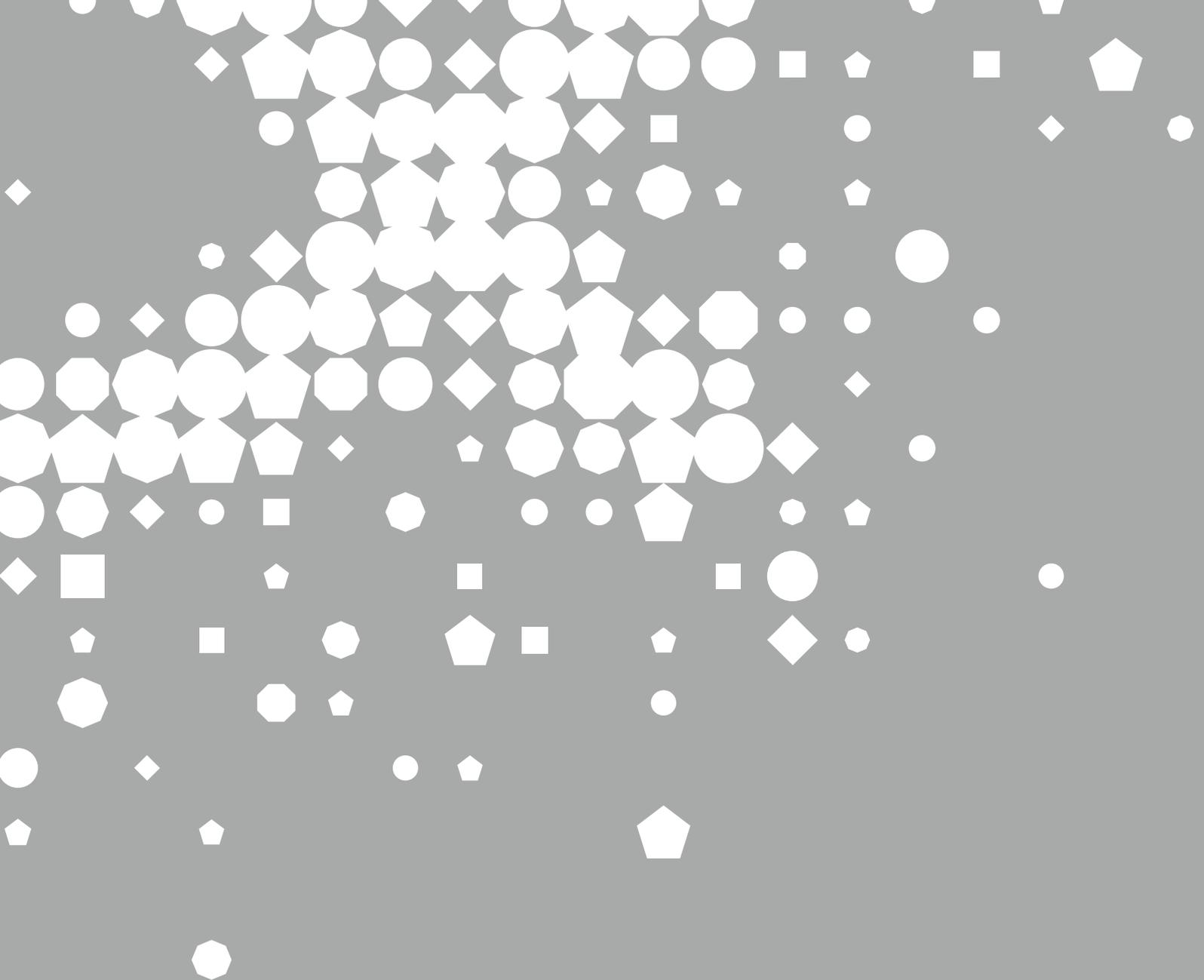


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Methodology: The research was developed by the Centre for Economic and Business Research (Cebr) and research organisations Reputation Leaders and The Research Base.





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