Applying Educational Theory to Develop a Framework to Support the Delivery of Experiential Entrepreneurship Education

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Abstract

Purpose

Experiential approaches have become increasingly common in entrepreneurship education in response to calls for different approaches to the traditional didactic process driven approach. Experiential approaches offer the potential to develop the skills and mind-set that are required in entrepreneurship. Research has highlighted the critical importance of educator pedagogical competence in the delivery and quality of teaching and learning in further and higher education. Nevertheless, educator narratives and practices are often based on foundations that suggest a lack in the depth of knowledge and understanding of the underlying pedagogic learning theories and practice. This paper brings educational theory and pedagogic practice together in a three-stage framework of the experiential entrepreneurship learning process to support entrepreneurship educators within further and higher education.

Design/Methodology/Approach

This paper reviews and brings together the seminal educational theories and philosophies of constructivism, objectivism, Kolb's (1984) theory of experiential learning, Schön's (1983) reflection-in-action and Mezirow's (1997) theory of transformative learning, to develop a framework which underpins the experiential entrepreneurship learning process.

Findings

This paper develops a three-stage framework which informs the roles of the educator and the learner in experiential entrepreneurship education within further and higher education, based on educational theories and philosophies that inform the learning process.

Practical Implications

The developed framework supports the pedagogic competence of educators in the delivery of experiential entrepreneurship education through a deeper understanding of the supporting theory that informs the pedagogic practice. This will provide consolidation to enable educators to maximise the effectiveness of their educational practice (Kaynardağ, 2019) and can increase the legitimacy of entrepreneurship education (Foliard et al., 2018).

Originality/value

This paper meets calls in the literature to provide a closer engagement between educational theory and pedagogic practice to afford guidance as to how educators can navigate some of the different educational theories and philosophies to consolidate the effective delivery of quality experiential entrepreneurship education. Applying seminal educational theories and philosophies to ensure the quality of experiential education can support the legitimacy of experiential entrepreneurship education.

Keywords

Entrepreneurship Education; Experiential Learning; Constructivist Education; Constructivism; Transformative Learning; Educational Theory

Introduction

There has been a rapid increase in the availability of entrepreneurship education worldwide over the last two decades (Fayolle, 2013; Neck and Greene, 2011), supported by governments keen to introduce programs that support and develop entrepreneurship in higher education (HE) (Greene and Saridakis, 2008). Entrepreneurship has been regarded as a critical contributor to both economic growth and development (Singer et al., 2015) and entrepreneurship education as an engine of economic and social development (Fayolle et al., 2016). It is perhaps not surprising that there have been calls for entrepreneurship education to be more widely available to more people and within more disciplines (e.g. Bell and Bell, 2016; Jones et al., 2012).

Support has been increasing for some time within entrepreneurship education for learning environments that depart from traditional lecturer-led passive learning to support entrepreneurship study within HE (Gibb, 2002; Jones and English, 2004). These include an increased emphasis on constructivist approaches (Hägg and Gabrielsson, 2019), including action-orientated experiential learning, problem solving, and project-based learning. With constructivist approaches to entrepreneurship education, educators adopt a less standardised approach in favour of a 'method approach' that focuses on thinking, using, applying, and acting to encourage creation (Neck et al., 2014). Experiential learning is regarded as being particularly efficacious in entrepreneurship education (Fuchs et al., 2008; Honig, 2004). This approach can align with the entrepreneurial process, which involves the creation of something, often using new processes or techniques, in order to create value (Schumpeter, 2008). It is based on opportunity recognition and is necessarily an inductive process, usually involving varying degrees of risk and uncertainty (Jack and Anderson, 1999).

Entrepreneurship educators can create linkages to real-life practice that appear to be useful to learners in order to encourage learning and the development of new skills as an entrepreneur (Macht and Ball, 2016). Support has also been expressed for learning-by-doing activities in group or network contexts (Rasmussen and Sørheim, 2006), and for learner-led approaches (Fiet, 2001). Jones and Iredale (2010) suggested that entrepreneurship education requires experiential learning styles, creative problem solving and learning by doing, in order to engage learners. It has been argued that constructivist educational approaches can

encourage experiential learning and can assist learners to actively participate in the entrepreneurial process, rather than simply reading or hearing about it (Jones and English, 2004).

However, despite the rapid growth in entrepreneurship education, there is a need for robust intellectual foundations at both a theoretical and methodological level (Pittaway and Cope, 2007) to help educators move towards a more constructivist view of entrepreneurship education. Fayolle (2013) also highlighted that there was only limited existing research focusing on the educational theory supporting such approaches, even though many of the approaches adopted are based on educational science and literature. Thus, within the existing body of research on entrepreneurship education there is degree of separation between practitioner-based research and the use of educational theory to underpin and conceptualise it. This is particularly relevant because many entrepreneurship educators have received only limited educational and pedagogic training, leaving educators to find their own way in pedagogic practice (Lackéus et al., 2016; Neck and Corbett, 2018). Indeed, many academics still view teaching as requiring no formal training (Stewart, 2014), despite research having highlighted that the pedagogical competence of educators is vital to the delivery and quality of teaching and learning in HE (Kaynardağ, 2019). Fayolle et al. (2016) highlighted that whilst there was much practical practitioner research focusing on the implementation and individual approaches, much of the existing research fails to engage with the deep body of educational literature on the nature of learning and pedagogical intervention. Educator narratives and practices are frequently based on a foundation that reflects a lack in the depth of knowledge and understanding of the underlying pedagogic learning theories and practice (Fayolle et al., 2016). It is important for educators to understand the underpinning philosophical frameworks to develop a deeper understanding of the 'why' and 'way' they do things (Hannon, 2006).

The aim of this paper is to develop a framework which applies educational theories and philosophies that inform the learning process and underpins the role of the educator in the delivery of experiential entrepreneurship education. This paper contributes by creating a framework for entrepreneurship educators at further education (FE) and higher education (HE) institutions that answers calls to provide a closer engagement between educational

literature on the nature of learning and pedagogical theory and practice (Fayolle et al., 2016). The linkage between pedagogical understanding and competence of educators and the delivery and quality of teaching in FE and HE behoves further support by providing consolidation to enable educators to maximise the effectiveness of their educational practice (Kaynardağ, 2019), which in turn, can improve the legitimacy of entrepreneurship education (Foliard et al., 2018). This paper consolidates a range of seminal educational theories and philosophies which underpin the entrepreneurial experiential learning process, including constructivism, objectivism, Kolb's theory of experiential learning (1984), Schön's reflection-in-action (1983) and Mezirow's theory of transformative learning (1997), to help guide entrepreneurship educators in their practice. The paper provides a synthesis of existing theories and concepts to develop a novel framework in order to make a contribution to the field (Phillips and Pugh, 2015). Robinson et al. (2016) highlighted the advantages of combining different learning theories and approaches, and moving to more learner-centred approaches focused on experiential learning, to encourage greater entrepreneurial awareness and the development of an entrepreneurial mind-set. Ramsgaard (2018) has highlighted the difficulties in knowing how to navigate the diverse and contrasting range of theories, methods, and philosophies. The framework offers guidance as to how educators can navigate some of the different educational theories, methods and philosophies that are interlinked. Since no single learning theory can underpin the diverse pedagogical approaches that incorporate the different activities in entrepreneurship education (Ramsgaard, 2018), this framework brings together different educational theories to underpin the roles of the educator through the stages and process of experiential learning.

The next section of paper explores the use of experiential learning within entrepreneurship education. Following this, the constructivist approach, which is the basis for experiential education is reviewed, and then other related theories linked to entrepreneurial experiential education are considered. The framework is then introduced, outlining the stages of the educational process for the educator. The following section then discusses the roles of the educator and respective learners in the process, referencing the framework. The final section provides the conclusion, a summary of key points and opportunities for further development.

Experiential Learning in Entrepreneurship Education

It has been argued that learners must engage in entrepreneurial activities in order to develop entrepreneurial competencies and must engage in entrepreneurial processes to gain experiential knowledge (Lackéus and Williams-Middleton, 2015). Experiential learning can be considered to be a participatory form of learning which involve learners in a range of mental processes to synthesise information in an active immersive environment (Feinstein et al., 2002). It is thus a form of constructivist active learning. Experiential learning lies at the heart of a social constructivist learning paradigm (Mueller et al., 2015) by meeting the need to develop skills, attributes and competency. In experiential learning educators guide learners as they work within a social setting to achieve greater levels of understanding through the process. This approach goes beyond merely teaching 'about' entrepreneurship, which teaches the theory of entrepreneurship, to the teaching 'for' entrepreneurship, which develops learners' entrepreneurial skills and competences ready for entrepreneurship, or teaching 'through' entrepreneurship, which supports learning by practicing entrepreneurship (Hannon, 2005). Such entrepreneurial skills and competences have been highlighted as important for graduates within the EU EntreComp framework (Bacigalupo et al., 2016).

Approaches to experiential learning can be based on Kolb's (1984) experiential learning cycle, which draws on the earlier works of Dewey (1963) and Piaget (1950), and others, who emphasized the role of experience in learning and development. Dewey (1963) argued that subject matter should not be learned in isolation; education should begin with experience and should be contextual. His approach which was originally described as instrumentalism but was later known as pragmatism also espouses the principle of learning by doing and testing validity for truth. Experiential learning is grounded in pragmatism and has its roots in the pragmatist views of James (1907) and Dewey (1963). Pragmatism is the "philosophical rationale for the primary role of personal experience in experiential learning" (Kolb, 1984 p. 18).

According to Kolb (1984, p.38), "Learning is the process whereby knowledge is created through the transformation of experience." Experiential learning can be described as the

process whereby "Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 41). Experiential learning theory (Kolb, 1984) proposes a (social and exogenous) constructivist theory of learning through which "social knowledge is created and re-created in the personal knowledge of the learner" (Kolb and Kolb, 2005, p. 194). It is a dynamic, holistic experience- based learning process (Kolb and Kolb, 2009).

Kolb's experiential learning cycle is composed of four different stages of learning from experience: concrete experience, reflective observation (reflecting on the experience), abstract conceptualisation (concluding/learning from the experience), and active experimentation (planning/trying out new ideas). The cycle can be entered at any point, but all stages must be followed in sequence for successful learning.

The Kolb Cycle emphasizes the importance of reflection on an experience to make generalisations and formulate concepts that can then be applied to and tested in new situations after which it can be related back to the theory. The framework thus focuses on the experiential learning process, as opposed to fixed learning traits (Turesky and Gallagher, 2011) and incorporates personal change and development (Healey and Jenkins, 2000) through transformation. It is both learning 'by' and 'through' doing (Morris et al., 2012), the latter being based on reflections of the experience and the lessons learned (Krueger, 2007).

Despite criticisms of Kolb's theory in connection with the difficulty in empirical validation and the omission of the emotional aspects of learning, Kolb's seminal theory of experiential learning has been widely adopted in entrepreneurial education (Lackéus, 2014).

Experiential pedagogy in entrepreneurship education is aimed at making the learning experience more authentic by providing learners with experiences through which they can practice and develop entrepreneurial competences, a critical vehicle for the preparation of learners for the future practice of entrepreneurship (Fayolle and Gailley, 2008). The literature reports favourable outcomes both in results and learner satisfaction (Bell, 2015; Piercy, 2013).

Having discussed the role and benefit of experiential education in entrepreneurship, the constructivist approach to education, which underpins experiential learning, will be discussed.

The Constructivist Approach to Education

The epistemological basis that knowledge is an objective phenomenon has been challenged by the constructivist approach to teaching (Jonassen, 1991). It comes from an epistemology of knowledge based on the subjective understanding of the individual (Gergen, 2015) and emphasises the role of the educator to guide the learner in creating their own meaning from knowledge in context (Mueller and Anderson, 2014). Knowledge thus resides in the individual learner (Lorsbach and Tobin, 1992), changing the role of the educator. Constructivism has taken a leading theoretical position in HE and has become an influential force in the linkage between teaching methods and learning processes (Steffe and Gale, 1995). This is in contrast to behaviourist approaches which support the delivery of objectivist knowledge. Freire (2006) referred to an objectivist, didactic, educational approach as the 'banking system' of teaching and learning, resulting in a stifling of learners' creative power. Indeed, it is argued that the transfer of passive knowledge to learners can result in learners becoming disengaged 'surface learners' who are only able and required to repeat back information (Bennett, 2006; Trigwell et al., 1999). In entrepreneurship education, these approaches can still be commonplace but are increasingly considered useful only for theoretical education and instructional information (Gedeon, 2014).

Constructivists argue that individuals play an active role in their knowledge construction and that learning is achieved when they try to make sense of new information by filtering it against their past experiences and existing knowledge to build a new knowledge framework and understanding (Snowman and Biehler, 2005). It is generally considered that learning is largely a situation-specific and context-bound activity (McInerney, 2013). Educators using a constructivist approach thus base their teaching on active participation, which has led to the creation and development of active learning in real life situations, independent thinking and the framing of self-questions in the process of discovery (Mathews, 2007). The burden on the educator is not to have learners mirror the teaching, but rather to guide them to internally construct meaningful and functional representations of the outside world (Jonassen, 1991). Constructivism lends itself to a variety of active learning approaches, which include problem-based learning, inquiry learning and experiential learning (Kirschner et al., 2006). The aims of

constructivist learning include the development of reasoning, critical thinking, and the understanding and application of knowledge (Driscoll, 2013).

Constructivism can be considered a continuum encompassing related perspectives that include cognitive/personal, social, and radical constructivism (Doolittle and Hicks, 2003). Two of the most important and influential fall under the general heading of educational constructivism and are cognitive constructivism and social constructivism. Developed in parallel, the two paradigms share many similarities (Schreiber and Valle, 2013).

The social constructivism approach, often ascribed to Vygotsky (1978), focuses on knowledge construction within the social environment. This includes social interaction, language, and culture in addition to the individual's personal characteristics. Vygotsky's Theory of Zone of Proximal Development (ZPD) (1978, p. 100) is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers". Educators have a role to play, and can facilitate peer groups in which each individual may contribute some knowledge or skill in order to progress (Goos et al., 2002). In effect, the social environment created by the educator facilitates or scaffolds the learning process (Wood et al., 1976).

Educators assessing learners using a constructivist approach acknowledge that the learning process of gaining knowledge is as important as the product. As a result, educators rely less on exams and objectivist knowledge testing and more on learner observation, outputs and portfolios developed by learners and discussions of learner reflections of the learning process (Fenwick, 2003). However, constructivist approaches are not without criticism. Kirschner et al. (2006), for example, argued that such approaches are ineffective as they lack guidance during instruction, making them less effective and efficient than instructional approaches which place a strong emphasis on guidance. The advantage of guidance only reduces when learners have sufficient knowledge of their own on which to build, which may disadvantage novices. Such criticism is countered by Hmelo-Silver et al. (2007) who argue that potential difficulties can be countered by the use of scaffolded guidance, as required.

Constructivist approaches, increasing in use (Piercy, 2013), can be argued to be particularly suitable for entrepreneurship educators, as the participants actively engage and are

encouraged in the development of higher-order skills associated with entrepreneurship. Approaches rooted in constructivism are widely considered superior for entrepreneurship education (Balan and Metcalfe, 2012; Kyrö, 2015), and can be considered to be one of the stepping stones to the development of an entrepreneurial mind (Bell, 2020). The experiential basis of constructivism can explain the experiential basis of entrepreneurial action (Mueller and Anderson, 2014).

Rae (2005) maintains that entrepreneurship and learning are inherently constructivist and social processes. Korsgaard and Anderson (2011) argue that entrepreneurship is both a social and economic process in which networking and social interaction play a prominent role. These views suggest that a social constructivism approach should underpin entrepreneurship education.

Active learning, which Bonwell and Eison (1991) describe as learners doing things and thinking about the things they are doing, is thus aligned or based on the constructivism learning philosophy. Active learning pedagogies play an important role in the development of higher-order thinking and cognitive skills (Madhuri et al., 2012). Active learning includes experiential learning as well as problem-based learning and inquiry learning, the first of which is regarded as being particularly efficacious in entrepreneurship education (Fuchs et al., 2008; Honig, 2004) and is the focus of this paper.

Having discussed constructivist education which underpins experiential learning, additional education theories which relate and support experiential entrepreneurship education will be presented and discussed.

Other related theories

Phillips (1995) argues that a crucial dimension of constructivism is that which allows an individual to become a 'constructivist.' Reflection in entrepreneurship education takes on this role, as the educator guides the learner to construct their learning from experience in this manner. It is the ability to reflect on one's actions that enables continuous learning (Schön, 1987), making reflection a key facet of entrepreneurship education (Neck and Greene, 2011). The reflection described within the Kolb experiential learning cycle implies that the learner reflects on their action post encounter and as a result this is sometimes described as 'reflection-on-action'. This suggests that the learner learns by reflecting on their mistakes and

corrects for those mistakes later in a new learning cycle. Schön (1983) described an alternative way of learning based on 'reflection-in-action' through which learners learn by critically reflecting on theory and re-evaluating that knowledge in-action. In this approach, the learner can question and re-evaluate the underlying logic and strategy of their approach to what they are trying to achieve, make adjustments midstream and learn experientially in a real time learning process, as they progress. For entrepreneurs operating in an uncertain, unknowable and chaotic environment the ability to respond and adapt to change with minimum delay may be vital (Neck and Greene, 2011). The combination of reflection-in-action with reflection-on-action provides a deeper understanding of the potential value and role of reflection in experiential learning.

Action and reflection in learning is also highlighted in the adult transformation learning theory proposed by Mezirow (1997). Mezirow maintains that there are four stages of transformative learning: elaborating on an existing viewpoint; establishment of a new viewpoint; transformation of viewpoint; and transformation of the existential habits of mind. Transformation occurs when learning encourages deep questioning of "long established frames of reference" leading to the creation of "new meaning schemes" (Mezirow, 1990 p. 5). Mezirow's conception and definition of transformative learning have been criticised for being too narrow and too cognitively orientated. Illeris (2014, p. 577) proposed a wider definition: "The concept of transformative learning comprises all learning which implies changes in the identity of the learner". This definition implies a shift or an actualisation of a new identity (Illeris, 2014). Experiential learning can provide the opportunity to engage in transformative learning, which can result in a change to learner 'identity'. The personal change and development can not only help the learner to develop new skills and new knowledge but can also help the individual to develop a new, stronger identity based on the new knowledge and understanding (Hinchliffe and Jolly, 2011). Ramsgaard (2018) highlights the construction of an entrepreneurial identity through engagement in the processes of entrepreneurship programs. Entrepreneurial identity at the HE level can take the form of new competences, self-efficacy, confidence, and determination (Bell and Bell, 2016).

The strength of transformative learning is less about the amount that is learned or understood but instead about how the learner is changed by the learning. Kolb and Kolb (2009) highlight

how, based on situated learning theory (Lave and Wenger, 1991), learning can be a process of becoming a member of a community of practice through participation (e.g. internships, apprenticeships, placements, work experience) in order to transform (develop a new identity through experience of the practice) through mentorship and activities. Trede et al. (2012) highlighted 'authentic learning experiences,' reconciling personal and professional identities and learners pursuing suitable development opportunities as important factors in identity formation. Experiential learning opportunities (e.g. venture creation experiences and work experiences) can help to develop such skills, (entrepreneurial) identity, and competence of the individual.

While this paper focuses on the experiential approach to entrepreneurship education, a balanced educational approach is necessary for the educator to ensure that learners have sufficient knowledge and the critical thinking skills to undertake the constructivist process. This requires the transmission of sufficient background knowledge to successfully undertake the experiential process. The objectivist knowledge can be provided through traditional didactic transmission processes. The epistemological base of traditional didactic teaching is the view that knowledge is an objective phenomenon and that reality exists independently of the observer and can be discovered to achieve verifiable facts about the external or real world. Educators can thus take a behavioural approach that involves efficient and functional mechanical processes (Löbler, 2006). Repetition, reinforcement and testing are important teaching elements in this approach.

Also under the objectivist rubric are approaches based on the cognitive paradigm, which is drawn from rationalism and postulates that knowledge can be reached through reasoning or intellectual intuition (Kyrö, 2015). Cognitivist approaches can help to develop and nurture reasoning and critical thinking skills, which can be defined as "thinking that is purposeful, reasoned and goal directed – the kind of thinking involved in solving problems, formulating inferences, calculating likelihood, and making decisions" (Halpern, 1996 p. 5). Facione (1990) characterized it as an essential tool of enquiry, and Örtenblad et al. (2013) argued it to be underemphasized in business education. Cognitivism focuses on individual cognitive processes and the level of cognitive development of the individual being taught (Bandura, 1977). It has an objectivist view that once taught and understood, the knowledge can then be used and transferred into other situations. Such traditional didactic approaches are valuable

in the delivery of information and the provision of conceptual frameworks for learners to analyse and understand their own experiences against in the real world (Jack and Anderson, 1999; Peltier and Scovotti, 2010).

This paper argues that the objectivist approach is crucial to entrepreneurship education and complements the overall constructivist process by supporting the experiential processes that a constructivist approach entails, thus providing sufficient knowledge for a learner to build on. It is for the reasons stated above that the framework presented later (Figure 1) will begin with the "Pre Experience" stage based on behaviourism and cognitivism.

Such theoretical approaches as those described above illustrate key features within the constructive experiential approach in bringing about transformational change in both the learner 'as self' (e.g. identity), and as 'entrepreneur', by developing an entrepreneurial mind-set, behaviours and identity.

Having discussed some of the supporting educational theories that inform the experiential learning process, this paper now develops a framework which underpins the roles of educators in FE and HE (and the respective learners) in experiential entrepreneurship education based on the discussed theories and philosophies that inform the process. This includes the role of objectivism in the stages preceding the learner's experiences. The application of the framework is aimed at educators in an institution using a set curriculum, although some of its suggestions may be useful outside this arena. The framework, using the theories above, is presented and then discussed in the following section on the role of the educator. Complementing this is the role of the learner, whose accountability for their learning is crucial in a constructivist process, but who will often need to be guided through these roles.

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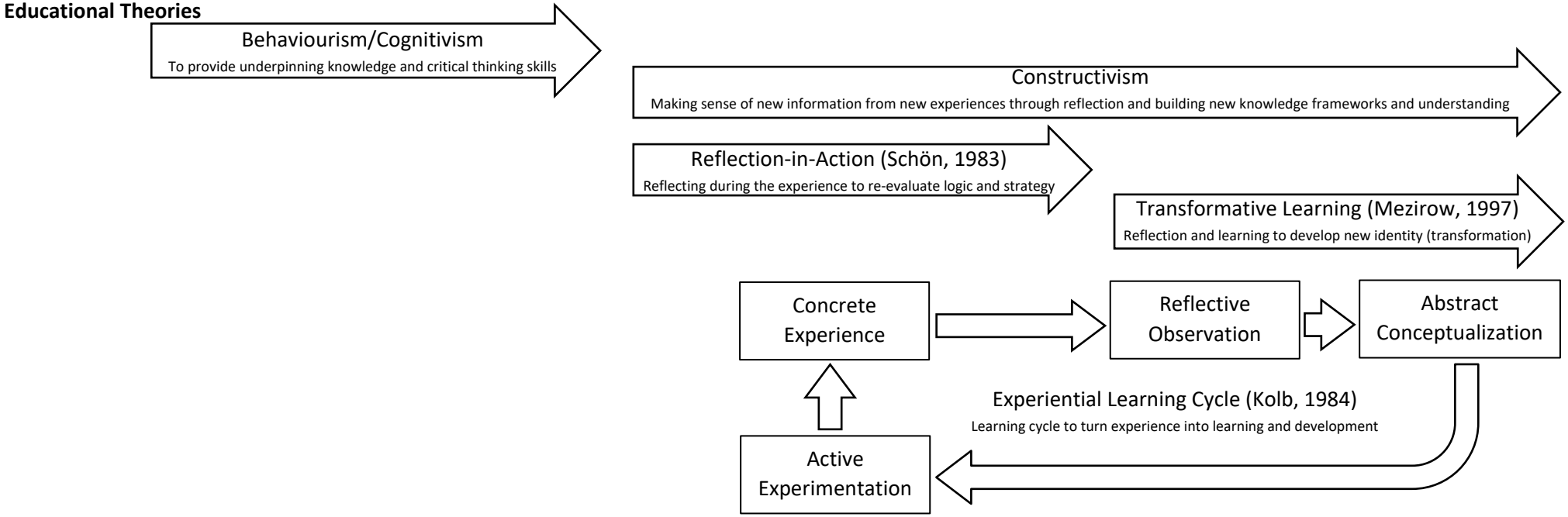
Figure 1: Educational Theories that Inform the Roles of the Educator and Learner during the Experiential Learning Process

	Pre Experience	During Experience	Post Experience
Role of the Educator	• Ensure learners have the required knowledge and critical thinking skills which underpins the experience • Ensure learners are willing and able to participate based on previous experience and cultural and pedagogic background • Ensure constructive alignment between the learning outcomes, taught content and assessment • Ensure learners have adequate understanding of the learning and assessment process	• Develop a low risk environment for learners to make mistakes and learn • Ensure the experience is as authentic as possible • Scaffolding and support as required on a need basis • Facilitation of learning through mentoring, guidance and provision of feedback • Support effective group dynamics and engagement • Support learners to reflect-in-action	• Support post experiential experience reflection and feedback (scaffolded as required) • Encourage comfort in critical reflection • Link the experience to real world practice • Assess the learning from the experience
Role of the Learner	• Develop underpinning knowledge • Prepared and committed to the process	• Active participation and experimentation • Willingness to look to the educator for guidance and support when required • Engage with group work • Willingness to reflect in action	• Willingness to critically reflect • Engage in reflection • Openness to link abstract experiences with the real world



The Role of the Educator in the Experiential Learning Process

Educators at the FE and HE level may be approaching entrepreneurship education from different starting points. They can be entrepreneurs, business educators, researchers, with or without training in education. This section covers areas of consideration for an educator designing a course, including constructive alignment (Biggs, 2012; 1996), scaffolding (Rogoff, 1990; Vygotsky, 1978), learner participation, reflection (Kolb, 1984; Schön, 1983) and assessment.

The first stage (Pre Experience) of the framework (Figure 1) represents the educator ensuring the learner acquires the basic knowledge and critical thinking skills to engage in the process. Importantly, the level of learning in constructivist business experiences is impacted by the learner's level of critical thinking, previous experience, and background. Approaches based on behaviourism/cognitivism, as described in the previous section, are required to provide the initial grounding required. The cognitivist approach involves the processing of information and development of critical thinking, which is required in the experiential learning process. Béchard and Toulouse (1998) argued for entrepreneurship educators to use a didactic approach to ensure learners can define and understand the course's objectives.

As the educator designs the course, they should ensure that the process is constructively aligned to optimise the conditions for quality learning (Biggs, 1996). In this case, the learning is constructivist based and the educator creates (or aligns) the environment (context and resources) to support the learning activities and achieve the desired learning (Biggs, 2012). Educators ensure that learners have support as required, an understanding of each step of the learning process, and their role in it. Effective constructive alignment (Biggs, 1996) helps to ensure that learners understand and engage in both the experiential and assessment processes. This has been found to be an essential part of curriculum development in entrepreneurship courses focusing on action (Morselli, 2018). By doing this, the educator ensures that the learner can have a clear idea of the aim, structure, process and the assessment strategies from the beginning of the process.

The second stage of the framework (During Experience) involves learners questioning the existing knowledge that they were taught in order to break free and test new ideas, processes

and/or assumptions through experience. The educator should ensure that there is a low risk environment in which learners can make mistakes to learn from. In the Kolb cycle, during the experience stage of the learning process, learners can start with concrete experiences before moving on to reflection or they can start with active experimentation to explore their different/innovative 'break free ideas' and then move to other concrete experiences based on this active experimentation towards the end of the experience stage.

The educator, who now takes on the role of coach or developer (Mueller and Anderson, 2014), can encourage the practice of 'reflection-in-action', which involves learners reflecting on their actions and the outcomes during the experience (Schön, 1983). Reflecting during the experience allows learners to re-evaluate their logic and strategy based on their current outcomes and make adjustments accordingly to enhance the outcome of the experience. This is an important entrepreneurial skill for students to develop in order to be able to respond and adapt to their future entrepreneurial experiences. The educator can support learners' reflection-in-action through questioning learners' approaches and progression. This can enable learners to re-evaluate whether more effective and efficient approaches might exist. Reflection-in-action can also be encouraged and developed through the completion of ongoing logs, during an extended experience. The experiential practice chosen by the educator for the "During Experience" stage of the framework, while based on initial learner competency, can take many forms. Entrepreneurial skills and attributes can be built by including meeting and interviewing entrepreneurs, developing business plans, attending entrepreneurship forums (Sherman et al., 2008), computer simulations, business visits, realistic class exercises (Solomon, 2008), mentoring experiences and case studies (Chang et al., 2013). However, educators are faced with 'authenticity' issues, that is, the degree to which educational activities represent the reality and complexity of real life situations (Gulikers et al., 2005), which is argued to improve learning outcomes (Macht and Ball, 2016). Thus, experiential learning activities that are perceived as 'real world' are valuable as authentic activities (Fook and Sidhu, 2010). Herrington et al. (2014) consider authentic learning as a pedagogical approach in terms of the context of future use. It follows that an authentic experience could be regarded as an approach to acquire knowledge and skills to create knowledge and innovate in the chosen field of practice, after graduation (Wald and Harland, 2017).

'Scaffolded' guidance is a process by which educators allow learners to engage in complex tasks which would otherwise be beyond their abilities. This support brings tasks within the learner's zone of proximal development (Rogoff, 1990; Vygotsky, 1978) or reach.
When choosing an experiential learning practice, educators are charged with considering that learners have the appropriate cognitive ability. Bell and Loon (2015) found that the level of learning in constructivist business experiences is impacted by the learner's existing level of critical thinking.

Sweller at al. (2019) highlight that educators should ensure that courses are designed to support learners through increasingly complex real life tasks and activities and not overloaded in the learning process. Educators scaffold by guiding learners, encouraging them to think deeply and leading them through the questioning process, and reducing support as the learning process continues (Hmelo-Silver, 2006). Learners look to the educator for guidance, direction and prompts when they are unable to proceed without some temporary intervention that will enable them to take part in the active learning process. Finally, learners may be wary of embracing new teaching structures and rituals (Neergaard and Christensen, 2017) and may require scaffolding until they become comfortable with the new approach.

In the framework's third stage (Post Experience), educators continue as guides or developers, and guide learners through reflective observation of their experiences. Reflection is an approach or tool that promotes learning and higher-order thinking skills, the development of professional practice and the facilitation of structured learning through experience (Coulson and Harvey, 2013). Inadequate reflection time undermines the learning process; thus, the educator should ensure adequate time is provided for learner reflection and discussion of the learner's experiences. Comfort should be fostered with the learners in a trusting, open and low-risk environment (Mueller and Anderson, 2014). It should be directed, systematic and focussed (Dewey, 1963) and should provide meaning to the learner through understanding of the experience (Hägg and Kurczewska, 2016) and its link to real-world practice. In Dewey's (1963) approach, tested ideas can be accepted and built upon or rejected for other approaches.

Reflection can be taught (and learnt) through strategic teaching intervention and appropriate scaffolding (Coulson and Harvey, 2013; Ryan and Ryan, 2013). Supportive interventions that enable learners to develop their ability to reflect and learn through experience are important roles of the educator in experiential approaches.

The importance of the reflective stage as an essential element in the learning process was highlighted by Kolb (1992), who warned educators against choosing action at the expense of reflection and leaving too little time for group discussion and debriefing. Hägg and Kurczewska (2016) similarly opined that the reflective process frequently receives less attention in entrepreneurship education than the actual doing, which inhibits the extraction of learning and knowledge from experience. From reflection, learners develop abstract conceptualization, which will inform future experience.

Transformative learning (Mezirow, 1997) is solidified or formalised in the Post Experience stage and is turned into learning which transforms the learner. Transformation can lead to more entrepreneurial thinking, entrepreneurial behaviours, and a stronger entrepreneurial identity. In the Kolb cycle, the process can end at this stage or can be repeated with the learner continually building on their learning by going through the stages again. Depending on the aims of the experience, the setting, and the specific circumstances, the focus may vary between the stages in practice, although reflection is important in the experiential process.

Conclusion

This paper addresses calls in the literature for the need to provide a closer engagement between the deep body of educational literature on the nature of learning and pedagogical theory, and practitioner research and practice (Fayolle et al., 2016). Jones (2019) points out that a concise philosophy of entrepreneurship education is currently lacking in the literature. Educator narratives have frequently been based on foundations that reflect a lack of in-depth knowledge and understanding of the underlying pedagogic learning theories and practice (Fayolle et al., 2016). The practical implication of this has been highlighted in the linkage between pedagogical understanding competence of educators and the delivery and quality of teaching and learning in HE (Kaynardağ, 2019).

This paper has developed a framework which highlights the roles of the educator and the learner when engaging in experiential entrepreneurship education. It is based on theories and

philosophies that inform the process, to afford guidance to educators by helping them to navigate the diverse and contrasting landscapes of approaches, theories, methods and philosophies (Ramsgaard, 2018). The framework highlights that there is a place for objectivist approaches using behaviourism and cognitivism to provide the underpinning knowledge as part of an overall experiential learning process rooted in constructivism. The paper also discusses the importance and theoretical underpinning of praxis, engagement and the interlinkage between the role of the educator and learner in experiential entrepreneurship education. The paper highlights the potential of learner development through transformational learning, to support the identity as a potential entrepreneur and the development of entrepreneurial competencies and skills. Whilst some educators may be aware of the 'what' and/or 'how' to deliver some forms of experiential entrepreneurship education, this paper helps to underpin the process by ensuring educators have a deeper understanding of the 'why' within the process. By underpinning educational practice with educational theory, educators can maximise the effectiveness of their educational practice. This can improve the legitimacy of entrepreneurship education, through the provision of greater linkage to educational literature and theory (Foliard et al., 2018). In addition, by aligning philosophy with learner expectations, requirements, and intended outcomes, it is more likely to lead to an improved learner experience (Hannon, 2006).

It is important to highlight that the theoretical framework produced in this paper is designed to be applied in FE and HE settings for entrepreneurship courses. It may, however, have some transferability and be of value to educators in other settings and at other levels. This may require adaptation or interpretation by the educator to meet the specific needs of the cohort involved, which may require varying amounts of preparation, assistance and time for the various stages of the process, which will also depend on the complexity of the experience and maturity of the cohort. For example, the actual approach adopted will depend on the proficiency level of the learners which can range from novice to expert and consequently the educator role adopted will range from a more educator led pedagogical approach to a more self-directed learning approach as learners develop their level of educational inquiry. Within andragogy, learners are more capable of becoming self-directed and motivated learners, whilst heutagogy learners are more independent and self-determined (Jones et al., 2014).

These more advanced types of educational inquiry are more likely to be applied in venture creation and incubator settings.

Learners may initially find the experiential process and transitions between stages challenging, particularly if they have had little experience of constructivist approaches. In this case, they will require more guidance and scaffolding of the process until they become more confident (Neergaard and Christensen, 2017), leading to the process becoming more student-led. Timekeeping, staying focused, developing logs, reflecting and achieving the desired outcome, may all require guidance. A clear constructive alignment of the process can aid this. It has been highlighted that the context and educational setting affects the utility of pedagogical practices (Liguori et al., 2019). Reflection, for example, may be difficult for some learners at first, but will usually improve over time. Both reflection in-action and on-action can be encouraged and developed to support the development of entrepreneurial skills and reasoning. Similarly, engagement in group activities may be difficult for some learners until they become more confident at expressing themselves. In some cultures, learners may find it difficult to offer and accept constructive criticism. Educators need to find ways to meet these challenges and enable learners to benefit from the experiential learning process.

The role of the entrepreneurship educator is both conceptually and pedagogically challenging (Hannon, 2006). Educators should be enthused as well as having an understanding of the processes of constructivist learning, the environments and practices. Experiential learning requires educators to adopt different roles at different stages and in different contexts. This requires educators to underpin practice with theory and identify those roles and the skill development that is required to successfully deliver them. They must also be supported in developing and delivering constructivist learning environments. A lack of resources, training, practicalities, and the perception that constructivist-based experiential environments are time consuming may result in some educators preferring to revert to traditional transmission approaches (Bell and Liu, 2019). Institutional contexts can also impede and present challenges to the effective application of constructivist learning by having constraining requirements and expectations, which more effectively support traditional approaches (Bell and Liu, 2019). These may include required assessment patterns, leadership and cultural expectations, class

scheduling, timing, and available resources. These factors may require educators to adapt their teaching to individual contexts to meet both institutional and students' needs and requirements. In some cases, institutional factors might change the delivery and organisation of experiential education or necessitate it to be delivered through extracurricular activities and events (Cui et al., 2019). There are a wide range of experiential learning opportunities that may be available and more manageable in practice in different contexts. Even if educators are not able to deliver the learning exactly as they would like, it is worth noting that active engagement can also potentially improve knowledge retention, help develop problem solving skills and can result in an increase in motivation for future learning (Bonwell and Eison, 1991; Snyder, 2003). Finding a suitable balance between approaches to achieve different objectives based on the desired impact on learners is the key to success in a given field (Kirby, 2004).

Since the experiential learning process is as important as the end product, assessment is approached as a process as well as considering the final output. Strategies to assess learning can include learner observation, outputs and portfolios and discussions of reflections of the learning process (Fenwick, 2003). Assessment has the potential to influence and direct learners' reflection and learning, through focusing their attention and cognitive processes. Since the timing and type of assessment can focus and direct learners, future research can explore how different types of assessment and approaches can influence and support the experiential learning process. Future work can also look to build on the proposed framework and consider other relevant educational theories. It could also look to develop frameworks for specific entrepreneurial educational objectives such as social enterprise, and for different cohorts, and different levels of ability. These would need varying levels of support requirements, levels of self-direction, and autonomy. This might also be the case for different institutions which have different objectives and missions (Barnard et al., 2019). These might require tailoring entrepreneurship education to meet their goals and desired outcomes.

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