



The framing of entrepreneurship education in policy and guidance: Opportunities and challenges in the UK

Item Type	Article (Version of Record)
UoW Affiliated Authors	Bell, Robin
Full Citation	Bell, H. and Bell, Robin (2025) The framing of entrepreneurship education in policy and guidance: Opportunities and challenges in the UK. Entrepreneurship Education. pp. 1-18. ISSN 2520-8152
DOI/ISBN/ISSN	https://doi.org/10.1007/s41959-025-00159-4
Journal/Publisher	Entrepreneurship Education Springer Nature
Rights/Publisher Set Statement	© The Author(s) 2025, Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, http://creativecommons.org/licenses/by/4.0/
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Link	https://link.springer.com/article/10.1007/s41959-025-00159-4

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The framing of entrepreneurship education in policy and guidance: opportunities and challenges in the UK

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Received: 26 February 2025 / Revised: 25 May 2025 / Accepted: 29 August 2025
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Abstract

The UK government, like many governments, has promoted entrepreneurship education (EE) to catalyse innovation, economic growth, and societal development through policy and guidance. However, it has been suggested that there is an incoherent picture as to what is meant by EE within policy and guidance, leading to calls to clarify exactly what EE policy and guidance is seeking to achieve. This research addresses these calls by reviewing the development of how EE in higher education has been framed within UK policy and guidance, and the opportunities and challenges that have come from this framing. The research demonstrates that whilst the UK has maintained a general emphasis and promotion of EE, policy and guidance have evolved from helping small business managers run their businesses to supporting start-ups and now supporting the creation of cultural, social, or economic value. This broadening of the framing of entrepreneurship education mainstreams its relevance to the masses but reduces its focus on start-ups, potentially misaligning with policymakers expected outcomes. Challenges and opportunities relating to the current UK policy and guidance are discussed, including the nebulous focus on skills, challenges in measuring cultural, social and economic value, a high degree of freedom for educators, funding challenges and limited identification of specific technologies. The paper posits that whilst the mainstreaming of EE is beneficial in reaching a larger audience, this paper contends that shifting the emphasis too far away from new venture creation may undermine the original goal of EE, confuse stakeholders, and increase blurring with business education.

Keywords Entrepreneurship education · Policy · Guidelines · Outcomes · Purpose · The UK

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Introduction

Entrepreneurship education (EE) is gaining prominence globally as governments and policymakers implement to catalyse innovation, economic growth, and development. EE is regarded as a crucial factor in fostering entrepreneurship, as it cultivates entrepreneurial attitudes, behaviours, and mindsets, ultimately facilitating entrepreneurial endeavours and actions (Cui et al., 2021; Dakung et al., 2022). Suguna et al. (2024) suggested EE bridges the gap between academic knowledge and societal requirements to establish sustainable communities. Policymakers in the UK and Europe assert that EE can produce competent graduates capable of positively impacting society and fostering economic growth by providing jobs and societal value through creativity, problem-solving, innovation, and the identification of commercial possibilities (Department for Business Enterprise and Regulatory Reform, 2008; European Commission Enterprise and Industry Directorate-General, 2008; QAA, 2018).

Despite these bold claims, there is only limited critical discourse in the literature as to the purpose of EE. Whilst the debate on the teachability of entrepreneurship has largely been resolved (Clark et al., 1984; Gibb, 2002), questions around its purpose and why it should be taught have started to resurface (Henry, 2013). This is possibly not surprising given that EE has been posited as able to achieve so much. Henry (2013) suggested that policymakers' views regarding the purpose and potential benefits of EE may have spiralled out of control and argued for a more realistic set of expectations.

Even the term 'entrepreneurship' can mean different things to different people (Matlay & Carey, 2007), leading to divergent definitions (Bell, 2023). Thus, there remains no universally accepted definition of EE and the concept of EE is modified and adapted within policy in different contexts to address specific needs. Bridge (2017) emphasises that among EE scholars, literature, and policy, there exist varying meanings of the phrase, resulting in significant confusion as to EE goals and purpose, with impacts on how EE is taught, delivered, and assessed (Bridge, 2017). Jones et al. (2021) suggest that effective EE should be driven by purpose, agency, and capability, which requires clarity of direction. Within the academic literature, the understanding and conceptualisation of entrepreneurship and EE within policy contexts evolve to keep pace with changing government strategies, ultimately altering the framing and purpose of EE.

EE policy and guidelines are a crucial instrument for enhancing, shaping, and developing EE and facilitating the opportunities for learners and society. Pittaway and Cope (2007) highlight that EE policy and guidance are generally unclear as to what outputs should be created and what outcomes should be promoted. Plus, there is an incoherent picture as to what is meant by EE and what its promotion seeks to achieve in government policy and guidance (Hoppe, 2016). More recently, Li et al. (2022) highlight an absence of contextualised research looking in-depth at EE guidance and policy and how this informs practice. Henry (2013) called for research to 'spell out' exactly what EE policy and guidance is seeking to achieve, and Li et al. (2022) have advocated for research to link and integrate

EE guidance, policy, and practice. This research addresses this gap and call by reviewing the development of how EE in HE has been framed within UK policy and guidance and what opportunities and challenges come from this framing. This addresses the questions: ‘How has EE been framed within UK policy and guidance during its evolution?’ and ‘What opportunities and challenges come from this framing?’.

Providing a contextualised review of EE policy and guidance contributes to the understanding of the ‘why’, ‘what’, and ‘how’ entrepreneurship should be taught in the UK, which have been identified as amorphous questions (Byrne et al., 2014; Lackéus, 2015). Answering these questions in relation to the evolving context and providing guidance are of fundamental importance to advancing understanding and the provision of more sophisticated suggestions for the design of EE programmes (Martínez-Gregorio et al., 2021). Whilst this paper is focused on the evolution of how the purpose of EE is framed within the UK, it offers potential transferability into other contexts which are following a similar EE trajectory and explores opportunities and challenges which could exist with a similar evolution.

This conceptual paper utilises secondary document analysis to review the framing of EE within UK policy and guidance during its evolution and considers the opportunities and challenges which stem from this framing. The authors reviewed key policy and guidance documents that supported the development, definition and implementation of EE within the UK along with literature discussing the evolution of EE in the UK, to help the conceptualisation of the framing of EE within policy and guidance. First, the paper reviews how EE has been framed in UK policy and guidance during its evolution. After this, opportunities and challenges which stem from its current framing are discussed. Finally, the paper concludes, offering some thoughts as to the direction of EE in the UK, areas for potential future research, and transferability of the research.

The framing of entrepreneurship education in UK policy and guidance during its evolution

Early entrepreneurship education in the UK

EE as a formal and distinct taught subject is relatively new in HE. Whilst it can be traced back to being included informally within curricular at schools and colleges of business and business administration in US universities during the late 1800s, it was not until the 1940s when institutions such as Harvard introduced specific entrepreneurship courses (Ellis et al., 2023).

Whilst some form of entrepreneurial training in the UK can be traced back to the industrial revolution (circa 1830–1890) for sons of merchants and industrialists (Pittaway et al., 2024), it was not until the 1970s that there was a gradual increase in teaching programmes within higher education institutions (HEIs) that had specific modules focused on small business and entrepreneurship (Watkins & Stone, 1999). These were often isolated modules within curricula, and there was little distinction between entrepreneurship and small business management (Bell, 2023). Historically,

business schools in UK HEIs concentrated on management education and the cultivation of professional management competences and skills to support existing businesses. The initial EE offering in the UK during the 1970s primarily targeted postgraduate business and executive owner-manager audiences rather than being openly accessible to a wide range of students (Watkins & Stone, 1999). This was predicated on the assumption that individuals already engaged in business would gain from acquiring knowledge about entrepreneurship, whereas undergraduates and people outside business disciplines would find such knowledge of minimal utility or interest (Bell, 2023). Contrasted against the trajectory of EE in the USA, prestigious institutions were increasingly emphasising the topic to foster ideas and nurture high-growth ventures and start-ups from various perspectives (Watkins & Stone, 1999).

The shock of the Sterling Crisis of 1976, which caused an economic slowdown and rise in unemployment, led to a revised conceptualisation of EE in the UK (Watkins & Stone, 1999). To alleviate the increase in unemployment, the UK government invested in entrepreneurship training. Termed New Enterprise Programs, they were designed for unemployed business managers. Thus began a transition from viewing EE and training as mechanisms to enhance the management of small enterprises to providing the means for a broader demographic to start new ventures, augmenting employment opportunities. Although such programmes are now widespread, these New Enterprise Programs were the first use of public money in this manner. (Watkins & Stone, 1999). These courses developed, evolved, and expanded during the 1980s and early 1990s to satisfy changing economic demands. The result was some distinction and funnelling across courses and programmes based on the potential growth of the entrepreneurial idea. Potential high-growth enterprises were directed towards business and management schools in traditional universities, whilst less inventive potential ideas were sent towards polytechnics. Meanwhile, older and more prominent universities frequently disregarded EE and training, instead engaging mainly from a research perspective (Watkins & Stone, 1999). In the 1990s, local enterprise partnerships and councils took over many of these practical EE courses and support programmes, allowing them to become more localised and freeing up higher education institutions (HEIs) to focus on other initiatives (Bell, 2023).

Growth of higher education and the mainstreaming of entrepreneurship education

In the late 1980s and throughout the 1990s, the UK experienced rapid expansion and growth in HE. This period also saw the breakdown of the traditional boundary between polytechnics and universities (Mayhew et al., 2004). As more students entered UK HE, there was a greater emphasis on educational outcomes, especially employment. HEIs were tasked with demonstrating value in terms of developing skills and competencies that would lead to employability and positive economic and social contributions. Ensuring the employability of graduates became a central focus for HEIs, which led to new teaching approaches and strategies as well as the introduction of new courses explicitly delivering employability skills. Ensuring graduates' employability became a top priority for HEIs,

resulting in new and innovative teaching methods and approaches, as well as the launch of new modules that explicitly sought to impart employability skills (Cranmer, 2006). A link was created between entrepreneurship and employment, and the notion that students and graduates possessing enterprising skills and competencies are typically more employable, there was increased emphasis and adoption of EE to deliver these skills (Rae, 2005). As HEIs and students sought skills and outcomes, EE became more relevant in UK HE and to all students, regardless of degree level.

The importance of EE within UK HE was strengthened by the recommendation from the National Committee of Inquiry into Higher Education (1997), that universities encourage and support entrepreneurship through course and programme design. This was furthered by Universities UK in making business and entrepreneurial development one of the four strategic goals for universities in 2000. This facilitated the promotion of entrepreneurship inside HE and the expansion of EE. The UK Higher Education Funding Council (2024) underscored the necessity of integrating entrepreneurship throughout all HE disciplines. These directives and policies were implemented based on the belief that HEIs are essential for fostering entrepreneurial ideas and cultivating business talent (Robertson & Collins, 2003). The necessity for EE was associated with, and supported by, the government's focus on graduate entrepreneurship and its significance to the national economy (McKeown et al., 2006). This emphasis prompted UK universities to adopt the notion of the "entrepreneurial university", necessitating flexibility to strategically capitalise on opportunities to support and promote regional development (Gibb & Hannon, 2006). It was hoped that this could be realised by both students and faculty being encouraged and supported to set up new ventures and support the growth of existing businesses (Education Department for Education and Skills, 2003). To achieve this the UK government sought to develop and promote a culture of entrepreneurship within HE through research, education, and facilitation by establishing the National Council for Graduate Entrepreneurship (NCGE), which later became the National Centre for Entrepreneurship Education (NCEE) (Pittaway & Cope, 2007).

The push towards promoting HEIs to play a leading role within entrepreneurship led to increased levels of EE within HE in the UK. Matlay and Carey (2007) performed a decade-long longitudinal study of EE in the UK from 1995 to 2004 and found that the overall provision of EE in this period grew considerably. By the conclusion of the 2004 academic year, most of the sampled universities were providing EE programmes at both undergraduate and postgraduate levels, whereas in the mid-1990's provision was largely only offered to business school students at the newer more vocational institutions. The growth of EE during this period in the UK HE was linked to a heightened emphasis on integrating entrepreneurship into non-business disciplines, encompassing both academic and professional vocational programmes (Jones, 2014). This was predicated on the notion that all students, irrespective of their prospective career trajectories, need the chance and to be motivated to engage in entrepreneurship, contributing to the cultivation of an entrepreneurial culture among new graduates (Henry, 2013). Consequently, entrepreneurship was seen in HE as pertinent to all individuals rather than a discrete group possessing certain ideas or expertise (Bell & Bell, 2016; O'Brien et al., 2019).

The rapid expansion and massification of HE in the late 1980's and 1990's saw HEIs increasingly needing to justify their value in terms of employability (Cranmer, 2006). EE was seen as a way of making graduates employable and saw growth in provision during this time. This framed EE as beneficial not only for managers in SMEs requiring upskilling or established managers confronting unemployment, as it had been previously, but also valuable for students and graduates with limited career experience. In the late 1990's and 2000's, HEIs were encouraged by policy to become 'entrepreneurial universities', not only being a place of learning but promoting regional growth and development (Gibb & Hannon, 2006). To support this, HEIs were encouraged to develop graduate entrepreneurship and the start-up of new ventures by graduates through the delivery of EE (McKeown et al., 2006). Entrepreneurship was encouraged and promoted as a viable opportunity regardless of discipline, and EE was used to motivate and engage students in entrepreneurship (Henry, 2013). This saw a period of fast growth in the provision of EE in UK HE (Matlay & Carey, 2007). EE was framed as an opportunity to engage and promote entrepreneurship and new venture creation to would-be entrepreneurs, regardless of the type of programme or discipline they were studying.

Despite the rapid growth in the provision of EE during the 1990's and 2000's, the delivery of EE was haphazard with variation as to how it was conceptualised and delivered, with each institution deciding what constituted EE (Matlay & Carey, 2007). This meant that there was "pragmatic fluidity" in both the concept of EE and how it was implemented in practice, with it regularly evolving from traditional business education, through the borrowing and adaption of course materials (Matlay & Carey, 2007). Pertinent questions thus arose as to the operational definition of entrepreneurship, the purpose of EE, and in turn the effective pedagogy, teaching and assessment of EE (Pittaway & Cope, 2007). In 2012, the UK Quality Assurance Agency (QAA) sought to address and provide clarity regarding some of these points through the release of 'Enterprise and entrepreneurship education: Guidance for UK higher education providers (QAA, 2012).

Published entrepreneurship education guidance

Between 2010 and 2011, there was recognition in the UK of the necessity for a holistic strategy for a framework to support the advancement of EE (Rae et al., 2014). The newly formed coalition government in 2010 released a HE White Paper as a precursor to its intended radical reform of the sector. Although this did not lead to legislation, it contained two commitments regarding enterprise in HE: the establishment of enterprise student societies and the issuance of guidelines on enterprise and entrepreneurship education (Department for Business, Innovation and Skills, 2011). The UK government instituted a period of austerity, during which the Wilson Review (2012) advocated the development of an entrepreneurial society to foster economic growth. However, EE struggled achieving academic legitimacy on moral, pedagogical, and theoretical fronts without agreed guidance and an unresolved tension between dual objectives of equipping students to become entrepreneurs and function and operate in an entrepreneurial society (Lewis, 2011; Rae, 2014). This

laid the foundations for the need for the development of increased guidance for EE in the UK. The QAA, an independent entity tasked with assessing quality standards, performing quality reviews, and establishing benchmarks for HEIs, was assigned the responsibility of formulating EE guidelines (Rae et al., 2014).

The QAA (2012) guidelines have been described as a ‘landmark’ document’ and have been used to form and shape EE initiatives worldwide (QAA, 2018, p. 1). The guidelines enhanced the guidance for the implementation and execution of EE within UK HE, establishing a more consistent and formal framework regarding its purpose, definition, delivery, and practice. The QAA (2012) offered guidance for EE; however, the development and delivery of EE provision remained at the institutional level with no formal mandated provision, giving individual institutions the autonomy to tailor courses to suit their student cohorts. The guidelines aimed to elucidate current best practices to inform, improve, and advance the development of enterprise and EE inside HE institutions. The information offered was not tailored to any particular degree programme, or topic area, but aimed to assist practitioners in integrating enterprise and entrepreneurship throughout the curriculum (QAA, 2012).

One of the goals of the QAA (2012) guidance was to standardise the terminology in the subject area, as a lack of a clear definition was causing tension in the development of EE (Dinning, 2015). Tensions emerged from varying interpretations of the term entrepreneurship, affecting the clarity of course aims, objectives and teaching material (Bridge, 2017). Acknowledging the definitional confusion around enterprise and entrepreneurship, the QAA (2012) set out to provide clear definitions and clarity in relation to these terms in education (Rae et al., 2014). To provide standardisation around their application, the QAA (2012) guidelines provided distinct definitions of ‘enterprise education’ and ‘entrepreneurship education’. Separating EE and enterprise education helped to make a distinction between the two concepts and clarify who they were relevant for. It was hoped that this would inspire and empower educators to focus on outcomes relevant to them and their cohorts (David et al., 2018).

Enterprise education was defined as aiming “to produce graduates with the mindset and skills to come up with original ideas in response to identified needs and shortfalls, and the ability to act on them”. In short, having an idea and making it happen. Enterprise skills included taking the initiative, intuitive decision making, making things happen, networking, identifying opportunities, creative problem solving, innovating, strategic thinking, and personal effectiveness. “Enterprise education extends beyond knowledge acquisition to a wide range of emotional, intellectual, social and practical skills.” (QAA, 2012, p. 8). Enterprise education was focused on developing mindset, skills, and ideation to support taking action to fulfil needs which is important for all graduates, no matter their career path (Jones et al., 2021). The skills that enterprise education sought to develop were highly relevant to the employment market and closely aligned to employability skills (Bell, 2016; Sewell & Dacre Pool, 2010) and the skills required to develop an enterprise culture and society (Athayde, 2012). The QAA guidelines aimed to connect and address the synergies between graduate employability and enterprise by stating that enterprise education can enhance careers education and student employability by fostering a

focus on opportunities, self-awareness, and understanding of the business environment (Rae, 2014).

EE was defined as focusing “on the development and application of an enterprising mindset and skills in the specific contexts of setting up a new venture, developing and growing an existing business, or designing an entrepreneurial organisation.” (QAA, 2012, p.8). This definition built on the definition of enterprise education, by bringing a sense of application of the entrepreneurial mindset in the context of business. This demonstrated a potential pathway between enterprise education and EE, whereby enterprise education equips students with the abilities required for entrepreneurship, and EE supports the use of these abilities in starting and developing businesses (Dinning, 2015). Whilst the QAA guidelines offered a tangible milestone and resource for EE in the UK, they were not mandatory to follow and it was down to individual educators to read and interpret them, which has led to some criticism as to their value (Armstrong, 2024; Rybinski, 2022). Indeed, their value was likely to be variable based on educators’ willingness to read and inform practice and their ability to effectively understand and interpret them.

The QAA (2012) guidelines were superseded by a revised set of guidelines in 2018 (QAA, 2018), which enhanced the definitions of enterprise and EE and aligned with this proposed broader impact measures (QAA, 2018). The review and development of the guidelines were implemented due to a changing policy landscape and to address calls and discussions with educators (QAA, 2018).

Updated entrepreneurship education guidelines

The QAA’s (2018) *Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers* provided updated definitions, guidelines, and benchmarks for UK educators and institutions around which to build their EE provision. This document was an enhancement of the guidelines provided in the previous iteration in 2012, rather than a fundamental change in the guidance, and it remains the most current QAA guidance for EE. Revised definitions of enterprise education and EE were presented to help distinguish between different entrepreneurial types of learning and evaluate existing practice acknowledging entrepreneurial learning is not always labelled explicitly within curricular. The continuum of entrepreneurial learning included learning where the goal is to create value by solving a problem or identifying new opportunities (QAA, 2018).

The aim of enterprise education was defined as “to produce graduates with an awareness, mindset and capability to generate original ideas in response to identified needs, opportunities and shortfalls, and the ability to act on them, even if circumstances are changing and ambiguous; in short, having an idea and making it happen.” (QAA, 2018, p. 9). This definition represented a limited departure from the QAA (2012) definition, retaining many of the same principles including developing attributes, ideas, and mindset to lead to action and make things happen. The definition of enterprise education was shortened and sharpened with the components within the definition contextualised in relation to change and ambiguity. The definition of EE saw a more radical change and

reconceptualization, with EE being defined as “The application of enterprise behaviours, attributes and competencies into the creation of cultural, social or economic value. This can, but does not exclusively, lead to venture creation.” (QAA, 2018, p. 7). Whilst both the QAA (2012) and QAA (2018) definitions of EE were both focused on application of entrepreneurial abilities, the context of this application had been widened in the 2018 definition to not only consider application in relation to business, but the creation of cultural, social or economic value. This shift in definition, conceptualization, and framing of EE corresponds with the perspective that EE should prioritise value creation in daily practice, serving as the foundation of entrepreneurship (Blenker et al., 2012; Lackéus et al., 2016). By focusing EE on the creation of value more generally, rather than only the formation of new ventures, it makes EE relevant and of value to a wider audience (Bell, 2022a; Lackéus et al., 2016), which aligns with the UK policy position that EE and entrepreneurship is pertinent to all, rather than a select few (O’Brien et al., 2019). Such a shift in emphasis and framing of entrepreneurship within EE has led to calls for EE to be viewed and assessed more widely as a way of thinking and behaviour, rather than an outcome (Cui & Bell, 2022; Leitch et al., 2012). Figure 1 details the stages identified in the evolution of the framing of EE in the UK.

Despite updated policy and guidance on EE, both opportunities and challenges continue to emerge.

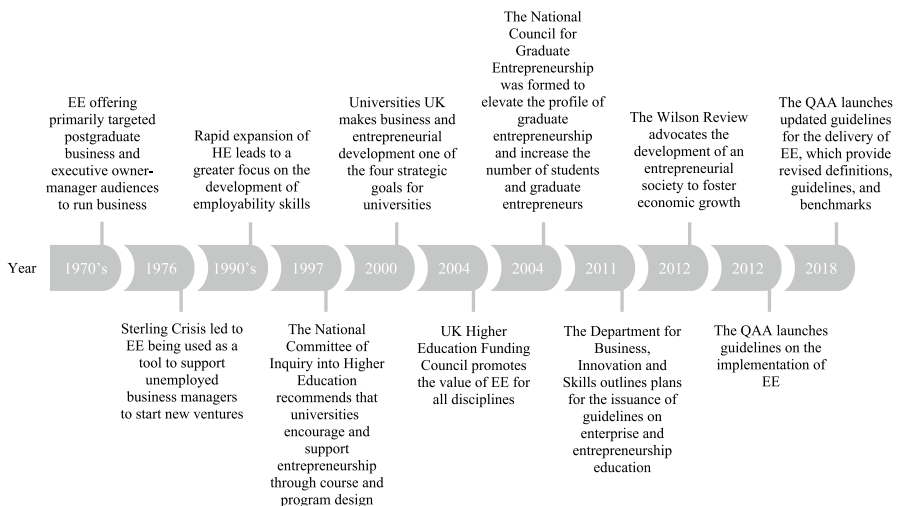


Fig. 1 Stages in the evolution of the framing of entrepreneurship education in the UK

Opportunities and challenges with the current framing of entrepreneurship education in the UK

The way that EE has been framed within UK policy and guidance offers both opportunities and challenges and the distinction between these is often blurred, as whilst it might offer an opportunity to one cohort or outcome, it might restrain another. Therefore, the opportunities and challenges should not be seen in isolation from one another.

Whilst the development of QAA EE guidance has been influential in the development of EE both in the UK and internationally, critique of it still exists. Armstrong (2024) highlights that the wide definition of entrepreneurship used within the QAA (2018) guidance has a nebulous focus on skill development, with some of the skills classified as entrepreneurial skills being able to be achieved through general teaching and assessment. It is due to this that the QAA's History benchmark statements contained in the QAA History Education guidance counter-intuitively state that History courses provide excellent grounding in enterprise and entrepreneurship (QAA, 2012). Therefore, it can be questioned as to what extent the QAA EE guidance is leading to the development of entrepreneurial curricular, vs existing curricular being relabelled as addressing elements of enterprise education and EE. Armstrong (2024) questioned whether the inclusion of EE benchmarks in other subjects coming from the QAA (2018) EE guidance was motivated by pedagogical decisions, or the desire to try and demonstrate subjects were adding economic, social, and cultural value.

This has led to calls for clearer distinction between the concepts of entrepreneurship, in terms of setting up a business, and transferable entrepreneurial skills, as a student could mistakenly believe that EE will focus on subjects like venture capital funding instead of broader instruction in the application of creative problem solving to lead to social or cultural value (Armstrong, 2024). Similarly, Bridge (2017) posits that due to the varied interpretations of entrepreneurship, it should be divided into "Enterprise for New Creation", concentrating on start-ups and business, and "Enterprise for Life", which emphasises fostering enterprising qualities in students, thereby eliminating the term entrepreneurship. A balance needs to be struck on ensuring that EE is relevant and delivered broadly to ensure that learners have the skills and attributes required for entrepreneurship, whilst still ensuring that there is a pathway to support those who want to start a new venture. The broadening of the framing and conceptualization of EE within the QAA (2018) guidelines to focus on the creation of cultural, social, or economic value has the potential to dilute the focus on new venture creation within EE. A lack of consensus exists in the literature as to what the focus and outcome of EE should be, with some suggesting that EE should move away from a fixation on the number of start-ups, to consider outcomes beyond venture creation, intrapreneurship, or exclusively entrepreneurial traits (Walmsley & Wraae, 2022). Consequently, if there is a movement too far from new venture creation, there is a danger that those interested in starting a business will no longer be supported, as institutions have finite resources, and these resources could get reallocated to support the majority. Such a transition could lead to taking the 'entrepreneurship'

out of EE, leading it to be focused on the masses, rather than supporting and nurturing high-growth ventures, a departure from the focus of EE in other countries such as the USA (Ellis et al., 2023; Watkins & Stone, 1999). This may result in the numerous qualities of EE advocated by policymakers, including job creation, innovation, and economic growth, remaining unfulfilled. Instead, fostering social and cultural value and development, which have significant importance, might be misaligned with the objectives pursued by policymakers advocating for EE. The broadening of the definition of entrepreneurship within UK EE guidance could explain an increasing misalignment between policymakers views as to the purpose and potential benefits of EE and its outcomes (Henry, 2013).

Effective evaluation of EE has already been identified as a challenge (Bozward et al., 2023b) and how its purpose is focused and framed could made assessing its impact more challenging. Conceptualising and framing the purpose of EE as supporting new business creation can potentially be assessed through the measurement of the number of start-ups or patents. Whilst this is not without its problems and challenges, as EE might not lead to impact in the short term and might impact people differently (Bozward et al., 2023a), the collection of objective measures relating to new ventures is more objective than the measurement of social and cultural value. The measurement and assessment of social and cultural value are harder to identify and quantify and clear direction for this is not provided in the QAA (2018) guidelines. The inclusion of three defined targeted outcomes of EE in the QAA (2018) guidelines, economic, social and cultural value, means that educators can tailor their targeted outcomes for their audience, but conversely makes it harder to measure the outcome, and there is still potential for blurring as to the purpose of EE.

Debates exist in the literature as to the balance between prescription and freedom within EE curricula (Rae et al., 2014). The perceived promise and opportunity afforded by EE have led to some countries to mandate a fixed entrepreneurship curriculum within HE, with varying levels of success (Al Kharusi et al., 2023; Wright et al., 2022). The QAA (2018) guidelines have continued to offer educators freedom to innovate their curricular and pedagogic approaches. But this can create tension between the prevailing policy environment and the educator's pedagogic decisions, potentially leading to a misalignment between the expectations of policymakers and educators (Rae et al., 2014). More direction as to how the impact of EE should be evaluated might better align its delivery with its intended outcomes. Few would argue that a fixed EE curricula should be mandated in the UK, particularly as EE is increasingly being seen through a humanistic lens focused on the individual learner and the personal development and fulfilment of learners (Bell, 2021, 2022b). However, such a broad purpose and set of goals could make it challenging, particularly for new or inexperienced educators to know what to teach.

An acute funding crisis in UK HE has led UK HEIs to cut both academic staff and provision deemed as being too costly (Oliver, 2025). Such cuts and rationalisation of HEI provision have the potential to influence EE in the UK. Due to the expense and time requirements of customised start-up support, there is a possibility of a reduction in EE focused new venture creation in favour of a more generalised and homogenised EE (Brentnall et al., 2024). There is also the potential for the repurposing of existing teaching materials leading to EE losing its distinction from

other business curricula (Wright et al., 2022). Such delivery might still meet the QAA (2018) guidelines for EE but impact the support for new ventures.

Finally, although the QAA (2018) guidelines emphasise the necessity for EE to equip students for the future, the guidelines do not explicitly detail technological expertise and skills that students should develop. This decision is presently at the discretion of the educator. However, it has been found that most entrepreneurship programmes emphasise generic entrepreneurial principles instead of equipping students with the digital and technological skills necessary for entrepreneurship (Wahl & Münch, 2022). So, providing more explicit guidance as to how technology and artificial intelligence can be integrated into EE could support educators who might not be familiar with the technology themselves (Bell & Bell, 2023). The fast pace of technology might necessitate much more frequent EE guidelines to detail how the latest technology feeds into EE, but it is essential that this technology is included in EE curricular.

Conclusion

As UK governments and policymakers have promoted EE through the issuance of policy and guidelines, an inconsistent picture of EE has emerged (Hoppe, 2016). This paper has sought to review the development of how EE has been framed within UK policy and guidance and what opportunities and challenges come from this framing, contributing to understanding the ‘why’, ‘what’, and ‘how’ entrepreneurship is taught in the UK (Byrne et al., 2014; Lackéus, 2015). This paper contributes to the literature by providing a critical analysis of the discourse around the guidance for implementation of EE, enhancing comprehension of the perspectives, ideologies, ambiguities, and concerns within the guidance (Amiel et al., 2022).

The general emphasis and promotion of EE have remained comparatively stable within the UK (Henry, 2013); however, there has been a marked change as to how its purpose and role have been framed within policy and guidance. Evolving from an 1970s focus on developing skills to help small business managers to a mid-1970s focus on helping unemployed managers establish new businesses, the government widened the focus of EE to develop an enterprising culture after polytechnics joined the ranks of universities. Despite the growth in the prominence and delivery of EE, HEIs delivered it with “pragmatic fluidity” (Matlay & Carey, 2007). Although the QAA was last updated in 2018, more recently, the 2024 UK Industrial Strategy (Department for Business and Trade, 2024) highlights the desire to create a pro-entrepreneurial environment, which could potentially be achieved through both a narrow focus on start-ups and/or the development of entrepreneurial skills.

The broadening of the focus and emphasis of EE has helped to mainstream its applicability to a broader range of learners, in effect mainstreaming its relevance. However, shifting the focus and emphasis of EE too far away from new venture creation undermines the original goal of EE. EE has traditionally been posited as able to develop and improve macroeconomic outcomes, such as economic growth, employment and innovation, and moving away from a focus on new venture creation could dilute this link. Challenges around the effective measurement of broader EE goals

such as the creation of social, cultural, and economic value, along with less linkage to headline macroeconomic outcomes preferred by policymakers, could lead to EE becoming less favoured by future governments. The shift in emphasis of EE to focus on wider social, cultural, and economic value could increase blurring with other forms of business education, as business education is increasingly seeking to align with societal values and development (Arieli et al., 2016; Bell, 2021). This blurring could make EE programmes vulnerable to funding cuts, particularly in the current UK HE funding crisis (Oliver, 2025). Ambiguity also decreases focus in key growing areas such as technology, artificial intelligence, and their relevance to start-up-focused EE (Wahl & Münch, 2022).

As EE is receiving ever-increasing global discourse, there is continuing metamorphosis as to the definition and promotion of EE. This ranges from a narrow focus on promoting start-ups to support economic goals to emphasising the development of globally relevant skills required for nations to advance the implementation of sustainable development goals for societal benefit. As the concept of EE is modified and adapted to focus on specific needs in different contexts by researchers and policymakers, there will likely never be universal consensus as to the purpose and goal of EE. As this paper highlights, the framing as to the purpose of EE is constantly shifting. Such differences and the continued metamorphosis of the concept of EE are something that researchers and policymakers need to be aware of, as EE and its purpose are not a singular monolith and are constantly evolving. Without clear definition of the purpose and focus of EE, there is the potential to confuse a range of important stakeholders, potentially damaging the uptake of EE and its ability to achieve the desired outcome. Additionally, without clear definition the value and alignment of teaching methods and approaches and assessment are hard to determine and can lack legitimacy within the eyes of stakeholders (Bell & Bell, 2024). Therefore, EE and its purpose need to be clearly contextualised and defined by researchers and policymakers, to support the effective development, implementation and practice of EE. In the UK context where higher education institutions are generally autonomous, direct government intervention is unlikely, making regular guidance through institutions such as the QAA important to ensure EE practice within HE is consistent and aligned with an agreed purpose and direction.

In most contexts, including that of the UK, the authors propose it will be important for policymakers to find a balance between ensuring EE is open and relevant to a wide audience whilst still ensuring that there is the provision required to support start-ups to ensure the sustainability and relevance of EE. This is a challenging balancing act which needs to consider the evolving dynamics of each context, and where the framing and definition of EE play an important role, and it is essential for powers determining this balance to be clearly defined and communicated.

Transferability, limitations and future research

Whilst this paper has focused on the development and evolution as to the framing of EE within the context of the UK, parallels can be drawn to EE in other countries. For instance, the purposing of teaching materials for EE reported in the UK (Matlay

& Carey, 2007) has also been identified in other countries (Wright et al., 2022), and the shift in defining entrepreneurship as creating value is also prevalent in Scandinavia (Lackéus, 2018). This suggests that whilst each case is unique, driven by different direction, policy and culture, the pathway followed in the UK, and the opportunities and challenges, might have some transferability to other countries seeking to promote EE. Although it is acknowledged that no two pathways for the development of EE are likely to be the same, future research could offer an increased understanding as to how EE can be established in different contexts and how it can be evolved and developed over time to increase effectiveness and sustainability.

This research has utilised only secondary document analysis, which fails to elicit views from individuals as to how policy and guidance is interpreted and actioned. Given that policy and guidance in HE is largely not prescribed in the UK, it is likely that individuals will interpret the guidance differently, leading to different implementations of EE. This is a limitation of the research and future research could explore how different HEIs are interpreting the policy and guidance in practice and explore how they are developing EE provision to address it. Future research could also explore the linkage between policy and guidance and EE educators' actions, to determine what affect policy and guidance has on individual educators and their practice.

This study has not sought to link EE policy to outcomes or impact, and this remains a valuable avenue for research which is also under researched. Therefore, this research does not posit the UK as an example to follow, rather this paper seeks to review how EE and its purpose have been framed and have evolved over time. Indeed, the lag time between EE and the longer-term impact and outcome is not clear and given that EE is increasingly seen as offering skills for life, further longitudinal research is required to understand how effective EE is in terms of societal impact. Future research could also seek to make direct comparisons between policy, EE and outcomes and determine how policy and pedagogic features lead to differing outcomes.

Author contributions HB conceptualized the research, reviewed the literature, conducted the analysis, and drafted the paper. RB supported the literature search and reviewed and edited the manuscript. Both authors approved the final manuscript for submission.

Data availability No datasets were generated or analysed during the current study.

Ethics Declarations

Competing Interests Robin Bell is a member of the editorial board but was not involved in the review process of the paper.

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References

- Al Kharusi, B., Bell, R., & Kasem, L. (2023). Educators' conceptualization of entrepreneurship in Omani entrepreneurship education practice. *Entrepreneurship Education*, 6(4), 339–364. <https://doi.org/10.1007/s41959-023-00102-5>
- Arieli, S., Sagiv, L., & Cohen-Shalem, E. (2016). Values in business schools: The role of self-selection and socialization. *Academy of Management Learning & Education*, 15(3), 493–507. <https://doi.org/10.5465/amle.2014.0064>
- Amiel, M., Yemini, M., & Kolleck, N. (2022). Questioning the rhetoric: A critical analysis of intergovernmental organisations' entrepreneurship education policy. *European Educational Research Journal*, 21(5), 756–777. <https://doi.org/10.1177/14749041211005893>
- Armstrong, J. (2024). The QAA's subject benchmarks and critical pedagogy: The example of 'gateway to King's.' *British Educational Research Journal*, 50(6), 2899–2919. <https://doi.org/10.1002/berj.4059>
- Athayde, R. (2012). The impact of enterprise education on attitudes to enterprise in young people: An evaluation study. *Education + Training*, 54(8/9), 709–726. <https://doi.org/10.1108/00400911211274846>
- Bell, R. (2016). Unpacking the link between entrepreneurialism and employability: An assessment of the relationship between entrepreneurial attitudes and likelihood of graduate employment in a professional field. *Education + Training*, 58(1), 2–17. <https://doi.org/10.1108/ET-09-2014-0115>
- Bell, R. (2021). Underpinning the entrepreneurship educator's toolkit: Conceptualising the influence of educational philosophies and theory. *Entrepreneurship Education*, 4(1), 1–18. <https://doi.org/10.1007/s41959-020-00042-4>
- Bell, R. (2022a). Developing entrepreneurial behaviours in the Chinese classroom through value creation pedagogy. *Innovations in Education and Teaching International*, 59(1), 37–48. <https://doi.org/10.1080/14703297.2020.1793800>
- Bell, R. (2022b). Supporting students and society: Underpinning entrepreneurship education with a humanistic philosophy. In G. J. Larios-Hernandez, A. Walmsley, & I. Lopez-Castro (Eds.), *Theorising undergraduate entrepreneurship education: Reflections on the development of the entrepreneurial mindset* (pp. 157–172). Springer. https://doi.org/10.1007/978-3-030-87865-8_9
- Bell, R. (2023). Entrepreneurship education in the United Kingdom. In X. Xu (Ed.), *Comparative entrepreneurship education* (pp. 179–213). Springer. https://doi.org/10.1007/978-981-99-1835-5_8
- Bell, H. R., & Bell, R. (2025). Legitimizing new constructivist practice for entrepreneurship educators: Legitimacy as a framework to examine educators' new practice in China. *International Journal of Entrepreneurial Behavior and Research*. <https://doi.org/10.1108/IJEBR-08-2023-0915>
- Bell, R., & Bell, H. (2016). An enterprise opportunity for entrepreneurial students: Student enterprise development and experience assessed through the student voice. *Education + Training*, 58(7/8), 751–765. <https://doi.org/10.1108/ET-12-2014-0150>
- Bell, R., & Bell, H. (2023). Entrepreneurship education in the era of generative artificial intelligence. *Entrepreneurship Education*, 6(3), 229–244. <https://doi.org/10.1007/s41959-023-00099-x>
- Blenker, P., Frederiksen, S. H., Korsgaard, S., Müller, S., Neergaard, H., & Thrane, C. (2012). Entrepreneurship as everyday practice: Towards a personalized pedagogy of enterprise education. *Industry and Higher Education*, 26(6), 417–430. <https://doi.org/10.5367/ihc.2012.0126>
- Bozward, D., Rogers-Draycott, M., Angba, C., Zhang, C., Ma, H., An, F., Topolansky, F., Sabia, L., Bell, R., & Beaumont, E. (2023a). How can entrepreneurial interventions in a university context impact the entrepreneurial intention of their students? *Entrepreneurship Education*, 6(1), 1–23. <https://doi.org/10.1007/s41959-022-00083-x>
- Bozward, D., Rogers-Draycott, M., Smith, K., Mave, M., Curtis, V., Aluthgama-Baduge, C., Moon, R., & Adams, N. (2023b). Exploring the outcomes of enterprise and entrepreneurship education in UK HEIs: An excellence framework perspective. *Industry and Higher Education*, 37(3), 345–358. <https://doi.org/10.1177/0950422221121298>

- Brentnall, C., Lackéus, M., & Blenker, P. (2024). Homogenization processes in entrepreneurship education: The case of Junior Achievement. *Entrepreneurship and Regional Development*, 36(5–6), 775–797. <https://doi.org/10.1080/08985626.2023.2279171>
- Bridge, S. (2017). Is “entrepreneurship” the problem in entrepreneurship education? *Education + Training*, 59(7/8), 740–750. <https://doi.org/10.1108/ET-02-2016-0037>
- Byrne, J., Fayolle, A., & Toutain, O. (2014). *Chapter 15: Entrepreneurship education: what we know and what we need to know*. <https://www.elgaronline.com/edcollchap/edcoll/9781849809238/9781849809238.00025.xml>
- Clark, R. W., Davis, C. H., & Harnish, V. C. (1984). Do courses in entrepreneurship aid in new venture creation? *Journal of Small Business Management*, 22(2), 26–31.
- Cranmer, S. (2006). Enhancing graduate employability: Best intentions and mixed outcomes. *Studies in Higher Education*, 31(2), 169–184. <https://doi.org/10.1080/03075070600572041>
- Cui, J., & Bell, R. (2022). Behavioural entrepreneurial mindset: How entrepreneurial education activity impacts entrepreneurial intention and behaviour. *The International Journal of Management Education*, 20(2), Article 100639. <https://doi.org/10.1016/j.ijme.2022.100639>
- Cui, J., Sun, J., & Bell, R. (2021). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *The International Journal of Management Education*, 19(1), Article 100296. <https://doi.org/10.1016/j.ijme.2019.04.001>
- Dakung, R. J., Bell, R., Orobia, L. A., & Yatu, L. (2022). Entrepreneurship education and the moderating role of inclusion in the entrepreneurial action of disabled students. *The International Journal of Management Education*, 20(3), Article 100715. <https://doi.org/10.1016/j.ijme.2022.100715>
- David, K., Penaluna, K., McCallum, E., & Usei, C. (2018). Embedding entrepreneurial skills development in teacher education. In J. James, J. Preece, & R. Valdés-Cotera (Eds.), *Entrepreneurial Learning City Regions: Delivering on the UNESCO 2013, Beijing Declaration on Building Learning Cities* (pp. 319–340). Springer. https://doi.org/10.1007/978-3-319-61130-3_19
- Department for Business Enterprise and Regulatory Reform. (2008). *Enterprise: Unlocking the UK's Talent*. HM Treasury.
- Department for Business, Innovation and Skills. (2011). *Learners at the Heart of the System* (BIS White Paper). Department for Business, Innovation and Skills.
- Department for Business and Trade (2024). *Invest 2035: the UK's modern industrial strategy*. Department for Business and Trade.
- Dinning, T. (2015). Dispelling the myth of how to develop enterprise/entrepreneurship skills in university students: A staff perception study. *Creative Education*, 6(14), Article Article 14. <https://doi.org/10.4236/ce.2015.614159>
- Education Department for Education and Skills Departmental. (2003). *The Future of Higher Education* [White Paper]. Education Department for Education and Skills Departmental.
- Ellis, A. K., Aker, L., & Delamarter, J. (2023). Entrepreneurship Education in the US. In X. Xu (Ed.), *Comparative Entrepreneurship Education* (pp. 215–233). Springer. https://doi.org/10.1007/978-981-99-1835-5_9
- European Commission (EC) Enterprise and Industry Directorate-General. (2008). *Entrepreneurship in Higher Education, Especially Within Non-Business Studies*. European Commission.
- Gibb, A. (2002). In pursuit of a new ‘enterprise’ and ‘entrepreneurship’ paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233–269. <https://doi.org/10.1111/1468-2370.00086>
- Gibb, A., & Hannon, P. (2006). Towards the entrepreneurial university. *International Journal of Entrepreneurship Education*, 4(1), 73–110.
- Henry, C. (2013). Entrepreneurship education in HE: Are policy makers expecting too much? *Education + Training*, 55(8/9), 836–848. <https://doi.org/10.1108/ET-06-2013-0079>
- Higher Education Funding Council Executive. (2024). *HEFCE Strategic Plan for 2006–2011*. HEFCE.
- Hoppe, M. (2016). Policy and entrepreneurship education. *Small Business Economics*, 46(1), 13–29. <https://doi.org/10.1007/s11187-015-9676-7>
- Jones, C., Penaluna, K., & Penaluna, A. (2021). Value creation in entrepreneurial education: Towards a unified approach. *Education + Training*, 63(1), 101–113. <https://doi.org/10.1108/ET-06-2020-0165>
- Jones, S. (2014). Gendered discourses of entrepreneurship in UK higher education: The fictive entrepreneur and the fictive student. *International Small Business Journal*, 32(3), 237–258. <https://doi.org/10.1177/0266242612453933>

- Lackéus, M. (2015). *Entrepreneurship in Education: What, why, when, how*. OECD.
- Lackéus, M. (2018). "What is Value?" – A Framework for Analyzing and Facilitating Entrepreneurial Value Creation. *Uniped*, 41(1), 10–28. <https://doi.org/10.18261/issn.1893-8981-2018-01-02>
- Lackéus, M., Lundqvist, M., & Middleton, K. W. (2016). Bridging the traditional-progressive education rift through entrepreneurship. *International Journal of Entrepreneurial Behavior and ResearCh*, 22(6), 777–803. <https://doi.org/10.1108/IJEBr-03-2016-0072>
- Leitch, C., Hazlett, S.-A., & Pittaway, L. (2012). *Entrepreneurship education and context*. Taylor & Francis. <https://doi.org/10.1080/08985626.2012.733613>
- Lewis, H. (2011). A model of entrepreneurial capability based on a holistic review of the literature from three academic domains. *Industry and Higher Education*, 25(6), 429–440. <https://doi.org/10.5367/ihe.2011.0071>
- Li, G., Long, Z., Jiang, Y., Huang, Y., Wang, P., & Huang, Z. (2022). Entrepreneurship education, entrepreneurship policy and entrepreneurial competence: Mediating effect of entrepreneurship competition in China. *Education + Training*, 65(4), 607–629. <https://doi.org/10.1108/ET-06-2021-0218>
- Martínez-Gregorio, S., Badenes-Ribera, L., & Oliver, A. (2021). Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: A meta-analysis. *The International Journal of Management Education*, 19(3), Article 100545. <https://doi.org/10.1016/j.ijme.2021.100545>
- Matlay, H., & Carey, C. (2007). Entrepreneurship education in the UK: A longitudinal perspective. *Journal of Small Business and Enterprise Development*, 14(2), 252–263. <https://doi.org/10.1108/14626000710746682>
- Mayhew, K., Deer, C., & Dua, M. (2004). The move to mass higher education in the UK: Many questions and some answers. *Oxford Review of Education*, 30(1), 65–82. <https://doi.org/10.1080/0305498042000190069>
- McKeown, J., Millman, C., Reddy Sursani, S., Smith, K., & Martin, L. M. (2006). Graduate entrepreneurship education in the United Kingdom. *Education + Training*, 48(8/9), 597–613. <https://doi.org/10.1108/00400910610710038>
- National Committee of Inquiry into Higher Education. (1997). *High Education in the Learning Society: Report of the National Committee*. HMSO.
- O'Brien, E., Cooney, T., & Blenker, P. (2019). Expanding university entrepreneurial ecosystems to under-represented communities. *Journal of Entrepreneurship and Public Policy*, 8(3), 384–407. <https://doi.org/10.1108/JEPP-03-2019-0025>
- Oliver, T. J. (2025). Learning to stand on its own two feet: The Office for Students and the crisis in higher education in England. *The Political Quarterly*. <https://doi.org/10.1111/1467-923X.13503>
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479–510. <https://doi.org/10.1177/0266242607080656>
- Pittaway, L., Henry, C., Kirby, D., & Thompson, J. (2024). The history of entrepreneurship education in the United Kingdom: 1860–2020. *Management & Organizational History*. <https://doi.org/10.1080/17449359.2024.2399664>
- Quality Assurance Agency for Higher Education (QAA). (2012). *Enterprise and entrepreneurship education: Guidance for higher education providers in England Wales and Northern Ireland*. QAA.
- Quality Assurance Agency for Higher Education (QAA). (2018). *Enterprise and Entrepreneurship: Guidance for UK Higher Education Providers*. QAA. https://www.qaa.ac.uk/docs/qaas/enhancement-and-development/enterprise-and-entrpreneurship-education-2018.pdf?sfvrsn=15f1f981_8
- Rae, D. (2005). Entrepreneurial learning: A narrative-based conceptual model. *Journal of Small Business and Enterprise Development*, 12(3), 323–335. <https://doi.org/10.1108/14626000510612259>
- Rae, D. (2014). Graduate Entrepreneurship and Career Initiation in the 'New Era' Economy. *Journal of General Management*, 40(1), 79–95. <https://doi.org/10.1177/030630701404000105>
- Rae, D., Matlay, H., McGowan, P., & Penaluna, A. (2014). Freedom or prescription: The case for curriculum guidance in enterprise and entrepreneurship education. *Industry and Higher Education*, 28(6), 387–398. <https://doi.org/10.5367/ihe.2014.0227>
- Robertson, M., & Collins, A. (2003). Developing entrepreneurship in West Yorkshire: West Yorkshire universities' partnership and Business Start-Up@Leeds Met. *Education + Training*, 45(6), 303–307. <https://doi.org/10.1108/00400910310495941>
- Sewell, P., & Dacre Pool, L. (2010). Moving from conceptual ambiguity to operational clarity: Employability, enterprise and entrepreneurship in higher education. *Education + Training*, 52(1), 89–94. <https://doi.org/10.1108/00400911011017708>

- Suguna, M., Sreenivasan, A., Ravi, L., Devarajan, M., Suresh, M., Almazyad, A. S., Xiong, G., Ali, I., & Mohamed, A. W. (2024). Entrepreneurial education and its role in fostering sustainable communities. *Scientific Reports*, 14(1), 7588. <https://doi.org/10.1038/s41598-024-57470-8>
- Wahl, D., & Münch, J. (2022). Turning students into industry 4.0 entrepreneurs: Design and evaluation of a tailored study program. *Entrepreneurship Education*, 5(3), 225–259. <https://doi.org/10.1007/s41959-022-00077-9>
- Walmsley, A., & Wraae, B. (2022). Entrepreneurship education but not as we know it: Reflections on the relationship between critical pedagogy and entrepreneurship education. *The International Journal of Management Education*, 20(3), Article 100726. <https://doi.org/10.1016/j.ijme.2022.100726>
- Watkins, D., & Stone, G. (1999). Entrepreneurship education in UK HEIs: Origins, development and trends. *Industry and Higher Education*, 13(6), 382–389. <https://doi.org/10.5367/000000099101294726>
- Wilson, T. (2012). *A Review of Business–University Collaboration*. Department for Business, Skills and Innovation.
- Wright, E., Feng, S., & Zheng, Y. (2022). Unemployed graduate to the next Jack Ma? A counter-narrative to the entrepreneurship movement in higher education. *Higher Education*, 83(4), 863–880. <https://doi.org/10.1007/s10734-021-00709-4>

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