'Before University' provision – enterprise education through the school curriculum.

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Abstract

In this chapter the authors focus on enterprise education students experience *before university.* We consider the current state of play in English secondary schools, where a national programme situates enterprise as an extra-curricular, competitive activity. We question this narrow and counter-productive approach and provide evidence from a 2017 research project[1] in which we worked with secondary educators and school leaders to explore policy and identify practices which teachers could enact through the curriculum. Our experience highlights that it is fruitful to create a space for debate about enterprise provision before university, and work *with* schools to develop enterprise in nuanced ways which can enhance subject learning and better reflect how enterprise works in practice.

Introduction

In sitting down to write this chapter, we found ourselves reflecting on the fact that yet another All Party Parliamentary Group (APPG) had recently been launched to *'encourage, support and promote entrepreneurship'*.[2] It is the latest in a number of high-level reviews (Anderson *et al.*, 2014; Young, 2014), which, among other issues, has concerned itself with asking how education *before university* might stimulate student interest in the world of work and business, and prepare young people with skills, attitudes and knowledge relevant to the life of the entrepreneur, or the entrepreneurial life, at least. This question – on the influence of experiences *before university* – gets its own section in the most recent APPG for Entrepreneurship, with investigators seeking to answer three main questions, (i) what role school experiences play in preparing students to engage with university enterprise education; (ii) what outreach and support activities universities undertake to support enterprise education in schools; and, (iii) what good practice models are currently available.

Our aim in this chapter is therefore to explore the current situation regarding enterprise education in the English schools' context where a national programme has now combined enterprise and careers education. First, we trace a recent policy history and look at how the 'enterprise' in the careers and enterprise programme is framed for secondary schools in England. Then we critique the presentation of enterprise as an extra-curricular, competitive activity and discuss the school curriculum as an alternative vehicle for interested teachers or department champions to develop enterprise education. We highlight outcomes from a project which involved working with teachers to surface and road test practices which subject teachers could enact through the curriculum. Our aim is to emphasise the role universities can play, not as uncritical cheerleaders of enterprise education, but as partners – as scholars – collaborating with schools to explore and ask questions of policy and practice and debating the nature and purpose of enterprise education.

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[2] The APPG for Entrepreneurship – http://appgentrepreneurship.org/.

The recent policy context for schools

Before we take look at the current state of play, it is worth briefly reminding ourselves that enterprise education before university is *not* a new phenomenon. For those with a good memory, the release of 'Enterprise for All' (Young, 2014[3]), brought back memories of, well, 'Enterprise for All' (Pilch & Shimshon, 2007[4]). Though the authors and contributors are from different political persuasions, there is much in common - both reviews propose that the needs of individuals and the UK economy would be better served if education were brought to life through effective links with the world of work and business. In addition, enterprise is framed not only as a response to challenges presented by the labour market, but also crucial for personal employability and mind-set development which empowers students with confidence and a 'can-do' attitude (Young, 2014; Pilch & Shimshon, 2007).

Such assertions are not unproblematic, and one might critique them based on economic fallacy (Chang, 2012), social inadequacy (Heilbrunn & Almor, 2014), and the pernicious responsibilising of individuals (Peters, 2009). But that is not the purpose of this chapter - the position we adopt here is pragmatic and functionalist. In this chapter we assume that HEIs have a stake in how enterprise education is framed and enacted before university and that academics will be concerned in ensuring that the interests of young people, the economy and their field are as well served by such provision as possible (Culkin & Mallick, 2011; Culkin, 2016; Brentnall et al, 2017a).

We begin our sketch of recent enterprise policy development in English schools with the Davies Review of Enterprise and the Economy in Education, which called for a step change both in 'enterprise activities, and in the promotion of economic and financial literacy' in education (Davies, 2002). The author's chief recommendation was that government should articulate a 'clear strategy for enterprise learning' and provide the resources to deliver it, monitor it and report on it. Enterprise Education was also defined by Davies (2002) as encompassing 'enterprise capability, financial capability and economic and business understanding':

- *Enterprise capability* is the ability to handle uncertainty and respond positively to change, to create and implement new ideas and new ways of doing things, and to make reasonable risk/reward assessments and act on them in one's own personal and working life. It can also be described as innovation, creativity, risk management, having a 'can-do' approach and the drive to make ideas happen.
- *Financial capability* is the ability to manage one's own finances and to become questioning and informed consumers of financial services.
- *Economic and business understanding* is the ability to understand the business context and make informed choices between alternative uses of scarce resources.

(Davies, 2002: 17–18)

These definitions, which included the skills, attitudes and knowledge that young people should develop through enterprise education, have subsequently been used by Ofsted, the English schools' inspectorate and the Department for Education (Gillie, 2012). Following the Davies review a number of policies were announced to enact the recommendations set out in his report (Gillie, 2012).

*******INSERT TABLE 1 - Summary of enterprise education in policy since 2002. *******

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[3] Commissioned by the coalition government and written by Lord Young, the conservative Prime Minister David Cameron's Enterprise Adviser
[4] Produced by The Smith Institute, with concluding comments provided by Labour's Ed Balls and John Healy.

In 2009, the MacDonald Review recommended that PSHE (Personal, Social, Health and Economic Education, which included enterprise education within the 'E' part of the acronym), become a statutory responsibility for all schools (a 'must' do, not a 'should' do). However, the position transformed as then Secretary of State for Education Michael Gove shifted the focus on to high standards of academic achievement as the route to career and economic success, social mobility and social justice (Gove, 2009), and plans for statutory PSHE were shelved (Truss, 2013).

The other transformational shift at this time was towards school autonomy, as enshrined in the 2010 Academies Act. Here, schools were encouraged – or enforced, if performance was deemed poor – to transform themselves as legal entities, separate from local authorities, in order to access funding direct from government and join or create new Multi Academy Trusts (MATs), which, crucially, could decide their own priorities and curricula. Our lived experience was that careers and enterprise fell down the school agenda to a large extent at this time, with only the most committed schools continuing with comprehensive enterprise education provision. But as enterprise slipped down the education agenda, it climbed the list of concerns, with Ofsted critiquing provision. The common, and persistent, criticisms levelled about enterprise education provision is: that it features a series of unconnected activities; that little focus is given to what students should be able to do, or know, by the end of activities; and that progression is not well thought out, with pupils repeating similar activities over successive years (Ofsted, 2011, 2013, 2016).

The report, Enterprise for All (Young, 2014), called for more enterprise and careers learning outside and inside the curriculum, challenging teachers to infuse an 'enterprise flavour' into curriculum materials. Lord Young's Review was followed by changes at the Department for Education – in July 2014 the incumbent minister, Michael Gove departed, to be replaced by Nicky Morgan – which brought about a shift in priorities. One immediate sign of change was signalled in October of that year, when proposed changes to Ofsted's Common Inspection Framework were put forward for consultation. These changes included an explicit focus on the 'personal development' of young people and aimed to judge how well schools prepared pupils for the next stage of employment, self-employment, education and training (Ofsted, 2014). In December that same year the secretary of state for education announced a new employer- backed 'careers and enterprise company' which would support the government's long- term economic plan and inspire pupils about the world of work (Morgan and the Department for Education, 2014).

What's the enterprise in the careers and enterprise programme?

The advent of The Careers and Enterprise Company, incorporated in February 2015, saw careers learning and enterprise education integrated and put back on the schools' agenda, in England. Alongside this, the statutory guidance on careers was re- issued (DfE, 2015, 2017, 2018), a national careers strategy introduced (DfE, 2017), and the Careers and Enterprise Company established the national Enterprise Advisers Network (EAN) to promote the agenda in schools.

The EAN is a network of volunteers from the world of work and business who work with schools to support the development of careers and enterprise and undertake a 'baseline audit' to identify gaps in practice and help set strategic priorities (Pye Tait, 2017). We think it significant to understand that this model, approach and national programme is being underpinned by research which supports good careers guidance. The Gatsby Benchmark for Good Careers Guidance (Holman, 2014), underpins the quality management approach,5 a Compass Careers Benchmark tool6 is provided to

help schools evaluate activity against best practice and it will be a statutory requirement (set out in the government's Careers Strategy, 2018) that schools have a named Careers Leader7 by September

2018. With regards to the baselines audit then, the way enterprise is framed in this audit is crucial – it will influence how enterprise is thought of and how it is practiced. There are 18 activities8 presented to schools (such as mock interviews, CV building, mentoring with an employee, careers websites etc), and two of these relate directly to enterprise: Enterprise Competitions (described as 'Longer term business competitions involving employers where groups of pupils develop and run a small enterprise'), and Enterprise Activities (described as 'Short term enterprise activities delivered in schools that can involve simulation of business challenges'). The Enterprise Adviser Network is being scaled through Local Enterprise Partnerships (LEPs), and, at time of writing, all 39 LEPs have joined the scheme and 2,000 Enterprise Advisers have been engaged to work with schools (Pye Tait, 2017).

Why is enterprise education being framed in this way? Davies' (2002) ambition was that curriculum time was used imaginatively to integrate elements of enterprise in ways that enriched learning but weren't burdensome for teachers, for example designing financial literacy work within a schools' numeracy strategy (Davies, 2002). He recommended that the government prepare guidance to explain to teachers 'what is meant by "enterprise capability" as an aspect of learning across the curriculum … and how and where [it] could be introduced within the National Curriculum and other subjects' (Davies, 2002: 10). But it is likely that the pragmatic 'five days' of enterprise learning became a target, most neatly delivered and measured through extra- curricular activities on collapsed timetable days. Many well- known delivery models for enterprise are also competitive formats. International initiatives such as Global Entrepreneurship Week has followed a local, regional and national competition format. Young Enterprise, the UK's biggest enterprise education charity, delivers the Company Programme in schools, an intervention which climaxes in the National and European finals. Then there is the National Enterprise Challenge, The Tenner Challenge, the Tycoon in Schools challenge. The short term 'Enterprise Challenge' has previously been described as the most frequent and popular way of developing enterprise in schools (McLarty et al., 2010), and this model persists in the perceptions of secondary school teachers as a pedagogy synonymous with enterprise education (Mann et al., 2017). While the definition of Enterprise Challenge days does not explicitly refer to competition, our lived experience is that such activities are structured competitively; for example, a year group will undertake an idea development simulation (design a healthy snack brand, design a technology for the future, design an app etc.), which climaxes in a pitch and one team being judged the 'winner' at the end of the event. We have explored the theoretical flaws in assuming positive outcomes from competition formats (Brentnall et al., 2017), and summarise some key points to consider before identifying the curriculum as an alternative development model.

We need to talk about enterprise education

Enterprise Education as the challenge day or competition, ubiquitous though it is, can be questioned on a number of levels. First, the focus on creating 'an idea' rather than exploring 'what you know, who you know and what you can do with these things,' runs counter to what research has shown about how entrepreneurs think and act (Gibb, 2002; Mansoori and Lackéus, 2017; Saravathy, 2001). In addition, the enterprise challenge/competition model may lead participants towards a focus on idea generation rather than implementation (Lyons et al., 2017), or the notion that there is such a thing as a 'best idea' and that this can be adjudicated in some way separately from the intended customer, as opposed to understanding that product and customer development are integral to one another (Blank, 2013). For example, longitudinal research on competitions found that the know-how developed by participants in a competitive format is not synonymous with the day- to-day

realities of new venture implementation; as such it had limited application outside a competition context (Watson and McGowan, 2016).

But the often heard arguments for competitive pedagogies extend well beyond the confines of preparation for start- up and enterprise. Essentially, the development of soft skills provides the most common rationale for competitions and challenges in primary and secondary education (Brent-nall et al., 2017b). This justification is reflected in higher education, where such activity- based extra-curricular provisions are provided to enhance the employability of graduates and encourage enterprising initiative (Rae, 2007). Recently re- issued QAA guidance aligns with this view, highlighting the potential of extra- curricular experiences for 'confidence- building, net-working and student enterprise' (QAA, 2018: 18).

Our research on competitively structured enterprise experiences challenges the theory behind such rationale. Competitions and competitive pedagogies in enterprise education are assumed to have many positive benefits and some research appears to support such assertions, with increases in entrepreneurial intent, increased enterprise attitudes, increased business knowledge, and more start- ups (Brentnall et al., 2017a: 5). However, there is also research where the outcomes appear mixed, with decreased entrepreneurial intention, decreased self- efficacy, decreased skills and confidence and the reproduction of social inequalities (Brentnall et al., 2017a: 6).

Much positive research appears to be about voluntary programmes, while negative research appears to describe compulsory activities. With this in mind, it is not clear which way causality is operating; opt- in programmes may introduce 'Volunteer Bias', an effect (where the nature of the volunteers causes the positive outcome as opposed to the intervention itself) that is difficult to control for (Goldstein et al., 2015; Heiman, 2002; Keiding and Louis, 2016). As well as this factor, our study identified other contextual issues which were likely to influence outcome patterns; for example, how well- resourced students are – personally, at school level, family resources and resources of the community – appears particularly significant. Being subjected to unfair competition where one's social and financial disadvantage is high-lighted against better resourced competitors has been observed to be harmful in competitive enterprise experiences (and in education more generally). Finally, winning and losing can play a role in complex ways, for example, developing an inflated sense of entitlement in winners, causing embarrassment, humiliation and loser's psychology for those who always 'fail', and, on a more constructive note, providing opportunities for learning and improvement, if significant, useful feedback is provided (Brentnall, 2017b: 11–13). In summary, there are theoretical flaws therefore in assuming that competitive- based activity learning will have positive effects on all participants – context will matter (Brentnall et al., 2017b: 17). So, what is an alternative approach?

Enterprise education through the curriculum?

'Enterprise through the curriculum' is the holy grail of enterprise education – a scenario where interested teachers or department champions have sufficient domain knowledge that they can seamlessly bring their subject to life by integrating learning about, through and for, enterprise and the world of work and business into everyday lessons. From a practical point of view, it is the curriculum which makes up the majority of pupils' school experience. Indeed, the chief inspector of Ofsted recently questioned what we understand as the 'real substance of education' (Spielman, 2017: 1), concluding '… at the very heart of education sits the vast accumulated wealth of human knowledge and what we choose to impart to the next generation: the curriculum'. The matter of

curriculum, evidence about its narrowing, and concerns about the capability of teachers to 'craft' the curriculum have been deemed sufficiently important as to warrant an Ofsted research investigation. A striking conclusion drawn from the initial research process was that: 'despite the fact that the curriculum is what is taught, there is little debate or reflection about it'. The 'new' National Curriculum (2013), is a key document which sets out the government's vision for the real substance of what pupils learn in schools. Its underpinning principles are to offer a broad and balanced curriculum that:

• promotes the spiritual, moral, cultural, mental and physical development of pupils and of society

• and prepares pupils for the opportunities, responsibilities and experiences of later life

(DfE, 2013: 5)

The National Curriculum is organised into subjects, with statutory programmes of study and attainment targets and a 'Purpose of Study' for each subject. That is, a summary which explains the importance of that subject, why schools would care to teach it, why pupils might care to learn and the wider implications of that subject beyond the classroom. The 'Purpose of Study' which underpins each subject is broad and expansive, and encompasses the aim to connect classroom learning with the world and future opportunities, for example:

Maths '… is essential for financial literacy and most forms of employment.…'

(DfE, 2013: 108)

Science '… is vital to the world's prosperity.…'

(DfE, 2013: 168)

Art and Design '… contributes to the wealth of our nation.…'

(DfE, 2013: 225)

Computing '… ensures that pupils become digitally literate at level[s] suitable for future workplace.…'

(DfE, 2013: 230)

Design and Technology '… pupils learn to take risks, become resourceful, innovative and enterprising.…'

(DfE, 2013: 234)

So, connecting subject learning to the world of work and business, and the three strands of enterprise education which Davies identified in his 2002 review (enterprise capability, financial capability and economic and business understanding), is implicit in the national curriculum, it exists in the purposeof study for each subject – the very reasons why you might care to learn about English, maths, geography, history and design technology.

There is an important gap between how entrepreneurs' practice in the real world and how students are educated for entrepreneurship. Entrepreneurs (mostly) do not have any entrepreneurship training or education; they (mostly) replicate their previous work, skills and industry into their business (Wasim, 2017). What does this mean? If we want to close the gap between the real life of entrepreneurs then 'entrepreneurship education should not be kept in isolation', but should happen

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through the curriculum (Wasim, 2017). Integrating links with employers and businesses into this process is also an opportunity to build students' knowledge of the labour market and social capital (Mann, 2012).

There exists a large and growing literature devoted to the issue of who or what is an entrepreneur, leading to the question of whether entrepreneurs are born or made (McClelland, 1999; Vesper and Gartner, 1997). This in turn often leads commentators to ask whether or not entrepreneurship can be taught, and in this respect, there is still considerable uncertainty (Henry et al., 2005). While we do not seek to contribute to the 'can entrepreneurship be taught' debate, it is interesting to bear in mind that the Higher Education Funding Council, England (HEFCE, 2017) identify that the majority of students (60 per cent), will eventually end up living in the economic area (their LEP, or Local Enterprise Partnership), where they were born and brought up. Those individuals who leave further and higher education will face economic uncertainty, and at some point, may need to employ themselves if they want to enter the labour market or achieve graduate- level work in their degree area; educational providers therefore have a responsibility to assist learners to navigate their way to employment (Turner and Mulholland, 2017). To conclude, 'enterprise through the curriculum' is an opportunity to connect students to the opportunities and networks that exist in their economic area as well as a better reflection of the entrepreneurial process of converting existing knowledge, resources and skills into commercial opportunities.

In search of practices

We have traced a recent policy path which ends with enterprise being part of careers education and framed as an extra- curricular, competitive activity and we have identified the school curriculum as an alternative context for 'before university' enterprise education development. Now, we summarise highlights from a recent research project, funded by Enterprise Educators UK (EEUK), through which we were able to explore government policy and propose and road test practices which teachers might use or adapt through the curriculum. Given the high priority of careers within the national careers and enterprise model and guidance, our aim was to address the careers component which teachers might be expected to con-tribute to, as well as the enterprise education element.

Teachers identify that a significant barrier to developing curriculum approaches in this field is curriculum 'tightness' and pressure to 'cover' curriculum content (Mann and Virk, 2013). This may help explain why numerous curriculum packs and ready- made lesson plans are under- utilised – there simply isn't the time to do 'something else'. A different approach to providing a curriculum pack would be to identify a number of transferable practices which may be integrated when there is convergence between what the subject teacher already has to do and teach and an opportunity to broaden students' careers and enterprise learning. Hall and Hord (2006), research school change and distinguish between national, regional, school and individual level change – each requires different support. For individuals they need to understand what is being asked of them and identify new practices which they can adopt and adapt.

Our project involved scrutinising a number of key documents which aim to inform and direct the actions of schools and teachers. These documents set out the problems, ambitions and include practical expectations (for teachers), with regards to careers and enterprise development.

The following documents were reviewed:

- Careers Guidance: Going in the Right Direction (Ofsted, 2013) – a report by the English schools inspectorate illustrating problems and issues with careers guidance since schools were mandated with the statutory provision.
- Good Careers Guidance (Gatsby Foundation, 2014) - the research which underpins the model and approach promoted to schools by The Careers and Enterprise Company.
- Enterprise for All (Lord Young, 2014) - the government review into enterprise education delivered by Lord Young in 2014.
- Getting Ready for Work (Ofsted, 2016) - the statutory guidance provided by the Department for Education which covers careers and enterprise inspiration and guidance in schools.
- Careers guidance and inspiration in schools. Statutory guidance for governing bodies, school leaders and school staff (Department for Education, 2017) - statutory guidance provided by the Department for Education which covers careers and enterprise inspiration and guidance in schools.[5]
- The Careers and Enterprise Company website, activities and development tool – see www.careersandenterprise.co.uk

Our purpose was to shine a light on 'what is actually being asked (or expected) of teachers?', and then to propose a pragmatic path: 'what are the concrete actions or practices which teachers might undertake to develop careers and enterprise in subject teaching?'
Eight practices were identified and are summarised in Table 2 with relevant extracts from policy and guidance and related research which has influenced our interpretation and/or inclusion of a practice. The full guide (Brentnall, 2017), explains the rationale for all the practices and provides practical examples of how secondary school teachers planned to utilise them.

******INSERT TABLE 2 – Practices to develop careers and enterprise through the curriculum*****

While the intellectual outputs from the project are important, an equally valuable part of the process was engaging with educators on this agenda and providing an opportunity for them to consider and critique their own provision and what was being set out for them in policy.

Our experience underscores the opportunity for HEIs to become partners in developing a shared sense of scholarship with regards to before university enterprise education provision and how it could enhance subject teaching. Our approach was influenced by research which argues that excessive focus on targets, measurement and outcomes reduces teacher agency and leaves little time and space to 'critically interrogate policy' (Priestley, 2013). Through the conversations, workshops and activities of our project, we aimed to open up a space for educators to review policy and curriculum documents and compare them with their lived experience and personal values. For example, by looking at the extent to which recommendations align with existing purpose and principles (or not), whether the recommended practices are fit for purpose (or not), and what ideas they spark (or not), and why.

While curriculum development is no doubt a complex endeavour, the opportunities clearly exist: 'subject teachers see far more of their pupils than guidance specialists do and often have a close relationship with them' (Holman, 2014: 23). But careers and enterprise through 'the' curriculum, is, in reality, careers and enterprise through the particular units and topics designed and implemented by individual teachers, by faculties and departments and by teaching and learning innovation groups (or whatever the professional learning model at a particular school is). The challenge, and the

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[5] Since our project a new version of this guidance has been issued - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672418/_Careers_guidance_and_access_for_education_and_training_providers.pdf

opportunity, is to offer teachers guidance about what they can do to link their subject (or topic) to careers and enterprise, in ways that are manageable for them, and meaningful for students.

Our field work with teachers and enterprise educators highlighted a number of issues related to competitive enterprise education which are reflected in existing literature (Heilbrunn and Almor, 2014; Komulainen et al., 2014; Lackéus, 2015). Such insights included: the mixed feelings of educators towards competitive enterprise education processes and out-comes; anxieties about 'outsourcing' enterprise culture to external providers, the experience of feeling disdain or disinterest from colleagues with regards to enterprise activities and finally, a desire for a sense of scholar-ship with regards to enterprise education (Brentnall et al., 2017b). In particular, two recurring, connected themes emerged: first, that experienced enterprise educators felt a gap, sometimes a chasm, it would seem, between what they believed enterprise was, and what it could be (a broad, an inclusive, a learning- enhancing activity), and how they felt their colleagues

Table 3 Critical themes expressed by educators

Values	'Competitions are out of step with the values of young people, who are more inclined to want to work together to make a difference.'
	'Competitions don't sit well with educators, who view them as part of a wider, failing, neo-liberal system which normalises inequality and selection.'
Outcomes	'Competitions are de-motivating for losers.'
	'A competition means you step in more – the focus is on getting it right rather than learning.'
	'Competitions are inherently unfair because every student, institution and community has different resources and inclinations to compete.'

perceived enterprise education (The Apprentice, Dragons' Den and private values colonising public life). Significantly, the use of competitions was problematic for some practitioners (some shared anecdotes of negative pupil outcomes or described how they didn't compete in certain events), and other practitioners revealed they had never reflected critically on the use of competitions (such comments came from educators, coordinators, school leaders and a provider). We organised these critical themes into two broad categories (values and outcomes [see **Table 3**]), and related these to existing literature (Brentnall et al., 2017b: 12).

Conclusions

Our aim in this chapter has been to focus attention on before university provision and provide insights from a research project which involved working with secondary educators and school leaders to consider first, the nature and purpose of enterprise education and second, the ways in which it might be enacted through the curriculum.

By critiquing policy and exploring alternatives through the project, teachers had the opportunity to come to appreciate enterprise education as a complex phenomenon, which had the potential to add value to their subject teaching. The potential impact of school- based enterprise education is significant. There are more than 3.2 million 11–18-year olds impacted in state maintained English secondary schools and more than 6.3 million across the United Kingdom (DfE, 2017). What these students experience before university constitutes their formative enterprise education experiences, which will influence how they conceive enterprise, how they think it's practiced, who practices it,

whether they perceive it to be valuable, appealing and possible. Our study concluded that competitions may present themselves as a reasonable strategy to create fun and drama in the short term, raise awareness of entrepreneurship and engage the private sector, but these perceived benefits may mask long- term detrimental effects. If one accepts that developmental experiences can shape deep beliefs about entrepreneurship (Krueger, 2007), then just as positive experiences arising from competing could be beneficial, negative experiences could be dam-aging. Making clear this potential harm in the prescribing of competitions is urgent, and necessary. But just as urgent is describing 'what else' educators could do, in ways which can be understood and enacted with little support (given the time and resource constraint which is acknowledged in policy and by practitioners). If enterprise education is always framed as a Dragon's Den- style compete and pitch activities which clash with educators' values and has unintended outcomes, we cannot be surprised when they rank such challenges as the least important of their careers and enter-prise activities (Mann, 2017: 6).

As an alternative, embedding is time consuming, may take years to craft and is the area where schools are judged to have 'the furthest to travel' (Holman, 2014: 48). While it is sensible not to underestimate the resources required to develop a coherent approach to enterprise through the curriculum, it is also useful to remember that change also happens at an individual level. Providing an opportunity for critical reflection and identifying alternative ways to practice enterprise education were practical elements of our research project which were welcomed by educators and school leaders.

Our view is that while enterprise (and careers) through the curriculum is a significantly more complex endeavour than hosting an enterprise challenge, or turning up to be a judge in a 'compete and pitch' activity, there is much to be gained by facilitating opportunities for its development, not least in the new relationships that can be created and the critical conversations that can be nurtured. In conclusion, both teachers and students will benefit from an intervention that has been designed to deliver an inclusive form of enterprise education, as opposed to a 'winner- take-all' approach.

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Table 1 – Enterprise Education in Policy since 2002.

Year	2002	2003	2007	2009	2014	2014	2015
Source	Davies Review of enterprise and the economy in education	14-19 Opportunity and Excellence	QCA Secondary Curriculum Review	McDonald Review of PSHE	Careers Guidance and Inspiration in Schools (April 2014)	Enterprise for All (June, 2014)	The Careers and Enterprise Company
EE is…	…defined as Enterprise Capability, Financial Capability and Economic and Business Understanding…	…positioned as part of work related learning and career education…it is the opportunity to develop enterprise capabilities…	…part of economic wellbeing (EW), which brings together current guidance on careers education, work-related learning, enterprise and financial capability….	…part of Personal, Social, Health and Economic Education (PSHE), which draws together careers, work related learning, enterprise education and financial capability under the 'E' of PSHE….	…enterprise skills, experience and qualifications that employers want can support preparation for work… …the opportunity to develop entrepreneurial skills for self-employment…	…first tasted in primary and secondary education… …meaningful to young people through real-life contact with business and work…	…part of a set of careers and enterprise activities which schools baseline audit… …an opportunity for an 'employer encounter' ….provided by funded or local organisations or school-delivered.
Ambition for EE to be…	… about engaging in quality enterprise inside and outside the curriculum for a minimum of five days over a school career.	…a feature across the curriculum rather than just as a discrete subject.	…integrated into non-statutory programmes for Key Stage 3 and Key Stage 4 pupils (11-16 year olds).	…included in discrete PSHE curriculum time, taught through other subjects, experienced through PSHE activities and school events and supported through pastoral care and guidance.	…part of a 'learning environment' where pupils are encouraged to tackle real life challenges which require them to manage risk and to develop their decision making, team building and problem-solving skills.	…captive, continuous and coherent… …infused in curriculum materials… …part of a strong and consistent government message to empower educators to embed.	…an extracurricular, competitive activity…. … i) short term activities that simulate business challenges and ii) longer term competitions.

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Table 2 (overleaf) – Practices to develop careers and enterprise through the curriculum

Problems and opportunities identified in policy	Practice and related research
'The biggest weakness across the schools was a lack of coherence in planning enterprise education and a failure to identify what the pupils should learn and be able to do as a result of the teaching. (Ofsted, 2016). 'Schools should have an effective programme of training to develop teachers' understanding of enterprise education and their expertise in delivering it.' (Ofsted, 2016).	1) *I explore and critique big ideas, principles and practices related to the development of careers and enterprise in the curriculum.* **Critical engagement** with policy and research supports teacher agency, autonomous 'curriculum making' and enables sense checking of top-down policies (Drew et al, 2016).
'Changes in technology and the labour market mean that increasing numbers of jobs require specific education and training…[that is] not well understood by many young people or their teachers.' (Gatsby, 2014). 'If pupils know what pay you get for different jobs and where and how numerous the vacancies are, they are in a better position to make informed choices about further study or training. '…eye catching displays prompted new ideas about careers.'….'schools successfully promoted a wide range of career pathways in different curriculum subjects by displaying well designed posters, photographs and flowcharts throughout school.' (Ofsted, 2013).	2) *I use current and future labour market information as teaching material and in classroom displays.* The career aspirations of teenagers can be said to have **nothing in common** with the projected demand for labour in the UK between 2010 and 2020" (Mann et al, 2013).
"It is difficult for many young people to connect what they are asked to learn in school with the outside world.' (Young, 2014). 'I hope, wherever possible, teachers adopt examples that relate to the real world.' (Young, 2014). '…teachers used industry related knowledge to inspire students and open their minds to career opportunities.' (Ofsted, 2013).	3) *I use examples and stories about people and organisations from the world of work and business as teaching material.* Psychologist's sometimes refer to stories as **'psychologically privileged'** meaning they are treated differently in memory than other types of material (Willingham, 2009).
'Careers guidance has long been criticised as being inadequate and patchy.' (DfE, 2017). 'Widen access to options available post-16, for example, apprenticeships, entrepreneurialism and other vocational routes alongside the more traditional A-level and university route' (DfE, 2017). '…the most effective encounters are often those where school pupils meet older students from universities, colleges or apprenticeships.' (Gatsby, 2014).	4) *I identify career and progression routes related to subject curricula.* Typically, teachers can: "**sign post career related implications** of subject content" and "**explain progression routes** open in continued learning of a subject area" (Hooley, Watts, Andrews, 2015).
'…a lack of work related learning was a major barrier to young people gaining employment.' (Ofsted, 2013). "Teaching staff have direct contact with employers and integrate them into the delivery of their subject." (Careers and Enterprise Company Development Tool, 2017).	5) *I work with people from the world of work and business to develop careers and enterprise in subject teaching.* "The barrier, therefore, is to be found in identifying and enabling new means by which teaching staff can easily and confidently **engage employers within learning processes**

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"Teaching staff have the opportunity to experience working environments relevant to their subject." (Careers and Enterprise Company Development Tool, 2017). Staff CPD includes elements involving or delivered by employers (Careers and Enterprise Company Development Tool, 2017).	in ways with are readily integrated into demanding teaching programmes" (Mann, A., & Virk, B., 2013).
'Too few students had sufficient opportunities to encounter a wide range of potentially stimulating and inspiring information and ideas about career pathways directly from employers. The overwhelming influence was family and friends. (Ofsted, 2013). 'Every pupil should have multiple opportunities to learn from employers about work, employment and the skills that are valued in the workplace.' (Gatsby, 2014).	6) *I involve people from the world of work and business in classroom learning.* Young people who **employer encounters** at school are less likely to be NEET. 'Notably… impacts were greatest for young people with lower level qualification' (Mann and Percy, 2015).
'Enterprise was often delivered through a series of unlinked activities…where pupils found it difficult to link different experiences and inputs, whether from expert visitors, assemblies, tutor activities or days when the time table was collapsed.' (Ofsted, 2016) '…make the link between the curriculum and the kind of problem solving demanded of people having to work in the private or public sector.' (Young, 2014).	7) *I use practices from the world of work/business to develop students' entrepreneurial and business related thinking.* Being entrepreneurial is 'practice-based' – it is a **portfolio of activities, techniques and ways of thinking and doing** which can be taught and learned (Neck and Greene, 2011).
'Schools should create a learning environment which allows and encourages pupils to tackle real life challenges which require them to manage risk and develop their decision making, team building and problem solving skills.' (DfE, 2017). 'Schools should offer pupils the opportunity to develop entrepreneurial skills for self-employment – and make it clear to them that working for themselves is a viable option (in fact it will be necessary for many of them).' (DfE, 2017).	8) *I enable learners to create value (can be intellectual, social, cultural, environmental, not just financial value) for stakeholders outside the classroom.* Let students learn by applying their existing and future competencies to **create value for people** external to their classroom and school (Lackéus, 2016).

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