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**Experiential Entrepreneurship Education and the Student-focused Entrepreneurial University**

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## Experiential Entrepreneurship Education and the Student-focused Entrepreneurial University.

### Abstract

**Purpose:** This article explores the provision and reported outcomes of Experiential Entrepreneurship Education (EEE), from learner, educator and university perspectives, in order to reflect upon the progress of the Entrepreneurial University. It proposes a conceptual framework for integrating the multiple stakeholder perspectives for an 'education led' and student-focused Entrepreneurial University, something yet to be identified from existing research and, consequentially, future research.

**Design/methodology/approach:** A reflective literature review explores the depth and breadth of EEE provision in Universities, noting: what is taking place, who is involved, where EEE is situated (within the university context), and how the knowledge base is informed. From these reflections, a conceptual framework is proposed as a means of exploring and categorizing progress towards a student-focused Entrepreneurial University through education experiences.

**Findings:** The literature review is largely informed by case studies developed by educators reflecting on student learner experiences for the purpose of course enhancement. These case exemplars provide the resource for emergent, bottom-up strategy that could support the Entrepreneurial University. However, the role of the University is less researched, in terms of providing context and external strategic relationships to resource EEE and deliver a more planned approach to the Entrepreneurial University. The Entrepreneurial University and EEE are mainstream agendas and the development of both must consider the role and contribution of the University in terms of strategy formulation and implementation.

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3 **Originality/Value:** This study takes a holistic view, seeing EEE and the Entrepreneurial  
4 University as connected agendas. The student-focused Entrepreneurial University cannot result  
5 from emergent, bottom-up strategy alone and thus there is a need to address the role of top-  
6 down resource-based University strategy in creating real progress. The article provides a  
7 conceptualization, for the purpose of analysing and informing the relationship between EEE  
8 and the Entrepreneurial University that places the University as a key stakeholder, and in doing  
9 so asks that scholars and educators build the knowledge base not only from cases of good  
10 practice but also from the review of strategic management within Universities.  
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21 **Key words:** experiential entrepreneurship education, Entrepreneurial University, stakeholders,  
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## Introduction

This article reports a reflective literature review and offers a novel conceptual framework for the assessment of the provision and reported outcomes of Experiential Entrepreneurship Education (EEE) and the implications for the development of the student-focused Entrepreneurial University. It asks questions of EEE provision, pertaining to: ‘what’ is provided in terms of learning opportunities; ‘who’ is engaged and involved in delivery; ‘where’ learning is situated in the University context, and therefore, ‘how’ the knowledge base is informed in terms of learner, educator and University perspectives.

The Knowledge Exchange Framework (KEF) (Research England, 2020) and Teaching Excellence Framework (TEF) (see Department for Education (DFE, 2017)) are amongst the key policy initiatives of relevance to EEE in the United Kingdom (UK). This study is timely **in coinciding with the introduction of the KEF**, an external engagement agenda designed to raise knowledge exchange to the benefit of local economic **and social** agendas (Johnson, 2020; Secher and Raghu, 2018). Specifically, skills, enterprise and entrepreneurship are included in the **metrics; and the number of graduate start-ups is an integral measure**. The implication is that the association between entrepreneurial learning and graduate outcomes becomes a matter of strategic importance and management.

A meaningful response to the KEF agenda would be to adopt an Entrepreneurial University Model. However, an enduring research gap relates to how Universities can deliver enterprise and entrepreneurial learning and through this create meaningful progress towards the Entrepreneurial University. Typically, the teaching and learning agenda and Entrepreneurial Universities have been researched and informed independent of each other (Gianiodis and Meek, 2020). Furthermore, the association between practices and outcomes needs further investigation, as entrepreneurship and enterprise agendas have been uneven across faculty and may not deliver their intended economic impacts. In a context where **the** Entrepreneurial University is evolving **into** a formal agenda with **associated metrics** (through the KEF), new questions arise. Specifically, what needs to happen strategically and structurally to enhance outcomes from EEE in order to fulfil engagement agendas **and increase graduate start-ups?** Previously, the work of Gibb has addressed these associations (most notably Gibb, 2005; Gibb et al., 2009), proposing that all students should be exposed to opportunities and risks to support their personal development. These arguments were subsequently reinforced by the UK Quality Assurance Agency (QAA) for Higher Education (2018). The underlying assumption being that

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3 teaching and learning will create the antecedents to aspirations and engagement in student and  
4 graduate business start-up. Importantly, KEF goes further, asking that universities consider  
5 their external impact in terms of social and economic change (Mason *et al.*, 2020), which can  
6 result from ‘entrepreneurial’ activity within the University experience and after graduation.  
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8 Therefore, the Entrepreneurial University, must respond to a more complex stakeholder  
9 community (Gianiodis and Meek, 2020). Within the UK context, EEE is in effect elevated by  
10 KEF into **an** Entrepreneurial University agenda.  
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17 This paper revisits the concept of the Entrepreneurial University, and introduces EEE as the  
18 lens through which to consider the depth and breadth of activity to support its development.  
19 EEE can take a wide variety of forms and, moreover, the Entrepreneurial University has no one  
20 definition (Bronstein and Reihlen, 2014). Firstly, entrepreneurship education opportunities are  
21 likely to be available to all students (Neck and Greene, 2011; Schenkel *et al.*, 2016), but not  
22 necessarily as part of their taught curriculum. Some opportunities may be experiential. Duruflé  
23 *et al.* (2018) distinguish between inspiring students (by creating a mindset and intent),  
24 engagement (experiential learning opportunities to develop skills and ideas) and acceleration  
25 (establishing ventures). Secondly, there are different ways to become an Entrepreneurial  
26 University; some cases allude to an education driven model that results in extended  
27 entrepreneurial ecosystems, over time, from the University (Wolf, 2017). Other models are  
28 more focused, seeking to maximize the potential for commercializing ideas to create economic  
29 and social value (Aldridge *et al.*, 2014; Clark, 1988; 2004; Huyghe and Knockaert, 2015).  
30 Incubating and starting new businesses (by both staff and students) is one way to do this. In  
31 practice, at some stage the commercial and education models coalesce; student venture creation  
32 courses lead to value-creation potential resulting in start-ups (Gianiados and Meek, 2020;  
33 Hayter *et al.*, 2017; Lackéus and Williams Middleton, 2016; Lackéus, 2020).  
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48 Entrepreneurship education is now widespread (Davey *et al.* 2016; Neck and Greene, 2011)  
49 but is it harnessed as a strategic resource? The resource-based view of strategy (RBV) contends  
50 that relevant, distinctive, high-quality resources are instrumental for creating and sustaining  
51 competitive advantage (Wernerfelt, 1984; Barney, 1991) and the achievement of the University  
52 vision and mission. This article revisits and reviews the concept of the student-focused  
53 Entrepreneurial University through the development of experiential entrepreneurial education  
54 (EEE) and asks whether the knowledge base is sufficient to inform a high-level resource-based  
55 University strategy. Taking a resource-based view binds together the relationship between  
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3 tangible and intangible resources such as infrastructure (curriculum) and the outward reputation  
4 of the institution. Furthermore, a resource-based view is best orchestrated through clear  
5 associations between goals, objectives and resource allocation mechanisms, directing attention  
6 to infrastructure and culture of the organization (Lynch and Baines, 2013). Resources and their  
7 management are, therefore, enablers of the Entrepreneurial University.  
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13 The RBV advises that organizations focus on building and further exploiting their existing  
14 resource strengths and expertise, and use these to innovate and develop a unique reputation.  
15 Bischoff et al. (2018) counsel that if recruiting new (perhaps more ideal) resources is limited  
16 by, say, financial constraints, the existing (less ideal) resources will need to be redeployed if  
17 strategic priorities are changed. This paper argues that while EEE has become an integral part  
18 of University provision, its relationship to the strategic agenda remains under-informed and  
19 underutilized. Consequently, the gap between current practice at ‘activity level’ (well-  
20 researched and with documented positive outcomes) and the challenge of actually delivering  
21 Gibb’s desire for every student to experience opportunity and risk is explored here.  
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31 The paper takes the following form: the Entrepreneurial University and EEE are explained and  
32 pertinent research questions identified. A reflective literature review then is undertaken to  
33 explore incidences of EEE and the findings and discussion then **consider** the nature of this  
34 knowledge base and determine “what is not known”, in terms of the relationship between EEE  
35 initiatives and the wider development of the Entrepreneurial University. A conceptual  
36 framework is then proposed, combining the contribution of stakeholders in developing  
37 objectives, opportunities and outcomes for EEE. The article concludes by examining the extent  
38 to which a student-focused Entrepreneurial University can be furthered through the knowledge  
39 and resources generated by EEE initiatives.  
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### 48 ***The Entrepreneurial University***

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50 Taking a student-facing perspective, Gibb (2005; 2009) postulated that Entrepreneurial  
51 Universities would demonstrate much more than entrepreneurship curriculum by providing  
52 multiple entrepreneurial initiatives and opportunities and embrace all learners. Other  
53 perspectives exist. The **Entrepreneurial University** may be seen as research led, with the  
54 University taking an active role in venture creation to commercialize research (and frequently  
55 involving staff), often undertaking collaboration with external partners (Etzkowitz, 2013;  
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3 Rhoades and Stensaker, 2017). Clark (1988) also includes the ability to generate research  
4 income. Alternatively, the Entrepreneurial University can be seen as a pervasive culture (Rae  
5 et al., 2012) that facilitates and motivates educators and learners to opt to engage in  
6 entrepreneurial behaviours as part of formal provision or adjunct to the curriculum. Some  
7 universities have created dedicated “enterprise centres” in which business start-up spaces (such  
8 as incubators) and learning opportunities for students co-exist. The implication is that resource  
9 requirements differ, necessitating distinct organization and development. The  
10 ‘entrepreneurship agenda’, however, remains a work in progress in terms of the feasibility of a  
11 student-facing Entrepreneurial University, which offers mainstream experiential provision to  
12 all students in preparation for the world of employment and self-employment (Sam and Van  
13 Der Sijde, 2014), the impact of which is much harder to determine.

### 24 ***Experiential Entrepreneurial Education***

25 A University degree, according to Gibb (2005), does not guarantee entry to the world of work;  
26 there is, consequently, value in additional personal development. Cherwitz (2005) reinforces  
27 this argument by proposing that entrepreneurship is not (just) about small business  
28 development, but about attitude and mindset. Experiential Entrepreneurial Education (EEE)  
29 has grown apace (Kuratko, 2005; Solomon, 2007; Pittaway and Cope, 2007a), underpinned by  
30 pedagogies developed to support learning for and from action. According to Honig (2004),  
31 EEE fills the gap between knowledge acquisition (of what entrepreneurship is), and a tacit  
32 appreciation of what it means to be entrepreneurial, knowledge and skills must be enacted,  
33 facilitated and reflected upon if real learning is to occur (Pittaway and Cope, 2007b).  
34 Experiential learning is strengthened where the learner is engaged, directive and reflective, in  
35 exploring their personal and professional development through action (Boström and Lassen,  
36 2006). EEE entails increasing awareness of entrepreneurial opportunities for students during  
37 and after graduation; furthermore, skills development may enable new venture creation to  
38 occur. The outcomes of such experiences may be temporary or enduring, but in the first  
39 instance create an awareness of the entrepreneurial self and the potential to engage in  
40 entrepreneurship in the future. Importantly, for the purposes of this study, EEE courses or  
41 interventions are characterized by opportunities to gain knowledge and skills for practice,  
42 informed by reflection and self-directed learning, and operating in conditions that educators  
43 think that entrepreneurs experience.

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EEE is conceptualized as a pluralist, multi-stakeholder agenda (Schenkel et al., 2016), in common with and to the same ends at the student-focused Entrepreneurial University. Progress towards an entrepreneurial context can, therefore, be assessed by the prevalence and outcomes of EEE. The following research questions are applied to the EEE literature in order to assess this aspect:

- How do educators construct theoretical/practical knowledge of EEE through research?
- What is being done in terms of EEE?
- Who are the stakeholders?
- Where does EEE take place, both within and external to the University?

Regarding the first question, there is a notable challenge in locating and navigating relevant literature sources as there is potential conflation between ‘entrepreneurship education’, ‘enterprise education’ and ‘entrepreneurial learning’ (Collins *et al.*, 2006) literature. There is a lack of clarity concerning what is being learned and how, in terms of how studies may be titled and categorized. In response to this issue, the methodology (below) proposes a reflective literature review that interprets the contribution to knowledge of each article through deep reading, as opposed to relying on titles and key words as sole indicators of relevance.

### Methodology

It has already been established that EEE and the Entrepreneurial University are rarely combined in research studies. A literature review is, therefore, undertaken in order to determine evidence of EEE in relation to the University context. This review is an important aspect of forming a conceptualization, addressing what is known of EEE in practice and how this knowledge can be used to address progress towards the student-focused Entrepreneurial University. Prior literature-based studies have sought to answer ‘what is happening’ in terms of the growth and development of the entrepreneurship education field, using systematic approaches (Pittaway and Cope, 2007a; Maritz, 2017), which ensures broad coverage of evidence and themes, as well as unifying research across different fields (Thorpe et al., 2005). The expectation concerning the key themes in this study is that there is a relatively narrow evidence base, but one that merits deeper investigation. The search was conducted using SUMMON (including: ABI/EBSCO/JSTOR databases) but does not apply journal ‘quasi-quality’ rankings, since this elitist approach could drastically cut various valuable cases and studies (Yatu et al., 2018).



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7 The inclusion and exclusion criteria used to initiate this search are listed in Table 1. For the  
8 resulting 33 articles, a reflective literature review is undertaken to inform the ‘how’, ‘what’,  
9 ‘where’, and ‘who’ questions relating to EEE learning experiences. Importantly, the search  
10 sought to link EEE (what is being done) with the University context (where). The inclusion of  
11 terms Entrepreneurial University, outcomes and stakeholders were applied to understand ‘who’  
12 is involved in the widest possible sense, in terms of relative interest and participation. A  
13 reflective literature review places emphasis on a deep appreciation of this knowledge base  
14 (Rose, 2016). The researchers undertook close reading and qualitative interpretations of these  
15 accounts (Amernic and Craig, 2006; Davidsson and Gordon, 2012), applying their own  
16 learning from practice as entrepreneurship educators in categorizing and making sense of the  
17 data. Each article reviewed is subject to careful consideration in terms of whether it is  
18 concerned with EEE and if sufficient detail is provided to respond to the questions posed in  
19 Table 2.  
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34 One concern is the possible omission of relevant examples of EEE due to choices in labelling  
35 and titling of articles, as noted earlier. Therefore, a genuine sense of incompleteness arises in  
36 relation to studies that might fulfil the characteristics of EEE but could be labelled as something  
37 else; such as ‘enterprise education’ or ‘service learning’. However, the authors determined that  
38 there was sufficient data to process in terms of EEE and thus gain a sense of progress towards  
39 the student-focused Entrepreneurial University. Many of the studies have references in  
40 common, conveying a clear sense of association to a body of knowledge (Perry et al., 2012).  
41 While limitations (unpacked further in the final paragraph of the Conclusion section) are  
42 evident in terms of reach when compared to a systematic literature review, the evidence base  
43 is sufficient for the purposes of informing a conceptualization of the relationship between EEE  
44 and progress towards the student-focused Entrepreneurial University.  
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## Findings

The findings section presents a table overview of what is being studied and the nature of the research approach (See Table 3). This overview is followed by an in-depth narrative that makes indirect and direct reference to the 33 articles reviewed in order to make sense of how the EEE studies inform the evidence base and, from this narrative, understand progress towards the student-focused Entrepreneurial University.

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### *Reflection: How is knowledge and practice informed by the EEE evidence?*

According to the categorization of articles in Table 3, the evidence base is largely informed by case study research. Importantly, most articles report purposively sampled case studies of specific course interventions. These studies span a range of countries including: Brazil, China, Finland, Kenya, Lithuania, Nigeria, Sweden, Uganda, UK and US. There are notable gaps within this body of literature, specifically comparisons between those learners who do not engage with interventions, and a paucity of longitudinal studies that consider impact beyond the University experience, namely after graduation.

It is a logical assumption that entrepreneurship education is researched by entrepreneurship scholars and educators who have access to learner communities and are interested in developing their practice. The dominance of the case study approach (as advocated by Yin, 2018) enables an appreciation of the variance and similarities in EEE, explained in part by context. Action Research is, therefore, implied where knowledge is derived from and for practice. However, it is noted that this approach to research (or, indeed, any association with critical realism) is rarely stated. Due to the lack of underlying explanations of the underpinning research philosophy, the value and relative subjectivity of the knowledge base is not fully appreciated. Strategically and politically, it makes sense to share good practice and models of emerging success and, in a more general call, to develop resources for the provision of EEE. There are, though, implications for what can be generalized from those researching their own practice, whereby the researcher is educator and highly engaged with student participant communities in developing research informed practice. The situation of the researcher and their critical distance are important aspects of the knowledge base. In terms of research approaches and designs, the question remains: why are scholars investigating EEE, how are they doing so and what is the impact of this knowledge base on strategy and resource development within University institutions? How does this practitioner researcher make sense of their situation through the research process (Hayward and Cassell, 2017)?

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3 ***Reflection: what is being done in terms of EEE?***  
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5 The evidence base is informed by courses (online, blended and offline), suites of courses, high  
6 reputation courses, modules/papers, competitions, and adjunct and outreach courses. The  
7 studies address a range of interventions. Entrepreneurship education is found at both  
8 undergraduate and postgraduate levels and in a range of disciplines and services such as  
9 engineering, science, health studies, agricultural studies, the creative industries, and  
10 journalism.  
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17 Courses reflect different interpretations of how theory informs practice and the relative  
18 importance of context, resources and learner outcomes (Kazakeviciute et al., 2016). The design  
19 of entrepreneurship education need not be an all or nothing proposition – it becomes a matter  
20 of review and alignment (Mitra, 2017) from concept learning to selecting venture creation ideas  
21 for implementation. The more ambitious propositions that reflect new venture-based learning  
22 are ‘uber experiential’ (Thompson et al., 2010), higher in risk and resource requirement, but  
23 are likely to deliver functioning ventures (Mandel and Noyes, 2016; Ghazzawi et al., 2018;  
24 Vincett and Farlow, 2008).  
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33 Experiential entrepreneurship education has a positive impact on a wide range of behavioural  
34 measures. Figure 1 summarizes the reported learning outcomes (intended and derived) from  
35 the literature reviewed.  
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39 **\*\*\* INSERT FIGURE 1 ABOUT HERE \*\*\***  
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42 From these data. knowledge, skills and attitudes are all important and supportive of business  
43 practice (QAA, 2018), engagement with networks as well as the enhancement of academic  
44 skills (notably research skills and financial management). The development of self (through  
45 reflective practice) is recognized and binds attitude and skills development. Notably, social  
46 learning (often through teamwork) is an important component of EEE and is further enhanced  
47 by understanding and meeting the needs of others (Sabbaghi and Cavanagh, 2018; Wu and  
48 Martin, 2018) through service-learning initiatives. Personal growth can derive from self-  
49 determination, dealing with uncertainty and ambiguity, as well as emotional intelligence – but  
50 the learner requires the reflective capacity to make sense of experiences.  
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3 From the articles reviewed, it has been determined that the assessment of EEE is under-  
4 researched (Pittaway et al., 2009; Wenninger, 2019). There is a role for more emotional, real  
5 time self-assessment using reflective technologies both for collaborative reflection and peer  
6 assessment. Chang and Rieple (2013) note that reflective diaries can capture changing levels  
7 of confidence and the nuances of personal development. While practice is considered key to  
8 skills development, there is scope for business actualization; where this is evident the  
9 importance of resilience and self-determination emerge.

### 16 17 ***Reflection: who are the key stakeholders?***

18 There is a general argument for more stakeholders to contextualize and support EEE  
19 (Wenninger, 2019). Business actualization requires specific resources, in terms of staff and  
20 infrastructure, as well as governance that acknowledges and rewards venture creation and the  
21 achievement of external impact (Yatu et al., 2018; Dhliwayo, 2008; Mandel and Noyes, 2016).  
22 Externally, it is important to recognize the involvement of government agencies and employers  
23 in the evaluation of programme effectiveness (Hunter and Lean, 2018; Nakelet Opolot et al.,  
24 2018).

#### 31 32 ***1. Universities***

33 Although their study examines curriculum emanating from business schools, Mandel and  
34 Noyes (2016) acknowledge the role of the University in providing internal infrastructure with  
35 links to firms and learning opportunities that exist off campus (Jones and Iredale, 2014;  
36 Dhliwayo, 2008). Incubators also provide the capacity for business start-up and practitioner  
37 support (Lamine et al., 2018; Vincett and Farlow, 2008). However, Fulgence (2015) suggests  
38 that the association between entrepreneurship education and wider University strategy is not  
39 always understood. Internally, the University has influence over recruitment and retention of  
40 human resources; specifically, educators who can design, deliver and mentor EEE. Institutional  
41 matters also relate to the challenges of scaling or mainstreaming courses, to reach more  
42 students. While University strategy is the means to bridging the teaching and research agendas,  
43 the challenge is one of creating conditions for EEE that may contradict the dominant HE  
44 paradigm of learning and assessment practices (Collins et al., 2006; Smith and Paton, 2011;  
45 Ramsgaard and Christensen, 2018), and the management of teaching and learning (Spence,  
46 2019).

## 2. *Educators*

Some experiential opportunities are led by academic faculty, others by dedicated support services. There is considerable reference to the ‘opportunity-based approach’ and opportunity spotting in relation to market conceptualization (Roy et al., 2020) and in discovering, evaluating and exploiting opportunities (Santos et al., 2019). Social enterprise learning is associated with service learning and assessment of the triple bottom line, with substantive input from external client assessment (Gundlach and Zivnuska, 2010; McCrea, 2010). Unless educators require students to demonstrate they are reflective and reflexive learners, a danger arises that they are ‘doing’, and enjoying doing, but not sustaining their learning, which may potentially limit how they can provide feedback into the curriculum and service planning. **Notably, educators** have less understanding of why people do not put themselves forward for opportunities and of the lasting effects.

Mentors are frequently recognized as important in the learning process (Mandel and Noyes, 2016; Hunter and Lean, 2018; Dhliwayo, 2008; Vincett and Farlow, 2008; Chang and Rieple, 2013; Bell and Bell, 2016b). Peer mentors were also proposed (Kubberød et al., 2018; Santos et al., 2019). If the mentor is external to the organization, the importance of networked faculty becomes key in matching mentors to the appropriate agenda (Huster et al., 2017). On the whole, external relationships with businesses enable a wider learning community – people to learn from and with (Santos et al., 2019). Importantly, educators learn too; involvement in entrepreneurship education creates the capacity for network building and resource development.

## 3. *Learners*

Course evaluation draws attention to the differences between learning outcomes (in terms of self-awareness and behaviours) and outputs in terms of contribution to the individual over time. Educators do not always assess for the latter and, further, seeing post-education outcomes off campus is problematic and lacking within the literature. Learner awareness and interest is typically captured through reflection and portfolio assessments (Man and Farquharson, 2015; Barnes and de Villiers Scheepers, 2018). Social learning is emphasized and experienced through teamwork, and this is seen as an important skill, one relevant to both future studies and to the ability to form, contribute to and learn from networks (Seikkula-Leino et al., 2015).

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3 Being on a course or participating in an intervention does not express real engagement; the  
4 effectiveness of any intervention is dependent on the reflective and reflexive capacity of  
5 learners (and those they are learning from). Santos et al. (2019) make the case for student  
6 consultants learning from entrepreneurs to the benefit of both parties. Some disciplines lend  
7 themselves to working with feedback from audiences and customers, such as journalism  
8 (Barnes and de Villiers Scheepers, 2018) and agricultural practice (Nakelet Opolot et al., 2018).  
9 Making mistakes and learning from failure (Kubberød et al., 2018; Bell and Bell, 2016b; Liang  
10 et al., 2016) are also gateways into deeper learning and overcoming reticence. The reviewed  
11 studies may reveal self-perceptions of skills development, but do evaluations go far enough?  
12 To what extent do participants continue with entrepreneurial learning post-intervention? Do  
13 they re-orientate their attention towards achieving academic success? How do they appraise  
14 their talent in terms of the ability to apply learned skills in the future?  
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26 ***Reflection: where does EEE take place, both within and external to the University?***

27 The site and situation of courses and interventions determine, to some extent, the nature of the  
28 learning experience. Promising ideas are moved into spaces and places where they can be  
29 implemented, such as retail sites and incubation units (Bell and Bell, 2016a; Vincett and  
30 Farlow, 2008). The exploration of 'where' also leads to insights into what is devolved within  
31 Universities. Are there opportunities for interdisciplinary learning between courses, facilitated  
32 support services and external engagement? Locating EEE on the boundary between the  
33 University and the local economy may be central to an engagement agenda, but peripheral to  
34 the majority of teaching and learning practice. Jones and Iredale (2014) call for attention to be  
35 directed to the bridges (and potential barriers) between policy and delivery. The location of  
36 educators and courses are important considerations in the acquisition of resources and in the  
37 development of impact and University strategy.  
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47 From this selection of literature, EEE is manifested as a vibrant area of activity with valuable  
48 and wide-ranging learning outcomes. However, the knowledge base (related to practice and  
49 theorizing from practice) is perhaps not embedded to the extent that it is shared widely across  
50 University provision and, significantly, is potentially absent from high level teaching and  
51 learning and external engagement strategies.  
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## Discussion

The findings reveal that, in relation to the EEE knowledge base, the University as the context and as a stakeholder is under-researched. The relevance of this particular debate, of course, is driven by the degree to which this particular (student) enterprise agenda is strategic, central and important to the University. The discussion now reflects on two key issues and makes proposals for future research. First, does the University possess the **knowledge and** resources required to pursue enterprise-related goals and ambitions; second, is it successfully developing these key resources and innovating?

Educators need greater insight into how universities evaluate their performance and success. Pittaway and Hannon (2008) suggest there are various relevant measures to consider: demonstrated student learning, student personal development, financial outcomes, academic reputation, mission-fit, government policy fit, and impact (community engagement). Some measures are short-term (student degree achievement) whilst others such as impact and reputation are longer term. Arguably, more evidence is needed, and specifically more data is required from more stakeholders. Evidence building also needs to extend from what is being examined (in terms of courses and pedagogical interventions) to acknowledge **how performance is assessed in terms of research design and the declared situation of the researcher. The review of courses does facilitate the discovery and exploitation of EEE opportunities, but they may be dependent upon the presence of individual educators (and their network) who are driven to behave this way, as well as researching their practice to ensure ongoing development. This dependency may threaten the resilience of certain courses and pedagogical initiatives.**

Understandably, educators know relatively little about the longitudinal impact of EEE on many of their students some years after their graduation, and whether any identified as having an entrepreneurial mindset (whether formally or informally) have used this to real effect. **With the advent of the KEF engagement agenda, UK** Universities might be expected to be constantly monitoring the student experience and new venture creation that arises during University and after graduation. How much EEE is currently available? How much is embedded? What are the intended outputs and outcomes for a wider agenda? To understand the situation more clearly, the key research challenge is to understand the drivers and constraints for EEE at the University level and the relative impact of educator and learner experiences **over time.**



### *Conceptualizing EEE and the development of the Entrepreneurial University*

Figure 2 is the authors' conceptual framework addressing the identified caveats in the literature reviewed. In terms of the Entrepreneurial University, it proposes the University as the key driver in a top-down, student-focused process of developing and extending the provision of EEE. It assumes that EEE can be appropriate, feasible and desirable for all the stakeholders and, consequently, has a key role to play in preparing students for the challenges on and beyond graduation – and also that the personal development of learners matters (alongside their formal degree studies and qualification) and is therefore important to and for the University. Itself influenced by external pressures – and opportunities – the (senior) University (management) set the parameters for priorities, staff recruitment, course development, teaching and external engagement. Learner choices and engagement will, in turn, be affected by various factors, including: what they are prioritizing personally, their awareness of what is available at University, their longer-term thinking (beyond their time at University), their commitment to the relevance of the entrepreneurship 'message', and their perceptions of the relevant educators. Each University will be different, with the relevant educators (and champions) varying in their visibility, expertise, encouragement, support and commitment.

**\*\*\* INSERT FIGURE 2 ABOUT HERE \*\*\***

Figure 2 suggests that effective EEE requires that choices, decisions and commitments on the part of the three identified key stakeholder groups are congruent and self-supporting. The challenge is to be in the 'North-East quadrant' for each stakeholder group; anything else risks under-achievement. Achieving this self-supporting congruency will not be easy and it will be very dependent upon the messages flowing top-down in the University – hence the underpinning belief for this paper is that the University perspective is critical if the EEE agenda and achievements are to be understood. The 'virtuous circle' therefore implies that the University must both espouse the value and significance of the student entrepreneurship agenda along the lines that have been discussed in this paper and be visibly active in taking this agenda forward. Without this direction and championing, then individual activities may not grow to become all-pervading and embedded. The issue of appropriate pedagogies is an institutional matter and not simply isolated choices taken by individual educators. Mandel and Noyes (2016) also ask for less judgement in terms of outputs; the literature review largely advocates that participants own their learning agenda, which has implications for how Universities express and instil desired learning outcomes and work with external subject benchmarks.



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3 Educators (the central stakeholder) **should be empowered** to support experiential approaches.  
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5 This current paper found that mentoring was cited as being supportive of self-directed  
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7 experiential learning. Equally, educators need to have external networks and contacts they can  
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9 call upon to help them. This helps develop the ‘know how’ and ‘know who’ to accompany the  
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11 ‘know what’ provided by theory-inspired knowledge. In terms of future research, the current  
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13 authors propose extending programme evaluation to explicitly state **research design, address**  
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15 **the role of the practitioner researcher** and, **where relevant, extend** sampling into non-participant  
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17 communities. The authors conclude from the literature review that the learner experience is the  
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19 element best informed by existing research. Activity and course-level initiatives, and what they  
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21 achieve, can, and should be, **evaluated** from the learner perspective, both during and after the  
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23 experience and ideally over the longer term. Further research, though, is needed to investigate  
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25 what is self-directed and undertaken beyond interventions, and what emerges as self-directed  
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27 action, but potentially resourced by the University.

### 27 **Conclusions and implications for practice and future research**

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29 It is, therefore, proposed that the need for reflection and sensemaking applies to educators and  
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31 Universities as much as, and as well as, to learners, given that they drive the learning agenda.  
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33 In concluding the paper, **and building on Figures 1 and 2**, this final section presents some  
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35 identified opportunities for future research that would address the research gap that this paper  
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37 has highlighted. If such research was clearly visible, there is a real chance that it would draw  
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39 attention within a University to the practice of EEE, and may thus act as a trigger to new  
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41 initiatives.

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43 **Learners** – and their personal development – could be the focus, through research that seeks  
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45 to track longitudinally the entrepreneurial learning journeys of selected students, by asking  
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47 them to keep learning logs over time. These logs would include all the relevant activities  
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49 learners decide to engage with: such as particular optional courses and extra-curricular  
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51 activities, part-time work opportunities, volunteering, University societies, together with a  
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53 record of those people with whom they network both within and outside the University, **this**  
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55 **aspect may include mentors (highlighted in this research study)**. Such records **could be**  
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57 **maintained through an e-portfolio and** would help to inform an understanding of the learners’  
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59 all-round learning and sense-making experience. **In doing so the key skill of reflection (as**  
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**identified in Fig. 1) is also utilized and maintained.** For some learners, their experience will be

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3 more entrepreneurial than is the case for other students and, in part be dependent on an  
4 individual student's personal attributes, social capital (i.e. who they meet, relate to and trust),  
5 how they find and act on opportunities and take risks, and how they navigate the University as  
6 a place. Second, and a more feasible subset of the first, a wider range of the relevant choices  
7 that learners make – supported by satisfaction surveys – could be tracked directly by the  
8 educators themselves. This, though, would not be investigating learning per se.

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13 Third, research could focus on the **educators** rather than the learners – and, say, investigate  
14 their views on, their belief in, their commitment to, and their personal implementation of,  
15 student entrepreneurship opportunities in their widest sense. This, for example, might include  
16 teaching approaches, assessment **and research** methods and the involvement of the students in  
17 these decisions. **Where the researcher is assessing their own practice, research diaries and**  
18 **reflection can facilitate better understanding of research philosophy and the nature of critical**  
19 **distance (Hayward and Cassell, 2017).**

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27 Fourth, entrepreneurship provision (both intended and realized) can be revealed by **observed**  
28 **actions resulting from the University's** declared mission statement. Visible championing of  
29 **EEE** at a senior level, appropriate resourcing (internal and external expertise), and **direct**  
30 **engagement would all indicate that entrepreneurship is being espoused actively, thus placing**  
31 **the University in the relevant 'north east' quadrant of Figure 2.** By strongly championing EEE  
32 at the University level, the breadth and depth of coverage can comprehensively support the  
33 student-focused Entrepreneurial University **and reflect** a realized (as distinct from intended  
34 but unrealized) strategy. Such a University, as a stakeholder, formulates strategic objectives  
35 and orchestrates the context in which EEE becomes part of the resource-based strategy. **The**  
36 **KEF and the external engagement agenda reports metrics for graduate start-ups, in conjunction**  
37 **with wider skills development through Continuous Professional Development (CPD)**  
38 **initiatives (Johnson, 2020).** A danger is that management becomes focused on individual  
39 **metrics, as opposed to building links and developing research enquiry that explores**  
40 **relationships between teaching, research and engagement agendas (Spence, 2018).** By  
41 measuring at the level of University strategy, clearer connections **will emerge** between **EEE**  
42 **initiatives** and the development of the Entrepreneurial University.

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In conclusion, this paper investigates, and reflects on, progress against a particular perspective  
of a student-focused Entrepreneurial University. Given that identified reported progress has  
been limited, it might be concluded that, however sympathetic stakeholders might be to the

perspective, delivering it and evaluating progress raise serious resource and research issues. It is defensively *desirable* for certain stakeholders, but it is perhaps not *appropriate* for all involved. Perhaps the KEF agenda, in the UK, will raise the debate between stakeholders and create deeper understanding of the nature and value of external engagement in relation to the Entrepreneurial University. Furthermore, taking a resource-based approach will help to inform the *feasibility* of a student-focused Entrepreneurial University. Whilst sympathizing with the direction of travel towards this student-centred perspective, the authors are, therefore, not advocating the Gibb approach (Gibb, 2005; Gibb et al., 2009) *per se*. However, as a perspective it appears to offer value if further genuine progress towards it can be made.

Several limitations of this study were evident. First, although the authors did not conduct a systematic literature review, the aim of the current study was nonetheless achieved aided by a closer appreciation of what EEE, which is not always evident from article titles and key words. Probing further into the knowledge base of case studies, the researchers' reflections of 'effective' practice, may lack a degree of criticality as they are removed from the detailed appreciation of EEE actions, in context (Loughran, 2002). There are also challenges to the extent to which insights can be generalized. Nonetheless, despite these risks, the authors adopted a critical lens when reviewing and synthesizing the literature, going beyond the question of what is being done in terms of EEE and developing an in-depth appreciation of context (where is EEE taking place) and, importantly, who is researching and for what purpose. Third, the approach adopted meant that it was not possible to include all examples of EEE, but the selection was comprehensive enough to draw conclusions and to provide the contribution to theory and practice that the review sought to achieve.

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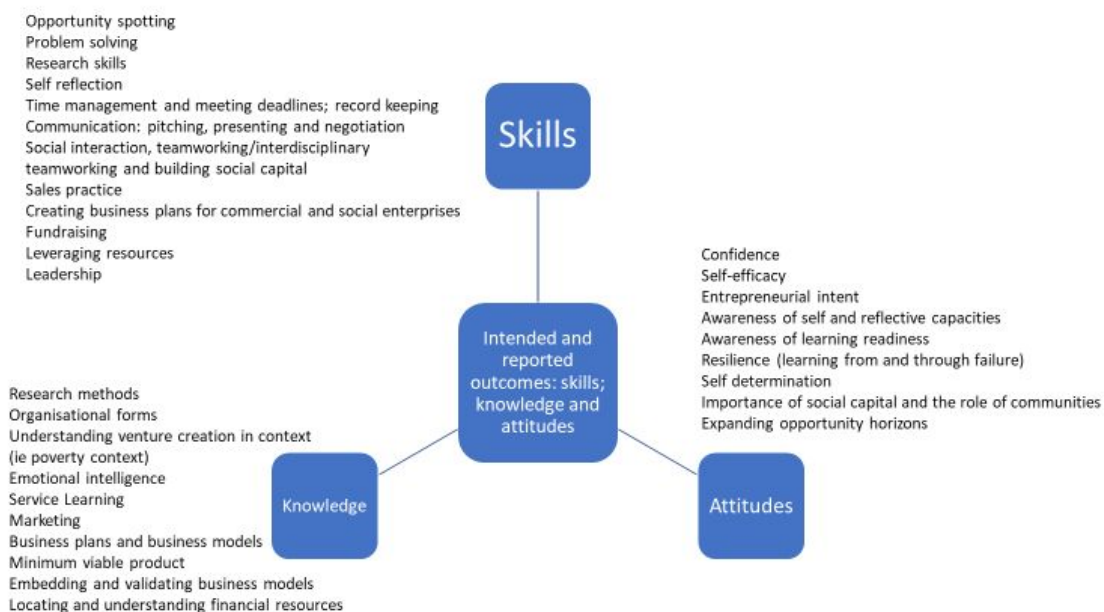
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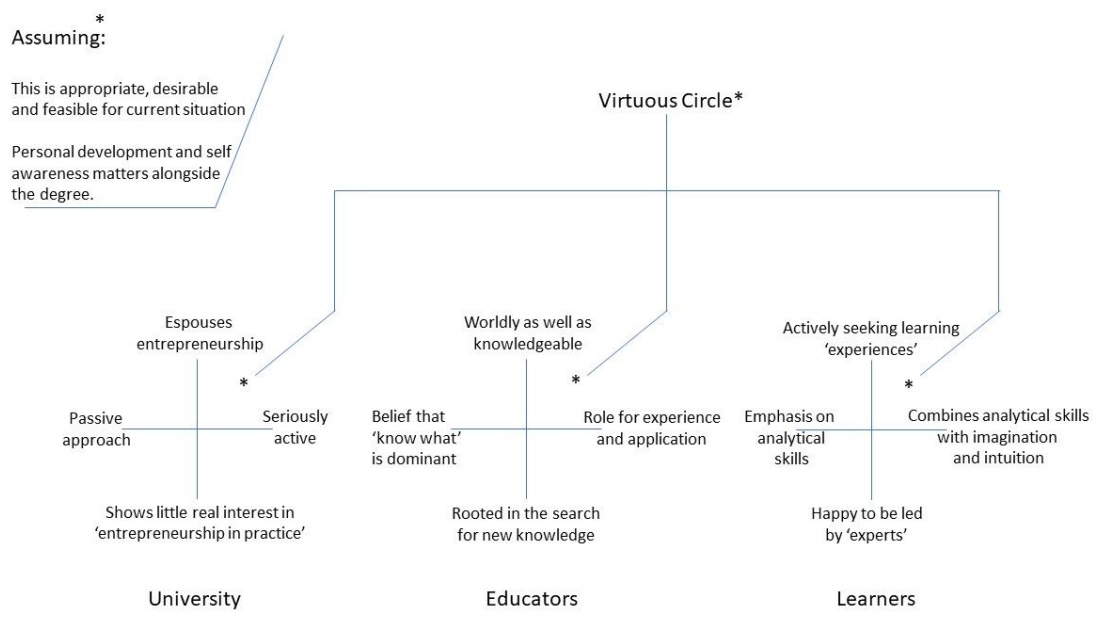
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**Figure 1.** Intended and reported learning outcomes: skills, knowledge and attitudes.

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**Figure 2. EEE: a framework for investigation and evaluation.**

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Search Terms	Inclusion criteria	Exclusion criteria	Articles yielded and discarded:
<p>Experiential entrepreneurship education (abstract) All other fields:</p> <p>Entrepreneurial University; Outcomes; Higher Education; Stakeholders</p> <p>(applied after 2005) the date of Gibb's template for the Entrepreneurial University.</p>	<ul style="list-style-type: none"> <li>• Empirical, conceptual and literature review studies;</li> <li>• Reference to experiential learning and entrepreneurship skills on / off curriculum</li> <li>• University provision;</li> <li>• Any discipline /any level of learning experience (undergrad; postgrad).</li> <li>• Any geographical location</li> </ul>	<ul style="list-style-type: none"> <li>• Studies of entrepreneurship education as a discipline with no reference to practical/experiential learning opportunities.</li> <li>• Editorials</li> <li>• Non-university (ie high schools)</li> <li>• Unavailable to download</li> </ul>	<p>37 yielded</p> <p>2 discarded as editorial overviews;</p> <p>1 repeat article;</p> <p>1 discarded as empirical data delivered in a high school setting</p> <p>Sample for review = 33</p>

**Table 1.** Search terms, inclusion and exclusion criteria.

<b>How does the EEE evidence base inform theoretical/practical knowledge?</b>	<b>What is being done in terms of EEE?</b>	<b>Who are the stakeholders?</b>	<b>Where does EEE take place?</b>
What is the research approach? Empirical? Conceptual? Literature review? If empirical, is it single or multiple case? Purposive sampling. Comparative case? Evidence of action research?	What is the study about? What are the subjects and themes? Programmes, modules and learning outcomes, policies, student cohorts? Interventions on or off curriculum?	Who is looking? Are researchers reviewing their own practice? Who is evaluating outcomes? Who is involved in delivery and provision? Which student communities? Who are the stakeholders?	Where is EEE located? Are the programmes delivered off campus / across campus between campus and other organizations and contexts? Where is the geographical location?

**Table 2.** Questions applied to the literature review.



Nature of research study	Authors and date	Subject
Case study of course or intervention	Barnes and de Villiers Scheepers (2018); Bell and Bell (2016a); Bell and Bell (2016b); Chang and Rieple (2013); Ghazzawi et al. (2018); Gundlach and Zivnuska (2010); Huster et al. (2017); Kazakeviciute et al. (2016) Kubberød et al. (2018); Liang et al. (2016); Man and Farquharson (2015); McCrea (2010); Mitra (2017); Nakelet Opolot et al. (2018); Roy et al. (2020); Ramsgaard and Christensen (2018); Santos et al. (2019); Sabbaghi and Cavanagh (2018); Schenkel et al. (2016); Seikkula-Leino et al. (2015); Collins et al. (2006); Smith and Paton (2011); Vincett and Farlow (2008); Wenninger (2019); Wu and Martin (2018).	Competitions, Masters and undergraduate courses; Courses between universities/SMEs/NGOs. Service learning and social enterprise modules/papers; innovation camp for science based students; start up courses; online courses; real world business challenges; immersive experiences; team challenges; peer mentoring interventions; students as peer consultants; subject specific courses (journalism, agriculture).
Comparative case study	Hunter and Lean (2018)	Comparative review of courses and course infrastructure
Conceptual study	Dhliwayo (2008); Jones and Iredale (2014)	Effectiveness of entrepreneurial training for entrepreneurship
Literature Review (including conference proceedings)	Yatu et al. (2018); Lamine et al. (2018)	Developments in University provision; review of incubator support
Survey	Mandel and Noyes (2016); Fulgence (2015)	High profile programmes benefits and barriers; review enterprise learning for education students.

**Table 3.** EEE – overview of the research evidence.

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**RESPONSE TO REVIEWERS - Manuscript ID ET-09-2020-0259.R2**

Heading	R1	R2	Response
<b>Comments</b>	<p>I had the privilege to review the article titled "Experiential Entrepreneurship Education and the Student focused Entrepreneurial University". This aim of this study was to explore the provision and reported outcomes of Experiential Entrepreneurship Education (EEE), from learner, educator and university perspectives, in order to reflect upon the progress of the entrepreneurial university.</p> <p>I read the second version of your paper with great interest and I am very pleased to see that it has greatly improved. I especially appreciated your work in significantly rewriting most of the sections of the paper. In the revision, the majority of comments have been addressed, however, there are still a few issues that have to be addressed:</p>		Thank you for your kind comments.
<b>1. Originality: Does the paper contain new and significant information adequate to justify publication?:</b>	The authors have addressed the key concerns regarding originality.	yes	Thank you.

<p><b>2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?:</b></p>	<p>The authors have addressed the key concerns regarding the relationship to the literature, though <b>I am still unclear about the way that the KEF focus may shape or change understandings of EEE (as presented in the conclusions)</b></p>	<p>yes</p>	<p>Thank you.</p> <p>We have now clarified how the KEF contributes to our understanding of EEE in the general introduction on p3, on p14 and in the conclusion sections. New reference to the work of Spence (2018) re the management of metrics.</p>
<p><b>3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?:</b></p>	<p>yes</p>	<p>yes</p>	<p>Thank you.</p>
<p><b>4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?:</b></p>	<p>The authors have addressed the key concerns outlined. <b>I would still like to see the frameworks proposed in figures 1 and 2 integrated into the recommendation structure that they propose</b>, as these represent some key actionable findings that seem to be then left aside.</p>	<p>On page 9, line 45- 48, the researcher state that "In terms of the different research approaches and designs, there is a lack of underlying explanations of the underpinning research philosophy and the implications for the knowledge generated by practitioner-researcher scholars". <b>This gap in my view is broad. The researcher should specifically say what was wrong with the choice of the underpinning research philosophy and how the gaps should be closed considering that their focus is on how knowledge and practice is informed by the EEE evidence</b></p>	<p>Thank you.</p> <p>These are very good points. Hence:</p> <p>R1: The conclusion section now makes intermittent reference to Figs 1 and 2 in the proposed recommendations. Importantly the value of reflective practice is noted (drawn down from Fig 1) and...</p> <p>R2: The discussion on p9 has been revised to stress the importance of the educator – identified as practitioner research – acknowledging how research of own practice has implications for critical distance.</p>

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			References are made to Hayward and Cassell (2017) in managing this approach to research.
<p><b>5. Practicality and/or Research implications: Does the paper identify clearly any implications for practice and/or further research? Are these implications consistent with the findings and conclusions of the paper?:</b></p>	Some practical implications are outlined.	<p><b>The authors should also include the limitations of the study. One of which is the challenges associated with reflective literature review which Loughran notes that: ‘In part, it was this diversity of views and understandings that led me to preface reflective practice with a qualifier of practice-effective-in order to begin to focus attention on the action as well as the outcome of reflection’ (2002, p42). As such individuals might not be critical in their reflective process, and thus fail to engage with the nuance’s questions surrounding the experience, problem, or thoughts.</b></p> <p>Also, another possible limitation to the study is <b>the possible omission of relevant examples of EEE due to choices in labelling and titling of articles</b>, as noted earlier.</p>	<p>Thank you.</p> <p>Also we appreciate these suggested limitations, and have addressed them by adding an additional paragraph at the end of the Conclusion section.</p> <p>We note that the reflective literature review has enabled depth of reasoning in relation to the articles used but the scope of the literature is perhaps narrower than a systematic approach.</p>

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<b>6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.:</b>	Yes.	Yes	Thank you.
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