Debating the first principles of English vocational education

June 2018
Within the world of academic education, **extensive debate and work has taken place over recent decades** to look at underlying questions about its purpose, the way in which knowledge and information is structured, the means of teaching and assessing and the role of education in society.

This has been **much less the case for vocational education**. Society and the educational establishment have tended to view this as secondary to academic education and to jump straight into practical delivery rather than taking time to consider the underlying principles.

This results in two challenges to the system. The first is that there is **no consensus around what vocational education is for** and so answers can vary widely – from vocational education as an elite route to professional careers, to vocational education as second chance provision for disengaged young people.

The second is that this fuels the state of **constant revolution in the skills system** that has been highlighted so well in reports like City and Guilds’ *Sense and Instability*, a direct contrast to the approach taken in established and successful systems of vocational education and training internationally.

We wanted to kick start a **real debate about the underlying principles and philosophy of English vocational education** so that we can move away from instability towards a more settled and focused vision.

We are delighted to be working with a **coalition of excellent partners** to foster that debate – King’s College London, UCL’s Institute of Education, City and Guilds and the National Baccalaureate Trust.

We were overwhelmed by responses to an initial consultation document that we published in early 2018. This report **brings together some of the excellent contributions** from that consultation and a subsequent debate chaired by Chris Winch, Professor of Educational Philosophy and Policy at Kings College London.

This represents the next step in that journey, but we **want this to be part of an ongoing discussion**, with further opportunities to contribute to the debate during the Autumn and beyond. Do get in touch with your reflections on the further questions set out in this report or to register your interest in taking part in future debates (onewton@edge.co.uk).

**OLLY NEWTON, Director of Policy and Research, Edge Foundation**
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The Edge Foundation
4 Millbank, London SW1P 3JA
020 7960 1540 - www.edge.co.uk
When we explain the skills system in England to international visitors, one of the most striking aspects is its state of perpetual revolution. With 65 Ministers responsible for skills over the last 33 years this is perhaps not surprising. City and Guilds’ excellent report Sense and Instability makes this point very clearly.

Talking to employers, providers, young people and parents, what they tell us overwhelmingly is that the vocational education and skills system is complex and ever changing. What they want above all are stability and clarity.

England lacks the debate and consensus on the fundamental principles of vocational education which has underpinned the success of other nations’ skills systems.

As government embarks on another wide-ranging set of reforms through T-Levels, it is essential that we foster a thorough debate about the philosophy of vocational education. Working together as a sector to develop the underlying principles that should underpin all future reforms will finally provide us with a stable base for a successful skills system.

1. Why is this debate so important?

When we explain the skills system in England to international visitors, one of the most striking aspects is its state of perpetual revolution. With 65 Ministers responsible for skills over the last 33 years this is perhaps not surprising. City and Guilds’ excellent report Sense and Instability makes this point very clearly.

Significant and ongoing political tinkering in the Further Education system, identified as a problem in the 2014 report, remains a key issue. Following on from the Wolf and Richard reports in 2011 and 2012, the Post-16 Skills Plan is the third independent report into FE and skills in five years, while responsibility for skills has once again changed department, moving from Business, Innovation and Skills (BIS) to the Department for Education’s (DfE) remit. It continues to be a concern that some policy proposals do not have time to take effect in practice before they are subject to further revisions… the outcome is a sector that is continuously and rapidly changing.

The origins of Germany’s world famous dual system can be traced back to the early twentieth century and to the work of Georg Kerschensteiner.

He was the director of Munich’s schools, but also an acclaimed educational philosopher. His conception of vocational education as a route to develop inclusive citizenship and personal fulfilment underpinned all of his work and was developed in tandem with delivery. This in turn informed the development of the skills system across Germany.

The strength of the underlying philosophy and vision that Kerschensteiner set out is one of the reasons that Germany’s vocational education system has remained strong, stable and successful. This is a stark contrast to the rapid changes in the English system, which lacks these underpinning principles.
Debating the philosophy of vocational education – key questions

We wanted to break down this complex issue into a number of specific key questions to support the debate. There are three overarching questions, each with two supporting questions.

**What is the purpose of vocational education?**
- a. What is vocational education?
- b. What is vocational education for?

**What should the relationship be between vocational and academic/general education?**
- c. To what extent should vocational education be integrated with or distinct from academic education?
- d. Who is vocational education for?

**How should vocational education be taught and measured?**
- e. What pedagogical approaches should be adopted in vocational education?
- f. How should the success of vocational education be recognised?

The next section of this report is structured around each of these questions, providing views and insights from leading thinkers and practitioners.

Cindy Rampersaud’s contribution provides us with a helpful starting point for a definition of vocational education.

*Cindy Rampersaud*, Senior Vice President, BTEC and Apprenticeships, at Pearson

Vocational education is a commonly used term but it is often used vaguely, and there is no clear and universal understanding of what it means. Part of the issue stems from attempts to articulate a distinction between ‘academic’ and ‘vocational’ on the wrong grounds. ‘Academic’ can be used to describe the study of theory, not work-related, but intrinsically worthwhile, and studied for its own sake. ‘Vocational’ can be used to describe training in practical skills, work-related, and studied with the intention of moving into employment. The language is confusing and incorrect; academic and vocational education are not distinct in this way.

A wide range of terms is used partly interchangeably for this kind of education – vocational, professional, technical. While ‘technical and professional’ is currently in vogue as the official term, we have used ‘vocational’ in this discussion as that is the longstanding and international description and it is important that this debate focuses on the medium to long term.

The question of a definition of vocational education goes right to the heart of this debate, and the lack of a settled answer is one of the main reasons for the cycle of constant change in this policy arena. There are a variety of ways in which vocational education has been defined, including in relation to:

- **The nature of the learning** – for instance, focused on learning technical skills.
- **The aims of the learning** – for instance, focused on preparing for work.
- **The students** – for instance, those who are more focused on entry to employment.
### Vocational philosophy

Academic education can be vocational in that it is often practical (experiments in science, field projects in geography), and is often chosen with a specific career goal in mind (medicine or journalism). Vocational education includes underpinning theories related to the subject being studied (maths and physics for engineering, physiology for sport). The false dichotomy is linked to another misconception; that learners can be described as being either ‘academic’ or ‘vocational’. We need to be clear in our use of language; this will help us move away from both misconceptions.

With this in mind, vocational education can be defined as an educational pathway which integrates theory and practice and develops practical intelligence underpinned by theoretical knowledge, and transferable skills. A specific vocational context - broad or narrow - is used to define the focus for learning and assessment, and the line of sight to work is more pronounced.

Another key point, which we shall return to under the question of the relationship between vocational and academic education is the misleading tendency to define the two in opposition to each other. In reality the most effective development can take place at the confluence of the two where young people are learning, doing and reflecting. This suggests that, as in other European countries such as France, the system would benefit from a single aim across school, further and higher education. Lord Knight’s contribution makes this point strongly and introduces the key concept of preparing people not just for work but for ‘satisfying work’.

Lord Knight of Weymouth, former Minister for Schools and Learners

I believe that people have much greater wellbeing if they feel they are making a valued contribution to their society. This is normally through work. Job satisfaction is significantly improved through vocation, and a belief in work being more than just a way of earning to provide for yourself and your loved ones. Vocational education brings together academic learning with applied learning and skills, to prepare people for satisfying work. This applies equally to surveyors, architects, electricians, artists, actors, doctors and many others in vocational education in schools, colleges and universities.

The focus of the debate so far suggests that we need to agree a clear and longstanding definition of vocational education to sit at the heart of the system. There is no single vision for what this definition should look like and so this is an area that will require significant further discussion and debate.

Most contributors to our initial consultation agreed that this definition should not be based on the ‘type of young person’ for whom vocational education is suitable as that can lead to reinforcing stereotypes and misconceptions. Instead it should be a positive definition focusing on the unique nature, context and purpose that vocational education offers.

One strand of argument that runs through many of the questions in the debate is a recurring view that academic and vocational education should not be defined in opposition to each other, something which will be explored further in Section 5 below.

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**Continuing the debate**

In no more than 100 words, how would you define vocational education?
Building on the evolving definition of vocational education, it is also essential to try to understand and agree its purpose, both for the individuals involved and for society as a whole. This has been an area of particularly strong interest in the debate so far.

One key point that has come up consistently is that vocational education does not and cannot have just one purpose and we must get away from the administrative neatness of trying to place all vocational learning into the same box. Professor Ewart Keep makes this point very clearly. He raises the concept of the ‘worker citizen’ that reminds us of the important role that vocational education has in supporting young people to prepare themselves as rounded human beings not just future employees.

Ewart’s discussion also reminds us that in this debate we must be constantly wary of slipping back into the well-worn cultural norm that vocational education is second-chance provision for other people’s children. Only by giving vocational education its own philosophical underpinning and status can we start to properly reclaim this territory.

There are several different potential purposes for vocational education. These include: entry into employment and an occupation and formation of an occupational identity, as well as subsequent progression within that occupation; a means of providing a foundation of general education that can support re-entry into academic learning later in life and broader lifelong learning; and a foundation for life as an active citizen (the worker citizen model). It can also provide a form of enterprise education. It can do this by offering the skills base for owner/manager status, as is the case in much German apprenticeship provision, where for example, the retail apprenticeship aims to deliver the skills and knowledge needed for the apprentice to ultimately manage or own a shop, rather than simply equipping them with the basic entry level skills needed to work as a shop assistant. It can also act as an enabler of
Vocational philosophy

contributive justice, whereby each citizen and worker has the opportunity to develop their full potential to contribute to the wellbeing of society to the best of their ability.

All too often in England it is none of these things. It is sometimes a low level qualification that, rather than delivering the development of an occupational identity and associated knowledge and skills, offers instead an attenuated bundle of skills and competences that fits the person for a specific low-paid, dead-end entry level job – e.g. a level 2 in ‘customer service’. The learning associated with many lower-level vocational qualifications remains task-focused, fragmented, and lacking any serious underpinning theory or deep knowledge.

These deficiencies exist, in part, because vocational education, outside of that offered in higher education, too often remains as being for ‘other people’s children’. It is also seen as being remedial and there to fill the gap left by the failures of mainstream (academic) schooling to engage and motivate a substantial proportion of learners. It is, as the previous chief inspector at Ofsted saw it, for those who failed at school and were failed by their school (the successes progressing into further academic learning). The conception of vocational as a second chance or remedial form of provision has considerable consequences for its status, not least relative to more academic types of learning.

Finally, vocational learning for the young is too often a warehousing function or ‘waiting room’ that allows time for employment expectations to be ‘chilled’ or adjusted downwards to meet harsh labour market realities.

It is not always the case that vocational learning in England is poor. Some courses are of world-class, exemplary quality, and deliver deep learning and excellent employment outcomes, but too often this provision feels like the exception rather than the rule. Without real debate about how best we can improve the quality and status of vocational learning outside of higher education, we face major problems.

This leads on to the question of the extent to which in reality nearly all mainstream learning is at its heart vocational as it aims to prepare people for future life and work, whether in engineering, performing arts or academia. This theme is explored by Geoffrey Elliot.

Dr Geoffrey Elliott, Professor of Post-Compulsory Education, University of Worcester

It is a mistake to conceive of vocational education as a distinct field of education, since the two forms share more characteristics than separates them.

If the purpose of vocational education is to prepare people for a vocation, employment, career, does not all education offer this benefit, by expanding the learner’s ambition, extending their skill, exposing them to the enduring values on which education is based?

Individuals approach formal and informal education from their own distinctive standpoint. On any course there may be participants who are seeking to change jobs, to move out of unemployment, to return to learn after a career break, to progress in an organisation from their current role. Equally, there may be those on the same course who wish to learn new skills, enjoy the social interaction of learning in a group, widen personal horizons, escape from a familiar routine. Whatever the motivation of participants, each will have developed their own way of learning.

It is most important to understand how students learn and to design learning environments, student support and ways of teaching that afford different approaches. Placing the learner at the centre of the education process will help to ensure that appropriate pedagogies are employed, whether the course is labelled as vocational or academic. And we would do better to try and avoid this unhelpful terminology from distracting us from the need to create openings and opportunity for all students whatever their individual motivation.

David Crossley (Whole Education) brings these themes together, arguing for the importance of vocational

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learning as part of all young people's entitlement to a ‘whole education’ that is relevant, engaging and helps them to develop the skills they need for working life.

The debate has also made clear an important tension in thinking about vocational education between helping individuals to develop the broad transferable skills they will need for almost any job, versus the knowledge of a particular sector and specific skills they need for an individual occupation. The former is a strong feature of other leading systems, including Germany where specific occupational preparation only takes place in the final year of training. Particularly given the impact of the fourth industrial revolution, the balance should be increasingly on these broad transferable skills.

David Crossley, Associate Director, Whole Education

To me the purpose of vocational education is to enable all children and young people to achieve their full potential and thrive in life, learning and work. This purpose requires the offer of an entitlement for all to what we would define as a ‘whole education’. This is an education that is broad and inclusive; one that helps children and young people to develop a range of skills, qualities and knowledge that they will need for life, learning and work and vocational education almost by its nature has a key role to play in helping develop those wider skills and attributes. More widely it is a proxy for avoiding an overemphasis on testing and a narrow curriculum.

Secondly, vocational education can help our education system better respond to its two broad aims - raising achievement and narrowing the gap. The current policy driver in the education system is to push ever more youngsters through a traditional narrow academic curriculum designed for entry to Russell group universities. There is another and better way for many, if not all, of our children and young people. That is an entitlement to a more balanced curriculum - an offer that combines an academic curriculum with challenging and demanding vocational education.

More fundamentally, I would argue that high quality vocational education can provide a response to what many observers and commentators identify as a weakness of the English system: the gap between the outcomes achieved by more disadvantaged students and others. Disadvantaged young people have more limited opportunities outside school to develop knowledge, skills and personal qualities and it is therefore essential that schools plan their curriculum in ways that help to develop these in every student and again this can be a key contribution of vocational education. As the Character and Resilience Manifesto published by the All Party Parliamentary Group on Social Mobility rightly says, ‘the so called soft skills lead to hard results’.

A third purpose of importance to young people in schools is that high quality vocational education can and should help make learning more real, relevant and engaging. This in turn helps them to internalise and embed their understanding, leading to learning that lasts. It also enhances young people’s engagement and encourages them to take ownership of their own learning.

Finally, I would stress the purpose of vocational education in terms of the enhancing aspirations and hopes of our children and young people and how best to enable them to achieve their potential, which has a positive impact on their individual lives and on our society and economy as a whole.

It has become clear that vocational education should be acknowledged as having a range of different purposes. These can include training for entry to an occupation, increasing skills within an occupation and providing a foundation for life as an active citizen.

As discussed in Section 3, the dichotomy between academic and vocational learning is seen as largely false. Some contributors argued that all learning is at least partly vocational as it is about preparation for future life and work. Others emphasised that some of the most effective learning can take place where individuals can learn and practice in real contexts.

Vocational education can also have an important social purpose, raising aspirations and helping to ensure that
all young people receive a ‘whole education’ that helps them to become rounded individuals or worker citizens.

The debate will need to take account of the fourth industrial revolution as it continues to progress and rapidly change the economy. This is likely to have a bearing on many aspects of the discussion, in particular on the balance of broad transferable skills versus specific job skills within vocational education.

Continuing the debate
How can vocational education best develop the broad transferable skills that will be needed as we progress through the fourth industrial revolution?

5. To what extent should vocational education be integrated with or distinct from academic education?

Starting with a point of definition, England appears almost unique in the world in referring to ‘academic education’ to make the distinction with vocational or technical education. In most other systems, this is referred to as ‘general education’, with academic being reserved for higher specialist academic study. This is a much more sensible position, making clear that there is some knowledge and skills needed by everyone in general and removing the misconception of ‘academic’ as superior to ‘technical’ from an early age.

This is an area where there have broadly been two schools of thought:

- First, that vocational education should have a strong and distinctive identity that is separate from academic education. This would focus on the unique teaching style and opportunities that the vocational dimension can offer and would necessarily require young people to make a choice between an academic and a vocational track at a particular age or stage. The government’s current T-Level and apprenticeship reform effectively create this decision point at 16, with little opportunity for blending and no further information available at this stage about ‘bridging provision’. Phil Crompton explores the possibility of this distinctive approach from 14, with much greater possibility for blending.

Phil Crompton, Chief Executive Officer, Trent Academy Group

Having been involved in education for over 30 years I have seen many approaches to vocational education. Usually they fail because they are seen as being directed towards the less able and then are hijacked by pedagogy and content that is not really different from academic courses.

My view is simple. Ensure vocational courses are different and easy to understand. Being able to construct a heating system for a house is just as valid - arguably more valid - than understanding the history of medicine, glaciated landscape features and irregular verbs. The time has come to acknowledge this.

By the time children reach the age of 14 they know if the academic route is for them – and in my experience for as many as 30% of young people the academic curriculum totally alienates them. All learners should have the chance to experience vocational education from the age of 14, helping them to take steps towards rewarding and important careers in sectors from healthcare to education to construction.

Some young people at this age will be confident enough to commit totally to a vocational route (e.g. a pre-apprenticeship). Most need to be able to blend the academic
To what extent should vocational education be integrated with or distinct from academic education?

and vocational to keep their options open. Courses should run from 14-19 and include a variety of assessment forms.

This will allow every student the chance to fulfil their potential, bringing much more out of talented youngsters who have abilities beyond the purely academic.

Second, that there should be a **unification, bringing vocational and academic education together**, with vocational education not having its own distinct identity. Richard Pring looks at the challenges of previous attempts at unification and the possibility of a future integrated system.

**Richard Pring**, Professor Emeritus, University of Oxford Department of Education

Only in the 1970s was a comprehensive system of education introduced into England and Wales. The organisational ‘bridging’ of the erstwhile divide between academic and non-academic later developed into a common national curriculum up to the age of 16, consisting of ten subjects. Vocational preparation (in the sense of providing skills relevant to specific occupations) would be postponed to age 16, when, general education having been completed, the young person could go to colleges of further education, or take a job with work-based training. Schools were for education; colleges and apprenticeships for vocational training.

Something, however, was lost in this admirable attempt to find a common curriculum for all in a non-selective system – and, indeed, in that distinction between, and that consequent separation of, the academic and the vocational. The comprehensive school had respected the value of practical learning, not just as a form of learning for those who were less academic, but as an important way of understanding, and of working intelligently within, the physical and social worlds students were to inhabit. Future engineers need more than an ‘academic education’. Practical ‘doing’ can be as demanding intellectually. It can incorporate or embody theoretical understanding, and lead on to yet further reflection and theorising.

The years after 2000 saw a vigorous attempt to develop a 14-19 phase of education. But such an attempt was bereft of any deeper consideration of the kind of learning which is to be valued, the kind of qualifications which will reflect that learning, the kind of institutional framework which will support it and thus the ways in which progress can be ensured into higher education, further training and lifelong learning. Policy and planning are trapped in an impoverished dichotomy between academic and vocational. There is little sense of a more generous tradition of education, reflected in developments in the
1970s and 1980s, where the focus of concern lay in the education and development of persons. Such a tradition would see the academic and the vocational in proper perspective and create the possibility of an integrated system of education and training, reflected in an appropriate and uniform framework of qualifications.

Ken Spours argues for the opportunity to reconcile these two points of view in a single position for 14-19 education that would allow all learners to experience both distinctive vocational and general education as part of a single coherent progressive curriculum.

Ken Spours, Professor, UCL Institute of Education

In broad terms, the debate concerning the relationship between general and vocational education can be characterized as an argument between those in favour of vocational distinctiveness and those proposing a close relationship between vocational and general learning (unification position) in the English 14-19 phase.

The distinctiveness position is based on the premise that vocational learning has quite specific features connected to the needs of the workplace and that it is from its association with employment that vocational learning derives its status. They also point to recent developments in vocational qualifications – parity of esteem approaches found in for example GNVQs and 14-19 Diplomas - that have diluted vocational content by trying to imitate features of academic/general qualifications.

Conversely, the unification position starts from a more historical perspective to suggest that the separation of vocational and general education is artificial because it is impossible to separate human thinking and practice and that attempts to promote a mental/manual divide is basically a reflection of class-based attitude. They would point to the fact that the distinctiveness perspective is applied only to the lower occupational levels and to 14-19 education and is not deployed in relation to the established professions or higher education.

Here I will argue that both perspectives contain more than a grain of truth and we should be exploring a new settlement between vocational distinctiveness and vocational and general education unity. The arguments for this dialogue lie in modern industrial and societal processes. Emergent productive processes - the Fourth Industrial Revolution – that focus on advanced technological developments will require a multi-disciplinary and fluid approach to learning; a dynamic of theory and practice. This points to a close relationship between general education and vocational learning, particularly through the lenses of complex problem-solving. There is also the additional debate about the ‘rise of the robots’ and the disappearance of routine jobs, both of which highlight the importance of general as well as vocational education as an entitlement and part of a wider preparation for active citizenship.

At the same time, work in all its forms is not going to disappear; new jobs will be created and these will demand new types and combinations of vocational skill and understanding.

Moreover, the fact remains that young people and adults gain a significant part of their identity through employment, developing specialist knowledge and skills and ‘becoming’ a worker. The workplace can and should offer a myriad of opportunities for learning, but the question becomes one of the capacity of the workplace to offer what Fuller and Unwin term an ‘expansive environment’ to do so.

The legitimate distinctiveness of vocational learning thus exists, but is strongly ‘situated’.

So what does a proposed ‘unification/distinctiveness settlement’ mean for 14-19 education? If we are to go with the flow of the demands of upcoming industrial and technological processes and avoid approaching this through the lens of class division, then the relationship between vocational and general education needs to change with age and stage rather than being based on prior attainment.

In practical terms this would mean that all learners in the 14-19 phase experience both: that A Level learners for example would have to engage with 21st Century
To what extent should vocational education be integrated with or distinct from academic education?

Competences beyond their chosen specialist subjects and those taking BTEC qualifications would have to meet similar general requirements. In this sense, learners on both routes would be taking combinations of general and vocational learning, but in differing proportions. Furthermore, these combinations would also alter according to the stage of the learner and that increasing degrees of specialization would be experienced later in phase rather than earlier.

The new unification/distinctiveness settlement thus points to a progressive curriculum framework from 14 years that allows for combinations of learning and high degrees of vocational and general education distinctiveness (specialist subjects/areas of study) to be explored to be carried over not only to higher education, but also to apprenticeships and the work-based route.

As we might expect for a debate addressing some very longstanding and ingrained views, there may be a need for us to consider the terms that we use as part of that debate – the question of whether we should refer to ‘general’ rather than ‘academic’ education at Level 3 and below is a good example of this.

The possibility may also exist to reconcile these two positions by focusing on a distinctive high quality vocational education as part of a single coherent progressive curriculum. What would change to tailor this to the needs of individual young people or to the age and stage of learning would simply be the balance between the two approaches.

Continuing the debate

Should our approach to vocational education be one of (a) distinctiveness; (b) unification with general education (c) attempting to reconcile the two?
This is perhaps the most controversial question of all. To discuss it we must recognize all of the longstanding societal views about vocational education and the misconceptions that it is only for those young people who cannot make it in academic education, are at risk of disengagement or are ‘good with their hands’. Ann-Marie Bathmaker makes clear this ingrained link between vocational education and socio-economic status.

Ann-Marie Bathmaker, Professor of Vocational and Higher Education at Birmingham University

This question is a question of social class and disadvantage in the UK. The overlooked and missing 50% who were identified as a key concern in a number of reports in the 2010s are very often from more disadvantaged socioeconomic backgrounds. Not only do they by default end up in ‘vocational’ forms of education, but a key goal that vocational education could achieve, would be to improve the quality of the education offered to this overlooked 50%. To a considerable extent, this is what further education colleges have sought to do for many years, particularly since staying on post-16 became the typical pattern from the 1980s.

The pursuit of parity of esteem and equal standing is both hugely problematic and a goal that is in my view a complete waste of time, certainly in the UK. Until Degree Apprenticeships automatically lead to employment that attracts the same high salaries and opportunities for advancement as a first class honours degree from Oxford or Cambridge, and until elite level professions are defined as ‘vocational’ or even ‘technical’, then the reality of vocational education remains that much more problematic.
vocational education is that it is geared towards middle-level, mid-to higher skilled, technician level employment, which in the UK does not attract the same returns as high-skilled graduate work.

As we move beyond these misconceptions, the answer to this question is tied irrevocably to our response to the previous question about the extent to which vocational and general education are distinct.

If we follow the distinctiveness argument, then vocational education should be for **those young people who make a conscious choice** that this form of learning best suits their approach and aims.

If we look at a unified position, the question becomes moot as **vocational education simply becomes rolled into a broad general education**.

Alternatively, if we pursue the approach of compromise between these two positions, this **question becomes one of balance** – all young people should have access to distinctive high quality vocational education, as part of a broad unified curriculum. The balance between vocational and general should change with the age and stage of learning, and to suit the individual needs of each young person. Such a system could successfully underpin the progressive vision set out by Robert Halfon.

**Rt Hon Robert Halfon MP**, Chair of the Education Select Committee

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**Vocational education should be for everybody. We need a far greater focus on skills throughout the school system. For far too long technical education has been the poor relation of academic study. This must change.**

We have a dire skills shortage in this country. That is not just dragging down productivity, but doing active harm to many of our people. It can’t be right that nine million working aged adults in England do not have the basic skills to get on and thrive. We must do better.

And we must act soon, because the rise of automation is only going to worsen this situation as fewer and fewer unskilled jobs will be available. For too long people have sought to solve this problem by sending more and more young people to study academic subjects at university. But **this is unsustainable. Many degrees are poor investments giving young people little in return for their money.**

Instead we must build a system around what works, encouraging people down paths that lead to good jobs and financial security. This means far greater investment in degree apprenticeships, which allow people to earn as they learn and develop skills that employers really value. It means a University Technical College in every town, and an Institute of Technology place available to every learner. It means proper careers advice that genuinely informs young people of all opportunities available to them, and an application system as simple to navigate as that used by universities.

Only by doing this will we allow everybody, no matter their background, to climb the educational ladder of opportunity.

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The way in which we answer this question depends strongly on the position we choose to adopt in the distinctiveness-unification debate (Section 5). Distinctiveness requires us to define specifically and positively the target audience while unification implies that this is universal. The reconciliation position makes the answer to this question one of balance – all young people should receive some distinctive vocational elements within a broader curriculum tailored to meet their needs.

Another key aspect of this question, no matter what the specific target group, is the age at which young people should have access to vocational education. Lord Baker’s contribution makes a case for this to be earlier than in the current system, by at least the age of 14.
Vocational philosophy

Lord Baker of Dorking, CH.
Former Secretary of State for Education

At primary level, it would be possible to introduce into the curriculum studies in practical and technical topics. The new digital technologies could help here. Children of 7 and 8 years are used to playing games on screens and using mobile phones. The Government has announced that primary schools should introduce courses on coding. This has got off to a faltering start, but it does point to a way forward to engage young people in the techniques of digital technology from an early age that will dominate their lives and indeed the work opportunities that will emerge.

The English education system is dominated by a school structure of 11-16 and 11-18 secondary schools. So, the question arises at what age should vocational education start in earnest? Is 11 too early and 16 too late? It is very important that whenever it does start, local employers must be closely involved in helping to shape the curriculum that they think is necessary for their needs. All of my experience, from Secretary of State to developing University Technical Colleges, suggests that 16 is simply too late. Young people and employers both show an interest in technical education from at least age 14, which must be fostered.

The pattern of education which should be adopted across the system, and which UTCs already exemplify, is to combine academic and technical subjects. Students should take GCSEs in core subjects, but not in the full EBacc and they should go on to study A-Levels alongside technical options. The object of this broad and balanced curriculum should be to provide leavers at 18 with a range of skills that they can apply to a wide variety of industries. The skills that employers tell us are called for are an experience of team-working, engagement in problem-solving, practical experience and communication skills. The purpose of the education system should be to train the intelligent and creative hand – our only hope in the rise of the robots.

If vocational education is left to start at 16 it means that students who followed only an academic curriculum to that age will be very hard-pushed to choose a technical route and certainly to reach Level 3 in two years. Our focus must be on offering high quality technical and professional education from at least the age of 14 so that more young people can reach Levels 4 and 5, the key areas of skills shortage in our economy.

Continuing the debate

What is the right age for young people to begin to have access to vocational education?
What pedagogical approaches should be adopted in vocational education?

The answer to this question is also bound up closely with the debate between integration and distinctiveness from academic education. Recent reforms have been built on the assumption that the teaching of vocational education can become more effective if it borrows certain pedagogies and modes of assessment from the academic sphere — for instance the move to much greater end-point assessment in new apprenticeships.

Many contributors so far have emphasised the opposite — the need for a distinctive vocational pedagogy. Peter Hyman emphasises a few of the ingredients of this from his experience.

Peter Hyman, Executive Headteacher, School 21

Education needs to be more expansive. We need to develop the whole child — head, heart and hand. And young people need to be taught with a repertoire that develops these sides to them. The starting point for us is oracy (speaking). This is not just because employers say repeatedly how important it is. Nor is it because so many more jobs in the future will require articulate and skilled communication. But because there is a moral purpose in every young person finding their voice and taking control of their own life.

A second key approach that blends the best of head, heart and hand and gets young people thinking, doing and creating is interdisciplinary work that solves real world problems. Using the best of design thinking, having an authentic audience as the focus and creating a product that has value beyond the classroom can be transformational.

The third pedagogical approach that has the potential to give young people a head start, is giving them the coaching tools and approaches to develop their well-being, bounce back from setbacks, take risks and have the reflection and confidence to constantly grow and improve.

Several contributors also emphasised the importance of the location as the context for vocational learning and the need for this to take place in classrooms, laboratories and workplaces, a theme explored further by Prue Huddleston.
Vocational pedagogy

Prue Huddleston, Professor (Emeritus), Centre for Education Studies, University of Warwick

Vocational pedagogy brings together teaching, learning and assessment within specific contexts which often have wider developmental concerns, for example lifelong learning, but also seek to develop other generic and transverse skills (applicable in a wide range of contexts), as well as sector specific knowledge and skills.

It is much more than linking theory to practice. It involves the combination of knowledge, skills and behaviours that provide access to communities of practice and build professional identity. Vocational learners require exposure to rich and varied learning environments including real workplaces – workshops, studios, laboratories – inhabited by experts with recognised professional identity. In short, vocational pedagogy must embrace the ‘what’ ‘how’ and ‘where’ of learning, bringing together content, process and context (both social and professional).

Vocational pedagogy recognises that learning occurs in different ways and in different contexts and should provide opportunities for learners to engage in problem based approaches, collaborative learning, cross-subject working and in using new technologies. But it also requires learners to ‘make sense’ of that learning through reflection, making connections, planning and reviewing performance. Developing these meta-cognitive capabilities is an important aspect of developing strong vocational pedagogy.

These contributions point to a number of recurring themes and ingredients that have repeatedly surfaced in the debate so far as possible key ingredients of a distinctive vocational pedagogy.

These include project based learning, cross-subject collaboration, significant employer engagement in the curriculum and students spending time in real workplaces.

Continuing the debate

What would be the key ingredients of a distinctive vocational pedagogy?

8. How should the success of vocational education be recognised?

A huge number of different qualifications has been developed and used over recent decades to measure achievement in vocational education.

Paralleling the debate on distinctiveness versus unification, one key area of controversy has been the question of ‘equivalencies’ - whether these qualifications should be given legitimacy by being compared to academic qualifications or stand on their own merits.

Others have argued that the success or otherwise of vocational education should be measured in different ways to academic education, for instance by looking at the further education and employment destinations of participants over and above the qualifications gained. Lord Baker’s contribution picks up this theme initially.

Alice Barnard, Chief Executive, Edge Foundation

The ultimate success measure for education of all forms should be the destination of its students. What matters is not simply that young people come away with a clutch of paper qualifications, but that they get the wider support, social capital and professional skills to succeed in their lives and careers.

Pupil destinations should be recorded and measured rigorously and in a timely way, with comparisons showing what a school or college’s pupils went on to do up to 5 or 10 years after they left. To ensure fairness, school and college destinations should be compared
with their peers providing education to a similar socio-economic group.

Mike Tomlinson was absolutely right to suggest in 2004 that there should be a single integrated end-of-school baccalaureate or diploma. This should seamlessly mix vocational and academic qualifications, an extended project and personal development, thereby measuring rounded achievement and readiness for adult life.

Achievement of this Baccalaureate together with pupil destinations should be the two key measures of success.

Lord Baker’s contribution also touches on a third school of thought. Just as Ken Spours suggested (Section 5) that it might be possible to reconcile the distinctiveness and unification arguments in terms of the curriculum, some feel that a comprehensive baccalaureate would create a single effective measure that does not reinforce the perceived differences between academic and vocational education. This would build on the success of the International Baccalaureate, which is offered in more than 140 countries.

Continuing the debate

To what extent should the assessment of vocational education be based on:
(a) equivalency to academic education;
(b) distinctive measures;
(c) A holistic baccalaureate?

9. International reflections

Dina Kuhlee, Acting Professor of Vocational Education, University of Stuttgart, Germany

International comparison and reflection can be a very powerful part of this discussion, as long as we avoid the temptation for simplistic ‘policy borrowing’. We were delighted that Dina Kuhlee could join us at the Big Debate discussed in the next section to provide reflections from a German perspective. We will continue to include and grow this international strand as part of the ongoing debate.

Philosophies of VET, their relevance for the design and institutional integration of VET in the German school system

As in England, the topic of equivalence between academic and vocational education is an ongoing debate. Historically drawn from the German new humanism movement of the 18th and 19th century (Neuhumanismus), the relationship of academic and vocational education was defined by a clear division of content, age and institutional setup well into the 20th century. This was often connected with the notion that vocational education is focused on adjusting young people to the practicalities of work, not on education (Bildung).

This understanding was highly criticised by the German theory of vocational education (Klassische Berufsbildungstheorie) represented by Kerschensteiner (1854-1932), Spranger (1882-1963) and Fischer (1880-1937) who highlighted the educational value (bildende Wert) and the relationship between work, vocation and academic/general education. Their work influenced the understanding and the development of 20th century vocational education in Germany. To this day, however, elements of division between the two sectors remain, and vocational education is still perceived as the less privileged form of education.

Vocational education in Germany at present includes and serves two central dimensions: berufliche Tüchtigkeit, which refers to the development of professional efficiency, and berufliche Mündigkeit, which identifies the development of maturity to reflect and critically analyse one’s own professional acting as well as economic, occupational and social structures, and to take on social responsibility in these matters. Vocational education therefore not only aims to qualify for the labour market, it also contributes to the personal development of young people. It is seen as aiming to develop the technical, vocational, methodological, social and ethical competences to reach the capacity...
Vocational philosophy

to plan, realise, control, reflect and adapt one’s own professional action (berufliche Handlungsfähigkeit), as defined in the German vocational education law (BBiG, § 1, section 3). This is based on a broad understanding of the everyday work a skilled worker has to fulfil, and is not reduced to the execution of particular tasks.

This approach is reflected in the curricular design of training programmes which lead to governmentally-recognised occupations (Ausbildungsberuf) at skilled worker level. There are currently some 330 governmentally-recognised occupations that are based on training regulations. These have been negotiated between and acknowledged by trade unions, employer associations and the government. Their profiles are independent of the specific needs of particular companies and include a wide curriculum of related training. This intends to ensure not only mobility and independence of the skilled worker in the labour market but also transparency and the possibility to connect to further, lifelong learning.

As initial vocational education is generally integrated at upper secondary level; vocational orientation and guidance is a central issue of academic/general education at lower secondary level, up to the age of 16. At this level, most schools provide a specific subject introducing students to the world of economy and work (Arbeitslehre) and offer vocational guidance and orientation. In this way work and occupation is a matter of academic/general education in the German context.

However, the traditional structure of German vocational education is currently under pressure. Digitalisation, demographic issues, skill shortages, demand and supply, and the increasing uptake of academic routes (Akademisierung) call for more innovative solutions in a very set sector of education. Current discussions and developments in Germany indicate the need for a review of the interconnection between vocational and academic education, from upper secondary level onwards, particularly with respect to the design and institutional setup of hybrid programmes incorporating elements of both.
It is always dangerous to try to distil the essential points made by such a diverse and knowledgeable group of participants, but I shall do my best. The first point is that there was surprisingly little dissent about the problems that face English vocational education and what its direction of travel should be. There were naturally differences of opinion and emphasis, particularly on implementation issues like vocational pedagogy and assessment, but on the key question of what it is for there was a large measure of agreement. This agreement, gratifying though it is, does not however necessarily mean that solutions to complex problems are ready to hand.

In terms of the aims of English vocational education there was general agreement that it does not have to have one single aim and that multiple and complementary aims are desirable. Preparation for working life was considered to be essential, although some contributors emphasised the need for this to be more than just preparation for jobs, but something more akin to preparation for an occupation. Many contributors also emphasised that today’s young people need to prepare for a career that might span multiple occupations over a working life, including in newly emerging industries. There was also broad agreement that there should be a citizenship element to vocational education, preparing young people to be productive and valuable citizens in the workplace and in their wider lives.

Another element of unresolved tension in the aims of vocational education concerned the twin aims of developing the economy through skill formation and promoting social inclusion through engagement with work, particularly for those young people who have not profited so much from their schooling. This issue is connected with the need to raise the esteem of vocational education relative to higher education while at the same time attending to those whose educational achievements at school are inadequate for full and satisfactory participation in the labour market.

It was acknowledged that translating such aspirations into viable curricula, pedagogies and assessment principles would be challenging, with as yet little consensus on what such broad and multiple aims would mean in terms of implementation. On this point several contributors stressed the importance of social partnership structures involving trade unions, employer associations and government to work out and articulate a consensus on implementation issues. It was noted by some that the implications for the labour market of Brexit would lend some urgency to these issues.

Some concern was expressed about the relative absence of careers guidance and education in the schooling system, the ‘gravitational pull’ of the Higher Education sector and the influence it exerts on post-school options. All participants recognised the value of considering the vocational education practices of other countries and the potential lessons that could be learned from them. However, everyone was also aware that policy borrowing can be a hazardous business if practice is simply transported, without its support factors, from one country to another.

The overall mood of the debate was very positive. Despite broad agreement no-one underestimated the challenges faced by those who wish to improve the sense of direction and underlying principles of the English vocational education system. The need to involve broader groups of policy makers (from all parties), trade unionists and employers in working for such improvements was also noted - a small band of enthusiasts on their own cannot do it. This was the first important step on an exciting wider journey to create an underpinning philosophical framework for English vocational education.
11. Conclusions and next steps

In this first phase, we have succeeded in **opening up a timely and lively debate about the key principles of English vocational education**, involving all of those with an interest – academics, businesses, practitioners and policy makers.

There has been a remarkable degree of **consensus on some areas**, such as the breadth of purpose of vocational education and the need to raise the status of vocational education.

This first phase of the debate has also illuminated some **key areas of difference**, the most striking being the question of how to define vocational and academic education – the degree of distinctiveness, unification or compromise between the two. This underpins many of the other questions from pedagogy to assessment.

The debate so far has helped to hone a **second wave of more specific questions**, where we would welcome a wide range of input and views. You can submit your thoughts by email to onewton@edge.co.uk. We will continue to make key contributions available (with your permission) on the Edge website ahead of a second Big Debate to be held in Autumn 2018.

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**CONTINUING THE DEBATE**

1. In no more than 100 words, how would you define vocational education?

2. How can vocational education best develop the broad transferable skills that will be needed as we progress through the fourth industrial revolution?

3. Should our approach to vocational education be one of (a) distinctiveness; (b) unification with general education (c) attempting to reconcile the two?

4. What is the right age for young people to begin to have access to vocational education?

5. What would be the key ingredients of a distinctive vocational pedagogy?

6. To what extent should the assessment of vocational education be based on: (a) equivalency to academic education; (b) distinctive measures; (c) a holistic baccalaureate?