Learning to make sense: What works in Entrepreneurial Education?

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Objectives: The article aims to explore the changing influences and relevance of passive and experiential methods of learning within what can be described as a new era of entrepreneurial education. What still largely remains unaddressed in the literature is how are entrepreneur's best educated and developed in a manner which can have a direct impact on their personal and business development.

Prior Work: The article suggests that learning is action-oriented, and that entrepreneurs are not merely "doers"; they are "practitioners". An integral part of being a "practitioner" is the use of practice to help move the firm beyond the "adaptive" learning which takes place in naturally occurring non-contrived learning occasions.

Approach: The article is theoretical in its intent and adopts a social constructionist view of knowledge and learning. The research approach is informed by practitioner-based practice and research, education and participation as a process of social learning.

Practical Implications: The article sets out to develop an argument against the traditional 'passive' means of business education, by suggesting that entrepreneurs who are exposed to passive learning are spectators rather than active participators.

Originality/Value: The article contributes to our current understanding of entrepreneurial learning by recognising that entrepreneurial learning in the context of higher education takes place beyond the domain of the classroom learning experiences, through experiential and discovery based learning which questions traditional orthodox pedagogies. The article illustrates how knowledge is constructed through a situated practice of knowing, and demonstrates how a practice-based perspective might be useful for the study of entrepreneurial education.

Introduction

The small entrepreneurial firm is often referred to as the driving force of economic development as a result of their diversity, flexibility and the fact that they account of a large portion of the gross domestic product and employment in the UK. Due to the nature and size of the small entrepreneurial firm, decision-making, innovation and business process are to a large degree directly dependent on the entrepreneurial behaviour of the entrepreneur ((Sadler - Smith *et al.,* 2003). Learning and the opportunities to learn are at the centre of entrepreneurial practice, as learning influences the recognition of opportunity, (Baron and Ensley, 2006; Hinrichs et al., 2004), the development of soft skills, processes and cultures that are all necessary in order to sustain innovative practices, (Spicer and Sadler-Smith, 2006). Contemporary empirical studies suggest that studying both the nature and conditions of learning in the context of the entrepreneur is essential in order to understand how these actors, innovate, survive, and grow in what are highly dynamic environments, characterised by changing trends, globalisation, and sustainability (Macpherson and Holt, 2007). The importance of entrepreneurial learning is reflected in the increased number of studies that are now taking place, (Cope, 2005; Rae, 2006). However despite such importance, research that specifically addresses the question of what methods best enable and sustain entrepreneurial learning is still in poor supply (Cope, 2003). A small amount of preliminary work has been reported upon in the literature from a "business start-up" perspective (Fenwick, 2003; Van Gelderen et al., 2005). The traditional preoccupation with an individualistic view of entrepreneurial learning has to a degree marginalised and undervalued the wider social context of what one can conceive as entrepreneurial learning, (Goss, 2005). The resulting lack of literature on the social and collective dimensions of learning has led to continued emphasis in learning from a psychological and behavioural perspective, which is primarily concerned with the acquisition and dissemination of knowledge. The social intensive nature of the entrepreneur (Aldrich and Cliff 2003; Jack and Anderson 2002) needs to be recognised if provision of enhanced learning and development practices is to reach its true potential. A recognition of the social process of learning helps in understanding how entrepreneurs develop their identity (Rae 2004) and create what Down (2006, p.109) suggests as relational narratives which 'provides an emotional refuge which enables them to be effective entrepreneurs; to realise and create an entrepreneurial sense of self'. By viewing entrepreneurship as a process of establishing identity, a process of enacting which

is located in a situated context is borne out of the realisation that entrepreneurs are continuously engaged in a form of learning which is relational, as it is derived from active encounters, (Cope 2005; Rae 2000, 2004; Taylor and Thorpe 2004; Thorpe et al,. 2008). Thus understanding how entrepreneurs learn requires methods and activities that seek to understand these working relationships embedded in the situated context of practice, as it is this process which may best account for learning within the entrepreneurial context (Devins and Gold 2002, 113).

The subject of how entrepreneurs learn has developed a considerable body of literature in recent years. In particular, focus has been placed on the role that education plays within entrepreneurship and in particular the suitability, relevance and effectiveness of passive and experiential learning strategies that are employed. This focus has given rise to the debate surrounding the question of do entrepreneurs find greater effectiveness from learning through strategies of action and reflection, or do the traditional and more passive methods of education remain the only sources of learning? Learning in the context of the entrepreneur has been described in terms of the varying skills that are required in order to effectively draw in new information and attribute meaning and context. This suggests that the creation of knowledge involves both procedural and contextual elements; procedural knowledge involves the process of knowing how to take data and develop this into information, contextual knowledge bears attention to the environmental domains and awareness of the entrepreneur, of their influence on the environment and the issues that arise from it. In this regard, connectionist or social learning theories can provide a useful platform from which to understand the creation of organisational knowledge. Knowledge can be understood as a collection of social practices consisting of elementary (entrepreneur) type entities containing diverse sets of knowledge. In contrast, the traditional approaches to learning makes the assumption that knowledge must be transmitted and received in the form of explicit information, after which learners can apply this new found knowledge to their own purposes. In this case learning is viewed as an external objective process.
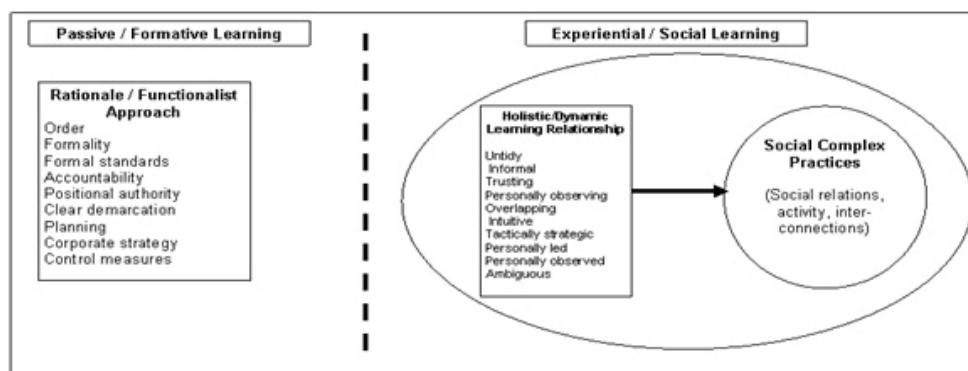
The article moves away from the predominant positivist view of entrepreneurial learning that has generally treated entrepreneurs as fixed entities. Some scholars have challenged the dominant conceptions that suggest entrepreneurship is an intrinsic related property of the individual person (Chell, 2007), and instead look towards the interconnected web of entrepreneurial practices with the broader societal and cultural images of the entrepreneur, (Bruni et al., 2004; Nicholson and Anderson, 2005; Peterson and Meckler, 2001). These scholars have sought to recognise that the representation of the entrepreneur as a heroin of innovation may be socially constructed, and that entrepreneurial practice operates within a social reality which is constructed and shaped by their actions and that of other in response to their actions, (Dood and Anderson, 2007; Radu and Redien-Collot, 2008). The article aims to examine the specific contribution of a practice-based view of learning as a means of entrepreneurial education and HRD development. The article conceives entrepreneurial practices as been inevitably and inextricably related to socially embedded experiences and relations (Lounsbury and Glynn, 2001). This is in direct contrast to a focus on the individual entrepreneur, which is more typical in research on entrepreneurial traits and cognitions (Chell, 2000; Krueger et al., 2000). We suggest that entrepreneurial learning requires an insightful navigation of rules, norms, and objective conditions which seek to facilitate and mediate some actions whilst inhibiting others. The paper is structured in the following way - firstly we review and direct a conceptual argument based onto existing literature on the current role of management education, from a UK point in case, highlighting the role of institutionalism and how this is affecting and shaping entrepreneurial education and development. Secondly we seek to illustrate how knowledge is constructed through a situated practice of knowing, in other words developing learning through practice, and demonstrate how a practice based perspective might be useful for the study of entrepreneurial education. Finally the paper concluded by providing some remarks regarding possible future research agendas and applications of the practice based perspective to the context of entrepreneurial education and development.

Management Education & Institutionalism
In the past number of year's entrepreneurial development and education has seen an increase in interest. However some serious questions have being raised on the current methods of entrepreneurial development and education and what should be the most appropriate approach to development and education. One particular concern relates to Hindles (2007) who refers to entrepreneurial development and education as a field of study that lacks legitimacy as a source of true value in the context of the community that is higher education. At present scholars and researchers in the field are currently challenging one another to question what is the most effective approach to educating the entrepreneur. One of the main challenges in discussing this area is the lack of any solid definition of the term entrepreneurship. Numerous authors have argued that the idea of identifying and acting upon opportunities represents the dominant view of what entrepreneurship is. Shane (2003, p4) defines entrepreneurship as entailing practices that involve the identification and development of "new goods, services, ways of organising, market processes and raw materials through organising efforts that previously had not existed", (Corbett, 2005; Rae, 2006). Gartner (1985), Peterson (1985) and others, suggested that there was no accepted definition of the term 'entrepreneur'. This argument

is further reinforced by Henry *et al.,* (2005, p. 98) who suggests that literature on entrepreneurship is 'abound with theories and discussions related to the issue of what or who is an entrepreneur'. Matlay (2005) also argues through his earlier work with Storey (2003) that increasingly entrepreneurs are exposed to a combination of 'push' [1]and 'pull' [2] strategies that send the individual down the entrepreneurial path. In other words, entrepreneurship and characteristics of the entrepreneur are something that is shaped through experience over time as opposed to being born with such skills. With this in mind, the methods by which entrepreneurs learn and how they are developed are equally subjective. Lazear (2005, p. 649) suggests that entrepreneurs are a 'jack of all trades', who achieves competence in many skills, which he argues is opposed to a specialist within a particular skill or trade who excels within a much smaller and closely related number of single skill sets. Lazear (2005, p. 676) goes further to define entrepreneurs as individuals who are engaged in the conception and formation of business ideas. Matlay (2005, p. 628) argues that often entrepreneurs are seen as 'individual who seeks business opportunities and takes advantage of economic disequilibrium to pursue personal gain'. Matlay and Westhead (2005) argue "Entrepreneurship can take a variety of forms - in new or established firms of all sizes (micro, small, medium and large businesses), as self-employment or as membership within virtual teams of e-entrepreneurs" (p. 630).

University business schools over the past number of years have had a significant impact in the way knowledge of the business environment have been delivered to managers/entrepreneurs and students alike. Today we see business schools throughout Western Europe, transfixed on the globalised economic world set up to service corporate large-scale business environments (see table 1). Such a view directs and focuses research, teaching methods, and the dissemination of knowledge. In the last three decades, there has been very little recognition given to entrepreneurship, (Welch, 1996). This is ironic in the consideration that the small entrepreneurial firm contributes more than 50.1 per cent of the UK turnover, and there are 4.8 million small businesses in the UK (up from 4 million in 2003). Across the UK and Europe entrepreneurship is considered to be critical to the contribution to local and national economies, regional development and employment generation, (Acs and Audretsch, 1990; Audretsch, 1995; Fayolle, 2004; Nerlinger, 1998). In conjunction with this trend there is now a growing realisation for the need to foster entrepreneurial activity with the specific aim to encourage entrepreneurial development, skills, and awareness, (Commission of the European Communities, 2006; Seikkula-Leino et al, 2010). Entrepreneurship as a subject base has taken several years to embed itself into the curriculum of business schools as a subject specific domain. Authors such as Bennis and Toole (2005), Ghoshal (2005), Mintzberg (2004), Pfeffer and Fong (2002), have criticised the model used by business schools when addressing business education, Handy (2007, p9) commented - *"I recounted in my autobiography that, when I was asked what I proposed to teach (at LBS) I said management, because that is what I had been doing. The principal memorably replied 'we are not going to teach that at the London Business School. We are going to teach marketing and finance and economics and production and so on".* Mintzberg (2004) argued business schools that are focused towards the paradigm of rational choice are developing ontology of "functional" based components of corporate strategy, supported through the development of journals which positioned this academic thinking. This is reflected in academic research that adopts a dominant positivist deductive approach, which has only served to distract away from the applied reality that is a small entrepreneurial firm. As a result less academic publications can be related too and even understood by owner/managers or entrepreneurs.

(Table 1 - Functional & Social learning relationships affecting entrepreneurial education)

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[1] (seen and defined as changes both positive and negative within circumstances both personal and professional)
[2] (a desire for change, growth or development)

Business schools have been criticised in their use of pedagogical approaches which have neglected or even dispelled the notion of experiential learning, "learning by doing" as a basis for practice, and have further neglected the associated inductive ontological based views to understanding the framing of real world "live" concepts and problems, (Pfeffer and Fong 2002). Preferring to adopt a pedagogy focused on case based delivery, resulting in a failure to focus on soft skills development, (see Table 1), (Bennis and Toole 2005). The end results being the development of an "entrepreneur" with no supporting analytical framework for understanding and appreciating real management based issues. Treating the process of entrepreneurship not as an art or craft that is deeply rooted in the practice of everyday life, but something that is functional (Mintzberg, 2004)., The existing mode of entrepreneurial education has been dominated by an ideology of rational institutionalism, based upon corporate cultural values. The nature of entrepreneurial learning is changing; this is leading to ongoing challenges both in the UK and Europe, the perspective taking in this article. The traditional philosophy of entrepreneurial pedagogy, based primarily on inherited US-UK influences, is increasingly in tension with the changing demands of the modern business environment, resulting in the requirement for a new emergent conception of the role of practice and experiential learning. A continued reoccurring theme is the divide in education ideologies between the "corporate bureaucratic model" and the "entrepreneurial value driven world" (see Table 1) which is manifested in the polarisation between experiential and passive learning, which persists in current education, (Rae and Draycott, 2009). Henry *et al* (2005) argued and defined the need for different skill sets in the education of entrepreneurs such as technical skills including oral and written communication, business management skills including strategic awareness, marketing and finance, and personal skills developed through learning via experience. Traditional teaching methods have origins deep within passive learning strategies and techniques. Dhliwayo (2008) argues that traditional passive learning methods can only be memorised by the student, in terms of the concepts and theories that are taught to them. Hwang *et al* (2008) suggest that entrepreneurs who are exposed to such learning strategies are simply 'involved' spectators rather than active participants. Experiential learning on the other hand requires a more involved pro-active approach. Chairam *et al* (2009) argued for the need to move away from traditional passive learning styles towards more 'constructionist perspectives' (p. 99) that focus on entrepreneur's 'centred learning' (p. 99). In other words, learning through experience and reflection should have greater priority than the methods and teaching styles that have been traditionally employed in the past. Munoz *et al* (2008) suggests that passive learning methods will ultimately not develop critical thinking and communications skills that are a pre-requisite for success, not just in entrepreneurship, but also in the wider business world. Strvenga de Jong *et al.,* (2006) study into the relationship between academic and experiential learning in vocational education, identified different attitudes arising from passive and experiential learning strategies. In contrast however, experiential learning is more concerned with the relating to, understanding and actively applying concepts taught in the classroom to the student's environment. Jennings (2010) identifies four elements to experiential learning – the exposure to experiences, the practice of embedding experiences, conversation and interaction with others regarding the experiences in order to make further sense and reflections on what we do, see and hear. Henry *et al.,* (2005) suggests that they are limitations to what entrepreneurs can be taught in the classroom and that learning from experience is the only way. This is further backed by Davies and Gibb (1991) who suggested that the methods employed within traditional education are, in the main, inappropriate for entrepreneurs.

Entrepreneurial learning takes place without direct influence of rationally planned objectives and involves relatively high levels of risk and uncertainty (Gibb, 2002). The key issue here is that learning is not only embedded in the firm's existing activities but entails shaping and reshaping of these activities, gaining legitimacy, acquiring and exploiting social interactions. The issue of entrepreneurial learning and education is the need to recognise and develop more reflective, experiential forms of learning, emphasising the importance of the reflective practitioner, the significance of critical events, and the importance of learning as a social practice. It has been suggested that developers of training programmes, view entrepreneurs as reluctant learners. This is illustrated in the various training schemes currently in existence in the UK, (Hankinson 1994; Bryan 2006). Yet when one considers the nature of the entrepreneur, they are in actual fact the embodiment of learning, through the relational processes that they have with stakeholders and their environment. The entrepreneur is under continuous pressure to learn new ways of improving through ad-hoc and holistic decision-making, in contrast to passive managers of large organisations who administrate function process based teams. Gibbs (1997) argued that it is this very relational type learning, learning-by-doing, that is critical to the success and growth of the small entrepreneurial firm, arguing that the entrepreneur has a strong desire to learn. This view of learning represents a great challenge to the use of knowledge, by recognising that learning is embedded in the entrepreneur's interaction and relations with others.

Epistemological Position of Entrepreneurial learning: the Construction of Human Knowledge
The article adopts a social constructionist view of learning which has become increasingly popular in organisations studies over the last 20 years in which scholars have developed an array of methodological approaches to study the manner in which organisations, identities and knowledge are socially constructed

(Shotter, 1993; Watson, 1994; Weick, 1995). Early work on social constructionism drew attention to ways of thinking about social reality, which formed a basis for social constructionism. For example Garfunkel (1967) emphasised the experiential nature of reality, where the notion that a sense of the real is a practical accomplishment achieved through the contextual, embodied, ongoing, interpretive work of people. This particular orientation focuses on the context in which interaction takes place, as well as the interaction itself. Berger and Luckmann (1966) proposed that society exists as both an objective and a subjective reality; the authors argued that the social world could be understood as a dialectical process of externalisation, objectivities, and internalisation. Berger and Luckmann (1966) argue that the social world is humanly produced in ongoing activity and routines, yet experienced as being objective in that it affects the actor's lives on an ongoing basis, in which the actors have to engage and experience it in that firm actors are socialised in the firm's reality and they interpret meanings of events and other subjective views and in doing so they take on the firm's reality. From the perspectives of inter-subjectivity created emerging social realities, both research and learning aims to offer insights into how we negotiate meaning about our experiences, by doing so shape those very experiences, with the aim of becoming more thoughtful, careful and reflexive about how we do so. This has an implication in terms of what form learning may take, and how this may impact practice by recognising that the entrepreneur's activities are social, and embodied always embedded in an intricate flow of complex inter-twined relationally responsive and implicitly knowledgeable activities. This draws importance to understanding the entrepreneur's relationship with their world; an understanding not based on relational theoretical knowledge but on knowing how to live in practical situations.

When attempting to understand the construction of human knowing, a number of key questions can be posed on how knowledge is acquired, how it is used in relevant circumstances and how it is communicated. While human knowledge is often considered and studied as a singular element, there are clear sub-categories of knowledge that exist and involve different types of learning and communication. Cognitive science is concerned with the nature of human knowing which must be understood as a variety of abilities to reflect, symbolise and to communicate with other humans. There are numerous questions relating to human know-how, how it is acquired, remembered, used and communicated. Clearly different sub-types of knowledge exist and involve different kinds of learning, recalling, and disseminating. Humans invoke and simultaneously call on a variety of differing forms of knowledge in many varying ways. Knowledge is a general term referring to the content of all long-term meaning which a human possesses, while know-how refers to these elements of knowledge related to the use of knowledge forms (technologies). Newell & Simon (1972) assumed that human problem solving involved the use of a set of built-in, or learned heuristics, which were constrained by the rules of logic. Humans solved complex problems in the same way as computers were used as problem-solving aids. Much of human knowledge is tacit, in that, the ability to recognise something; this questions the assumptions of structured knowledge. Johnson-Laird (1983) argues that human reasoning involves both the generation of mental models, which suggests that knowledge is gained simply by the human being present as the experience occurs. This is a very basic kind of human knowledge as it underlies the human ability to carry out daily tasks successfully, but certain kinds of problems and challenges which a knowledge worker can face, and the effective human response to those problems does require the learning of complex patterns of interaction. The role of language is seen not only as a vehicle of communication between the knowledge workers, but also as a tool used by the knowledge workers for thinking through complex problems, establishing a cognitive manipulation and allowing for dialogue to emerge. Coupled to this is the nature of human knowledge, in the sense that humans tacit knowing and what they do in various contexts is to a large degree learned from other knowledge workers, in which language is seen as a critical factor.

Human know-how and problem solving in complex situations highlights the role of human language and argues two points that are highly relevant. Firstly, human language is seen not only as a process of communication between agents but also as a tool which can be used by agents for thinking and understanding complex problems, that is, as a vehicle for abstraction and cognitive manipulation. Secondly, the nature of human knowing and what they are doing in various contexts is learned from other humans. Donald (1991) developed a perspective on human knowing in which he is concerned with different kinds and levels of human knowing, and the associated mechanisms of learning. Donald (1991) holds that the modern human knowledge worker is a diversity of different kinds of knowledge and learning processes, which has evolved, the first two taking a phylogenetic evolution, the third via a dual evolution between phylogenetic and partly cultural evolution. The knowledge workers ability to know can be derived from direct learning by doing, interaction with the physical and social environment. Representing knowledge at this level, a framework of experiences is developed of epodes of events, which are recalled in a context and can be used to guide action and interaction with others, anticipating action and supporting short-term planning. However this form of developed knowledge, does not lend itself to "out of context thinking and planning", it is limited with respect to deliberation and is strictly individual knowledge of the world, from a specifically limited perspective.

The second level of knowledge, according to Donald (1991), which is developed and established, via other knowledge workers by the imitative representation of reality is based on learning from others and with others

through imitation (mimesis).   Human imitation is based on copying the actions of others but involves much more than learning through imitation and the ability to involve what is learned in the correct circumstances. It involves the internalisation and representation of the imitated actions that allows deliberate recollection and manipulation of the actions out of context, which can involve the manipulation and regeneration of imitated actions mentally to form new ways of doing things. The importance of imitation for social knowledge sharing, and as a basis for further evolutionary change, is an important concept. The next transition in Donald (1991) theory is that toward shared knowledge that is gained through oral symbolic language. Narrative is the natural product of knowledge and is the basis for explanatory structures such as religion and myths, which form the basic structures of a social community. Complex language representations allow for the development of cultural systems in the knowledge based small firm and the cultural sharing of much complex knowledge. The final layer of language was developed in cultural evaluations as externalised memory, in which case knowledge is constructed through forms such as written symbols and other graphic forms. This form of knowledge is limited without the meaning of language and is greatly facilitated by the spoken language, which enables the acquisition of cultural knowledge that can be shared across communities. The resulting layers represents a hybrid modern mind which is capable or experiencing, learning, knowing and problem solving, which are employed simultaneously in differing ways.

For example, a entrepreneur solving a problem with a client involves learning by understanding the problem areas, stakeholders and their environments, imitating skill acquisition, practice and generation of new forms, oral instruction in the interpretation of the client's needs, learning and following the notation of the problem, and finally the study of theory, all of which provide different experiences of the process itself. Donald (1991) recognises the necessity of establishing human knowledge as an evolutionary process, where the point is to learn about and adapt within the world. It further recognises that humans have constantly and radically changed the knowledge environment itself. Hutchins (1996) is concerned with the know-how of humans that is based on co-operative and collective elements and a number of different knowledge workers with different knowledge, skills and tasks that are involved. The knowledge required by the knowledge worker to operate in the knowledge environment are acquired through individual experience and through imitation, in that the tacit / explicit dimensions of master-apprentice may learn partly through verbal instructions as well as through imitation. In addition, instruction manuals and the like, which take the form of externalised scripts? What Donald (1991) recognises is that human knowledge has the capability to learn about and adopt within the context of the problem and the environment, whilst recognising the importance of the human capacity for symbolic communication and collective problem solving. A critical element in the understanding is that of the evolutionary cycle, in which the human environment is constantly changing in which they operate, thus changing the nature of the knowledge possessed in numerous ways as a result. Human knowledge can be described as learning from direct interaction with the environment, both material and social, with the human capability for imitating reality, and the development and understanding of language. Hendricks-Jansen's (1966) concept of learning and knowing similarly focused on action and interaction within the environment, in which the learning from others through modelling, imitating and practise.

Entrepreneurial Learning as Practice
The term practice, in the context of leaning, develops from a distinguished line of philosophy, which is imbued with numerous diverse traditions of thought and understanding such as phenomenology, Marxist, and Wittgenstein's linguistics. Thinking of learning through participation of the entrepreneur in a practice enables one to focus on the realisation that in everyday practice, learning takes place in the flow of experience, with or without the entrepreneur's awareness. In every day firm's activities and organisational life work, learning, innovation, communication, interpretation and history is co-present in practice. Heidegger (1962) and the phenomenological school used the term "dasein" to denote this "being-in-the-world" whereby subject and object are indistinguishable, in which they are both part of a situation and exist in a social and historical setting. Both Ryle (1949) and Polanyi (1967) place huge emphasise on knowing in practice, while this may seem to some as inconsequential in terms of a contextual shift from knowledge to knowing, but rather this shift has an important fundamental implication towards your understanding of entrepreneurial learning. For example in the work of Schon (1983), based upon the concepts of Polanyi (1967) and Ryle (1949) who observed that knowing is in the actions of the agents in the firm, in which it is argued that the practice exhibited by any agent of the firm does not consist of applying a prior functional knowledge for a particular decision or rule of action, but rather a process of knowing which is inherent in their actions. What this suggests is that the role human agency plays in the knowledge performance of the firm's agent, a view further supported by Maturana and Varela (1998) where knowing is defined as effective action in which knowing is implied in application or action. By solely placing focus on either knowledge or knowing focus is automatically lost on the centrality of action in the application of knowledge. A reason of this divergence can be that there exists a tendency by research and academic practitioners to form a focus of knowing to that of knowledge that is deeply grounded in current theoretical domains, as research and the academic community attempt to develop and test theories that try to account and predict how knowledge is gained. Polanyi (1967) illustrates that through the tacit element of knowing which is evidenced in an agent's ability to recognise, or subscribe to

experiences, even if the entrepreneur cannot articulate precisely how this occurs. What is important here is that the entrepreneur recognises the "know-how"; the ability to view an opportunity by observing the practice (the actual action) the practice has no meaning apart from the knowing-how that constitutes it. Remove this element of knowing-how from any of the above practices, and then meaning of the practice is lost, in that there are no recognisable elements from which experience can relate.

Giddens (1984, p4) defines human knowledge and knowing as "inherent within the ability to go on within the routines of social life, where human agency represents the autonomous agent". The entrepreneur's ability to enact knowing through their day-to-day activities is not separate from them, (incorporated in routines or systems in the firm) or inscribed in bodies but rather represented in a recursive process of everyday practice. As such knowing cannot be viewed or understood as a static entity as it is enacted in the context of a specific moment and time, knowing-how to do a job or learn a practice and gain knowledge are capabilities generated through action. They emerge from both the situated and ongoing co-evolution of the interrelationships which exist between the agents in the firm and in the context of specific time and place, human agency of learning and actions and structure. In which the development of competence or mastering of the practice is achieved rather than given, as the practice is a recurring situated and enacted process that cannot be assumed outside of the context. Schon (1983) demonstrated a case in which situated or localised practice often involves the entrepreneur reflecting through the reconstruction of their knowledge and knowing, thus altering their perceptions. Barrett (1998) and Weick (1993) similarly argue that through experimentation and reflection in practice is viewed as a strong methodology and means towards innovation and learning. In other words when an entrepreneur changes their practice their knowing is altered. From such a perspective an entrepreneur can learn to know differently as they use means and opportunities to reflect on, experiment to improve their practices. In that when a practice is defined as a situated recurrent activity, they cannot be spread into "a_priori" fixed rule of static objects. But rather competence maybe seen as the process generated by the entrepreneur's capacity to enact what is appropriate at a particular moment and time, with appropriateness seen to be necessarily contextual and provisional aspect of situated firm activity. The concept of practice, as a pedagogical approach to entrepreneurial education reveals how the entrepreneur understands a situation, connecting knowing and doing, conveying the image of materiality, and of fabrication. Practice conveys the contingent conditions and materiality of the world of the worlds into knowledge. The study of knowledge in practice can follow a similar methodological pathway as identified by Latour (1987) in which entrepreneurs identify ways in which they associate the various elements that make up their social and natural worlds. A practice-based theory of entrepreneurial learning in action dismisses the distinction draw between order and disorder and places emphasis towards a disturbance – producing a system that is constituted by incoherencies, inconsistencies, paradoxes and tensions. The point of such a system is the realisation of not to go in search of a framework that comprises all of those reflections in a single space continuum, but rather to demonstrate how a practice-based theory of knowledge in action arises from multiple perspectives of social interactions. Cope (2003) argues that entrepreneurs 'learn by doing' (p. 430) through experiential learning methods that include trial and error, problem solving and discovery as the main tools at their disposal.

Implications for Entrepreneurial Education: a future HRD research agenda
The role of practice is that of active engagement in lived experiences, it is suggestive towards the social constructionist approach to learning that truth exists in the situated nature of the activity at hand. Learning in this case implies a dislocation of understanding that is derived from self-referential, collective inquiry and the external environment. The implication of this position in terms of an educational agenda involves challenging the "self-conceptions" of what does it mean to be an "entrepreneur", inviting openness to alternative meanings and political agendas (Alvesson & Willmott, 1992; Martin, 1992; Linstead, 1993). This perspective represents a movement away from the pre-conceptualisations of rationality, offered through intuitionalism, to a method that embraces introspection of self, critical reflection of activities and the creation of learning practices that enable and facilitate the exploration of alternative spaces of possible actions. This view changes the perception of the educator's/trainer's role and level of involvement, from that of a transmitter and disseminator of knowledge, to that of a facilitator of learning which is consistent with an inquiry-based pedagogical approach, (Goodlad, 1992; Brookfield & Preskill, 1999; Sarasin, 1999). Such pedagogy draws a distinction between andragogy and pedagogy; andragogy seeks to encourage the student to become more autonomous in their actions and more specific in the assessments of their own capabilities and actions. In andragogical practice, instructors would model such patterns of behaviours as tolerance of ambiguity, openness, patience, judgement, and empathy, calling for an educational environment that requires flexible open learning spaces free from hierarchical structures, (Pedler, 2002; Raelin, 2000; Boshyk, 2002). An alternative method which features deeper probing into the entrepreneur's mental constructs is action science, which by its conception questions the long established practices of the entrepreneur and social systems to critical reflection. Thus exposing differences or gaps between the individual entrepreneur's espoused perceptions of theories, it seeks to probe into the politically defensive routines used by the entrepreneur to be rational and controlling over others. In this way it allows for the exploration of hidden tensions of resistance and conflicts that are embedded in social discourse. This can be further exemplified through a technique referred to as the "ladder

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of inference" in which the entrepreneur begins to understand how they and others select bits of knowledge from learning experiences and then draw almost immediate conclusions from these bits of knowledge without understanding their embedded assumptions or attributions.

The method in question is referred to as cooperative inquiry that invites the entrepreneur to engage in critical reflection of self, in the presence of a group or peers which invites inquiry into its own constructs and dynamics, (Reason, 1994; Heron, 1996). Rather than the entrepreneur accepting prescribed content and methods, the cooperative enquirer searches for their own patterns of knowing, while at the same time continually questioning their own practices, shifting the entrepreneur away from a self-referencing conceit that characterises human agency. In this case the entrepreneur learns to view themselves by learning to be 'self-referent' and observe others in and through their practice that continuously re-shapes and shares their own interpretations of the world, (Eyler, 2002; Kenworthy-U'Ren & Peterson, 2005). In practice-based learning environments the entrepreneur participates in activities that are focused to meet the needs of that community, but the entrepreneur is actively encouraged to reflect on their practices in order to provide them with an understanding of the context. Methods that can be employed and noted in the literature include critical incident mapping, decision explorer, personal journals, concept mapping or narrative analysis, (Gathercoal, Love, Bryde, & McKean, 2002; Zubizaretta, 2004). The creation of learning groups as a mode of entrepreneurial learning is appropriate as such a learning environment can be sensitive towards its facilitation, by providing the entrepreneur with a safe environment in which to experiment with others, in order to accomplish diverse goals (Michaelsen, Knight, & Fink, 2002). These learning groups can become a reflective artefact, which can help the entrepreneur to become more aware of their actual practices and patterns of behaviour, such as exercising influence, establishing meaning and identity. Therefore the role of the instructor becomes much more encompassing as opposed to merely dialectically delivering a program of study. That is not to say that the instructor's knowledge is not purposeful. According to Mayer (2004), an unguided method of learning only exceeds seminar/lecture methods when supplemented by attentive trained facilitation. Such learning can constitute mutual learning through one's peers, as much can be learned from enacting in practice with fellow peers who have higher levels of experience or competence; this has been noted in social learning theory. A balance needs to be achieved which is contingent upon such elements as the complexity of human dynamics, the acquisitions of the subject material against meta-cognitive processes of inquiry. The process of meta-cognitive inquiry can help entrepreneurs to develop their analytical levels of thinking to become more self-reliant, and productive in their learning endeavours. By enabling the entrepreneur to establish practices of learning to construct new knowledge when faced with complex problems, for which there is no known rationale solution. It is through these uncertain highly dynamic situations which may encourage the entrepreneur to engage in "reflection-in-practice", incorporating such behaviours as sense making through reframing a prior established rules and routines, in other words rule breaking, (Schon, 1983). A practice-based epistemology corresponds to current empirical work on facilitation and entrepreneurial education through such practices as entrepreneurial engagement and social presence (Chickering & Gamson, 1987; Rourke, Anderson, Garrison, & Archer, 2001; Shea, Pickett, & Pelz, 2003). Such practices appeal to the need for the educator in higher education to develop close contact with practitioners, in this case the entrepreneur, in order to provide guidance through experience (academic observations) and the creation of open, warm and trusting learning environments. A view consistent with situated learning theory, educators could adopt a hands-on process of engagement, such as an apprentice type relationship, based upon skill acquisition towards the development of an emerging model, which builds upon complex cognitive skills that require the entrepreneur to organise and structure their thinking processes.

Conclusion
The concept of learning has developed overtime in which numerous areas of interest has been established, such interest groups attend to either the behavioural aspects (Cyert and March, 1963; Levitt and March, 1988), the *cognitive* issues (Duncan and Weiss, 1979; March and Olsen, 1975), the *socio-cultural* dimensions (Cook and Yanow, 1996; Lave and Wenger, 1991) and more recently the *practice-based* view (Nicolini et al., 2003). These differing views allow researchers and theorist a degree of freedom to understand different dimensions of the entrepreneurial learning phenomenon. The literature review developed suggests towards the conceptualisation that entrepreneurship is learned through experience and "trial and error", and as a result the process of entrepreneurial learning needs to be viewed as a method of practice, in which knowledge is developed and shaped in a literative process of new experiences and social dynamics, (Sullivan, 2000). The development of experiential knowledge in entrepreneurs is an incremental process that evolves throughout the course of their working lives. This means that attempts to stimulate "real life" experience through formal modes of passive education and training are unlikely to have a strong influence or impact on the development of the entrepreneur as a practitioner.

Therefore, one may prefer to embrace indeterminacy and learn from our real life inquiries (Roy, 2005). It is thus at times limiting to set about entrepreneurial education by offering prescribed criteria or theoretical solutions in advance, in order to educate one towards practitioner's problems. At times, decisions are often

remedial reactions in direct response to new conditions or disruptions. Further to this, issues that are encountered by the entrepreneur are as likely to be specific as general. Therefore it is trivial to attempt to specify sets of criteria that may not fit the context as objectifying interpretations can be self-defeating for entrepreneurs if they attempt to fit their lived context against pre-established criteria. In terms of learning, it is important that the outcomes of interventions in the activities of the entrepreneur can be documented in order to know not only what has being learnt, but also how, what and why learning has taken place, (Willmott, 1997; Fournier & Grey, 2000; Garrick & Clegg, 2001; Fenwick, 2003). By viewing knowing as an epistemology of the practice, positions learning as a dialectical medicated process that integrates theory with practice. The characteristics of this knowing cannot necessarily be deconstruct red and reported upon, as it entails a deep immersion in lived experiences which is purely tacit based interpretations. Gibb (1995) proposed that in order for the firm to survive and develop the entrepreneur must be introduced to a new form of thinking and learning, which facilitates the development and transfer of knowledge, in order to move towards a form of higher learning and acquire the capacity to build and nurture experience based knowledge.

This focus of practice based learning lies with what Reynolds (1997) and Higgins (2010) suggest as the process of dialectical relations that can alter misunderstood interpretations found in conventional wisdom or power relations. According to Johnson and Spicer (2006), based upon their empirical study of action learning in engineering programs, they suggest, "workplace-centred learning produces *learning* managers as opposed to *learned* managers". Learning in this case develops both a heightened level of consciousness and criticality, allowing the learner to influence organisational dynamics and awareness (Rigg & Trehan, 2004). In current entrepreneurial education, as noted previously, the technical form of education is emphasised at the expense of the interpersonal skills, the accumulation of facts over wisdom, and a focus on the individual gains over inter-subjective appreciation. A practice based view of a learning process seeks to address some of these failings by directing attention towards four key factors – academic development through sense making, personal development, reflection and storytelling, and finally work skills development, (Parks, Onwuegbuzie, & Cash, 2001). Even though some existing empirical studies have established a connection between practice-based learning and the academic performance of the entrepreneur, the real benefit of this process derives from the entrepreneur's increased sense of awareness to learn, and their heightened interest in learning, (Blair, Millea, & Hammer, 2004; Dressler & Keeling, 2004). The approach can enable an epistemology which targets learning outcomes that are specifically derived though the enactment of an activity, rather than from the traditional classroom environment (Raelin, 2006). The process of engagement calls upon the entrepreneur to view their own perceptions as tentative and open to the views of others (Shulman, 2002). In these instances practice-based learning can accelerate this engagement process by aiding the entrepreneur to become more critically aware of their own preconceptions, inconsistencies and defences which exist between their own espoused beliefs and actions. The entrepreneur needs to continuously develop and be aware of new spaces of knowledge and learning, using the knowledge they currently have to and sharing it with others in order to affirm or manage new unknown dynamics. This can be related to Piaget's (1969) concept of assimilation, where the entrepreneur attempts to use existing mental models to make sense and systematise new conditions, in order to recognise patterns of actions, (Mezirow, 1981; Boud, Keogh, & Walker, 1985; Billett, 2001). Exposing the entrepreneur to the understanding of their own practice enables them to develop the confidence to construct new knowledge, allowing them to make contextual relevance while continuing to understand the context of their own actions, (Teekman, 2000; Leonard & Swap, 2004).

The paper suggests that learning in the context of the small entrepreneurial firm, is socially constructed and conceived, which is based on social interactions and discursive behaviour, which enable the emergent social construction through the firm agents learning. These social constructions involve both plurality and diversity and emerge through the process of social interaction. This approach understands knowledge and learning as a constructing or learning activity, as opposed to a representation, on which reality is constructed socially. In this case learning can be articulated and re-framed as a process of activity, (Cook & Brown, 1999; Gherardi & Nicolini, 2000). By taking such a perspective, knowledge has the following characteristics: it is situated in the system of ongoing practices, it is relational and mediated by artefacts, it is dynamic and contextual, in that it is always rooted in a context of social interaction and it is acquired through some form of participation. It is suggested in this article that educational methods need to be focused more towards the stimulation entrepreneurial activity by primarily focusing on the role of practice as a process of learning, which in term can have a profound impact on entrepreneurial motivation and ability to recognise learning as a situated enacted process through their professional existence. The review has highlighted that experience drawn from the actual development and running of an entrepreneurial firm establishes for the entrepreneur a level of preparatory knowledge, meaning that attention needs to be directed to the issue of how entrepreneurs can be supported through their own career development. It can be argued that research studies into the learning process of entrepreneurs have all suffered from the lack of common epistemological view of learning, and many questions in relation to entrepreneurial education and learning remained unaddressed. Simply researching the learning outcomes of the entrepreneur through a prior experience is of no real value. What is required and argued in this article is the recognition and inclusion of a practice based view of learning and

education which allows one to explore experiential learning as entrepreneurial learning method, and how this method evolves through an educational process and the entrepreneurs own career development, which focus them onto particular aspects of their own learning practice when transforming their experience into knowledge. The article argues that such a view of learning calls for more directed research on the application of practice based pedagogies of learning and development as a future research agenda to enhance our understanding of this important field of study in the context of entrepreneurship which is warranted.

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