Are the dominant teaching theories in higher education adequate to underpin teaching practices in enterprise and entrepreneurship context?

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#### **Abstract**

It can be comprehended that the models and theories which are currently used to reinforce teaching depict the education practices of transmitting knowledge from teacher to students, which is more traditional, linear, input-output construction of teaching that has dominated adult education for decades including the last half century. As numerous studies (e.g. QAA, 2018) emphasizes that both the needs of learner and learning in enterprise and entrepreneurship education (EEE) context is different from other disciplines and mainstream higher education (HE). This requires further development of teaching methods and practices that can encourage the aspirations of the learner in this particular education setting. When investigating the theories and approaches that are used to examine teaching in HE, the relevance and adequacy of them to review teaching practices in this 21st century and EEE context is a question. Thus, the need of new theoretical models and frameworks can be clearly observed. For example, to investigate teacher's role in EEE setting, there is a need of adopting more context specific, individual-focused research methods.

When the recent outcomes associated with the UK higher education are taken into account, there is an emerging key debate; i.e. are universities actually turning off potential entrepreneurs. Whether these outcomes are due to teaching, learning environment or other activities within universities, is still largely a question, hence requires further research to find answers.

#### Introduction

There is a rapidly increasing emphasis on the necessity and influence of entrepreneurship (Kuratko and Morris, 2018). This has led to a vigorous, continuing debate among enterprise and entrepreneurship education (EEE) scholars such as Liguori *et al.*, (2018); Birch *et al.* (2017); Turner and Mulholland (2017); Gibb (2008); Kirby (2007) about how to develop and educate entrepreneurs. The history of entrepreneurship education in HEIs goes back more than seven decades with some of the first entrepreneurship courses began in 1940s (Katz, 2003), however, do the educators today know how to teach entrepreneurship? Is there an agreed approach to teach entrepreneurship? If the educators know it, why only 1.0% of the students start up a business six months after their graduation in UK (see Fig 4), when actually every university in the UK has allocated substantial resources to nurture entrepreneurs? Can the needs of entrepreneurship education be underpinned by general teaching/learning theories in higher education?

As Hurney (2012) and Hattie (2003) posit, teaching can actually have a significant impact on students' development and positively affect their achievements in general, conversely, can teaching have such positive influence on an individual's entrepreneurial development? The study of Aluthgama-Baduge (2017) finds out that there is still dearth of knowledge in the area of influence of teaching in the development of one's entrepreneurial skills and attributes. Additionally, a knowledge gap can be noticed in theories and models that underpin the EEE teaching practices at HE level, particularly teaching styles, methods and the teachers' role during the education process (Aluthgama-Baduge, 2017).

This study critically examines the current dominant HE teaching theories and approaches and their implications to comprehend and underpin the teaching practices in EEE context. The study investigates HE theories and practices primarily via the perspective of teaching. The review begins with an analysis of dominant, general HE theories, particularly styles, methods and conceptions of teaching. It will also discuss the types of learning environment and other activities that support learning. The study will then move on to examine the teaching theories and practices within EEE context (HE level) in relation to the above theoretical constructs, i.e. styles, methods and conceptions of teaching, and learning environment and other activities that support learning. UK's HE environment will be utilized to critically evaluate the current teaching practices within EEE context.

# Teaching in Higher Education - A synthesis and analysis of dominant concepts and practices

The analysis here will concentrate on three key concepts within HE pedagogy literature, i.e. styles, methods and conceptions of teaching. Teaching is a central activity of the most educators in higher education (Teichler, 2009; Marriss, 2011; Li, 2015), and one of their major sources of personal satisfaction (O'Brien, 2009), which can have a significant impact on students' development and positively affect their achievements in general (Hurney, 2012; Hattie, 2003).

## Styles of teaching

Gray (1988, p. 07) "teaching style can be defined as a relatively consistent pattern of behaviour or preferred approach, which colours one's stance towards subject, students, colleagues, methods, media, etc.". Heimlich and Norland (2002, p. 23) define teaching style as "the study of matching teaching beliefs and values—the philosophy of the individual—with the behaviours used in the teaching-learning exchange." According to Conti (1985; 2004), teaching style is the distinct qualities exhibited by a teacher, which are consistent from one situation to another even though the content being taught may vary. Jarvis (1995) and Banning (2005) identify three key teaching styles employed by instructors in higher education, which are: didactic, facilitative and Socratic. In universities, the content-oriented didactic style, or in other words lecturing, still remains the predominant form of teaching (Jarvis, 2006b; Kember, 2009). Facilitative style is a more informal approach to teaching which is learning-oriented or focuses on learning skills rather than delivering the subject matter (Brain, 2002). "Facilitation means easing: helping learners realise their capacity to learn is the hallmark of the facilitator, moving education from a delivery of static knowledge to a dialogical relationship where knowledge is co-created" (Gregory, 2002, p. 80). The foundation for Socratic teaching style (or Dialectic or Maieutic) is questioning (Banning, 2005; Tokuhama-Espinosa, 2014), and it is often used in law schools around the world (Sorvatzioti, 2012, p. 61).

#### Methods of teaching

Weston and Cranton (1986, p. 260) define teaching method "as the vehicle or technique for instructor-student communication". Grasha (2002a) finds that the teaching methods employed are a key element of teaching style, which can help enhancing understanding of approach to teaching of a lecturer. Some of the popular methods of teaching in HE context include content delivery, case based teaching, problem based teaching and project based teaching (Aluthgama-Baduge, 2017), and from them content delivery is still considered to be the most used (Griffin, 2006).

### Conceptions of teaching

Conceptions of teaching can be identified as one of the signature concepts in higher education teaching and learning literature (Kandlbinder, 2013). With respect to teaching, conceptions of teaching may be envisioned as being the lens through which the process of teaching and learning is viewed and shaped" (Apedoe, Holschuh and Reeves, 2009, p. 157). Devlin (2006) defines conceptions of university teaching as "specific meanings attached to university teaching and learning phenomena, which are claimed to then mediate a teacher's view of, and responses to, their teaching context" (p, 112). Teachers at all levels have their own conceptions of teaching which they gradually develop with their classroom experience as students and later as teachers (Ramsden, 1992).

Teaching in university context is traditionally dominated by the conception of conveying information and knowledge from the teacher to the learner (Heimlich and Norland, 2002; Blenker *et al.*, 2006). In other words, teaching has conventionally been associated with the notion that there is a truth proposition (knowledge) or an established theory that can be disseminated via the agency of the teacher (Jarvis, 2006b). Not only the conceptions but also the dominant teaching practices in universities continue to portray this transmittive, didactic, teacher-centered traditional lecturing approach or its remnants (Ramsden, 2003; Jarvis, 2006a; Kember, 2009; Goedhart, 2015), where the students passively accept the information given by the instructor (Jarvis, 1995; McComas, 2013).

When considering the key theories that underpin teaching practices in HE, Kember (1997) and Kember and Kwan (2000) developed the following model (See Fig 1), which Kember reproduced later in 2009 with some changes. The model suggests that the conceptions of teaching have influence on approaches to teaching which then have impact on students' approaches to learning, and subsequently learning outcomes.

Trigwell, Prosser and Waterhouse (1999, p. 60) also developed a similar model (Fig 2) to the model of Kember (1997, 2009) and Kember and Kwan (2000), depicting the relationship between teaching and learning, however, it does not show a clear link between approach to teaching and approach to learning.

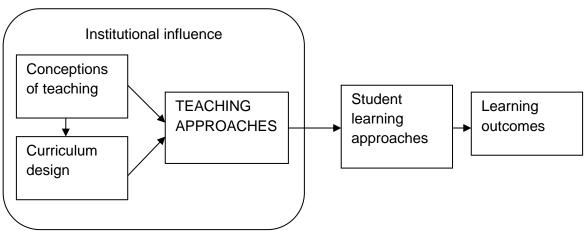
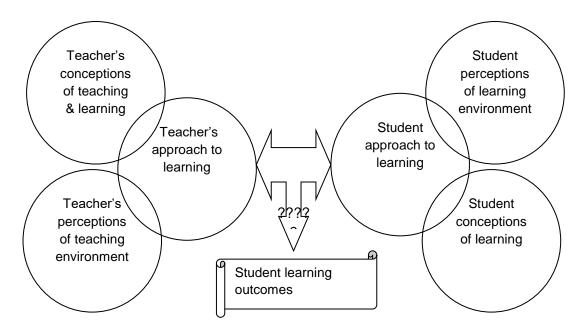


Fig: 1 The relationship between conceptions of teaching, teaching approaches and learning outcomes

Authors simplified model. Adapted from: Kember (1997, p. 269, Fig. 3); Kember and Kwan (2000, p. 471, Fig. 1)

Fig 2 Established links between teachers' conceptions of teaching and learning and students' learning outcomes



Authors simplified interpretation. Source: Trigwell, Prosser and Waterhouse (1999, p. 60, Fig. 2)

# Towards a new model to underpin and generate deeper understanding of teaching practices in HE?

These Kember (1997; 2009), Kember and Kwan (2000) and Trigwell, Prosser and Waterhouse's (1999) models provide insights into understanding the dominant input (teaching) output (learning outcomes) conception of higher education. These models depict the education practices of transmitting knowledge from teacher to students, which is traditional, linear, input-output construction of teaching that has dominated adult education for decades including the last half century. Does this still apply today, and in particular in relation to EEE is there a difference?

On the one hand, the less reference made to style of teaching can be noticed within general HE teaching and learning literature, which has been acknowledged by a number of researchers such as Trigwell and Prosser (2004); Jarvis (2006b); Shaari *et al.* (2014) and Aluthgama-Baduge (2017). Does this not mean there are even less studies that have made reference to styles of teaching within EEE? On the other hand, there is tendency to examine teaching style as if it is synonymous with method, or technique of teaching (Heimlich and Norland, 2002; Jarvis, 2006b). The difference between teaching style and method as Jarvis (2006b, p. 29) claims, "methods focus on the techniques that teachers employ; they are ways of doing it - process, technique". To explain further, "teaching methods are about the technical processes of teaching whilst teaching styles are more about the teachers and the way that they conduct themselves during the teaching session" (Jarvis, 2006b, p. 30).

As Salama (2015) argues, it is the adopted style and method of teaching create the learning environment that can be either active or passive, which also has a significant influence on students' learning approaches (Cambaliza, Mazzolini and Alarcon, 2004), and subsequently learning outcomes (Noroozi and Haghi, 2013). In an active learning environment, students' role goes beyond simply listening and watching: they are encouraged to argue, question, do discussions and brainstorming, and engage in active experimentation and reflective observation (Huang and Hang, 2011). In contrast, the focus of the passive learning environment is learning facts and information with no or minimal discussions, questioning and collaboration with peers, which result in students not being able to think outside the regurgitation of book information (Magnan, 2013). Arasti, Falavarjani and Imanipour (2012) posit that, the instructors who use facilitative, student-centred teaching approach tend to utilise various other activities such as workshops, project works, industry visits, competitions or guest speakers which help making the learning environment more active.

Based on the above critical review of key theoretical constructs, Aluthgama-Baduge (2017) developed a model to generate a deeper understanding of teaching in HE (See Fig 3).

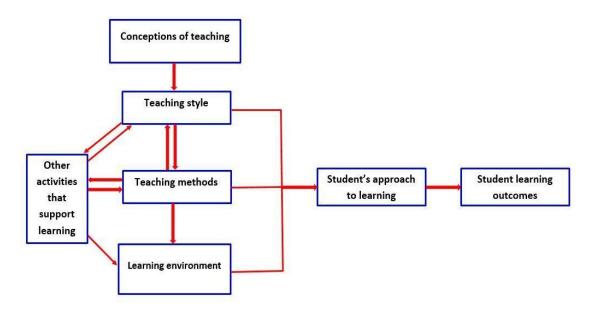


Fig 3: Aluthgama-Baduge model of teaching in HE. Source: Aluthgama-Baduge (2017)

When considering the theories that are used to investigate teaching in HE, are they adequate to teaching approaches and practices in this 21<sup>st</sup> century? One good example is the use of Lippitt and White's (1958) leadership styles theory to examine teaching, which classifies styles of teaching to three categories, i.e. authoritarian, democratic and laissez-faire. This 1950's framework has been continually utilised to investigate teaching styles by numerous researchers including Jarvis (2006b); Jarvis (2012) and Frunza (2014). Given the fact that every teacher has a unique style (Dean, 2005; Aluthgama-Baduge, 2017), can three or four styles of teaching be generalised to all the lecturers in HE?

## **Enterprise and Entrepreneurship Education in Higher Education**

EEE has established its place within HE around the globe (Jones, Matlay and Maritz, 2012), and is now delivered in various education contexts and as part of diverse disciplines such as

business, engineering, health sciences and design (Vanevenhoven and Drago, 2015). Nevertheless, how to educate entrepreneurs is still vigorously debated at all levels of education without common consensus to date (Kirby, 2007; Neck, Greene and Brush, 2014). On the contrary, worldwide, there is a rapidly increasing emphasis on the necessity and influence of entrepreneurship (Thompson, Mawson and Martin, 2017).

Meantime, the rapid growth of EEE has actually outpaced the understanding of what to teach, how to teach it, and how entrepreneurial learning is best evaluated (Morris and Liguori, 2016). When considering how to teach entrepreneurship in particular, there may be suitable education contexts to adopt such teacher-centered approach, however, is it adequate to develop one's entrepreneurial skills and attributes? What teaching methods and approaches are actually used in EEE context in HEIs? EEE is different from other disciplines (Beugre, 2017). The QAA (2012; 2018) guidance for EEE in HE is a good example that emphasises this uniqueness. The guidance highlights the need for more active education environment and approaches. A number of experts (Arasti, Falavarjani and Imanipour, 2012; Alalwany and Saad, 2015) argue that facilitative, student-centred, action-based teaching styles and approaches are appropriate. Kirby (2004; 2007) requires HEIs to not only teach *about* enterprise and entrepreneurship, but also to educate *for* entrepreneurship.

# Teaching entrepreneurship in HE context - A synthesis and analysis of dominant concepts and practices

When examining the teaching practices and theories in EEE context, numerous research with individual cases of diverse courses, curriculums and teaching practices can be noticed. The collections of studies of Neck, Greene and Brush (2014); Crittenden *et al.* (2015); Volkmann and Audretsch (2017); Jones, Maas and Pittaway (2017) and Turner and Mulholland (2018) are good examples.

#### Styles of teaching

Interestingly the less reference made to styles of teaching within EEE literature is clearly evident, apart from the attempts of a small number of researchers such as Bechard and Gregoire (2005; 2007), Kozlinska (2016) and Aluthgama-Baduge (2017). Due to the multifaceted roles (e.g coach, consultant, storyteller) a lecturer may play in EEE context (Tavangar, 2016; Aluthgama-Baduge, 2017), the styles of teaching in EEE are significantly different from one teacher to another (Aluthgama-Baduge, 2017). Thus, to generate a deeper understanding of teaching styles and approaches in EEE, there is a need of adopting context specific, individual focused research methods (Aluthgama-Baduge, 2017).

Kozlinska's (2016) work applies and highlights the study carried out by Bechard and Gregoire (2005; 2007) on teaching in EEE. Bechard and Gregoire (2005; 2007) examine three teaching archetypes or models in higher education based on existing literature, and go on to propose the concept of teaching models in entrepreneurship at higher education level. However, the "framework has been unfairly neglected in the empirical entrepreneurship education literature despite being comprehensive and simple to use" (Kozlinska, 2016, p. 290). The important point with teaching model here is that "teaching model form a bridge between educators' knowledge, conceptions and beliefs about teaching, and their teaching behaviour per se" (Bechard and Gregoire, 2007, p. 264): it "is centred on the link that unites the conceptions that scholars and educators have about teaching, and their actual teaching behaviour" (Bechard and Gregoire, 2005, p. 105). A teaching model is "an instructional design which describes the process of specifying and producing particular environmental situations which cause the students to interact in such a way that a specific change occurs in their behaviour" (Mohan, 2007, p. 79;

Singh, Sharma and Upadhya, 2008, p. 219). Joyce and Weil (1985) define model of teaching as "a plan or pattern that can be used to shape curriculum (long-term courses of studies), to design instructional materials, and to guide instruction in the classroom and other settings". Bechard and Gregoire (2005) firstly examines three teaching models in higher education, which are: the supply model, the demand model and the competence model.

The supply model of teaching focuses on imparting knowledge and information from the educator to the learner, which makes learner a passive receiver of that information (Bechard and Gregoire, 2007). This teaching model corresponds to Ramsden's (2003) 'teaching as telling or transmission'. When the supply teaching model is investigated within entrepreneurship education context, it is entirely teaching-centred and related to education about entrepreneurship; the focus is on transmission of information and knowledge, particularly theoretical study of entrepreneurship rather than entrepreneurial training (Kozlinska, 2016); thus, can be less interesting, and also less effective for students to develop their entrepreneurial thinking and behaviour (Fiet, 2000a).

The demand model of teaching "focuses on answering the learning goals, motives and needs of the students" (Bechard and Gregoire, 2007, p. 264), and it stands on the principles of constructivist learning paradigm (Kozlinska, 2016). Ramsden's (2003) 'teaching as organising student activity' corresponds to this model of teaching. The demand teaching model in entrepreneurship, is related to education through entrepreneurship as it focuses on developing entrepreneurial personalities: the approach to teaching is both content and process-driven: educators let and make students experience the elements of entrepreneurial process both inside and outside the classroom: teaching is conceived in terms of developing and supporting the environment that enables the appropriation of knowledge, while the curricular focus rests with entrepreneurial personality development, facilitation of self-discovery and self-appropriation in students (Kozlinska, 2016, p.68-69).

The competence model "focuses neither on the supply nor on the demand of education, but on the interaction between the two" (Bechard and Gregoire, 2005, p. 111) or, in other words, an interactive process between the learner and teacher (Kember, 1997). The aim teaching here is to develop students' competences that include the knowledge of how to solve complex problems using relevant knowledge (Bechard and Gregoire, 2007). Bechard and Gregoire (2005) posit that this model corresponds to Ramsden's (2003) concept - 'teaching as making learning possible'. Teaching is more about coaching and acting as developers, and the students are seen as "individuals who actively construct their knowledge through their interaction with their educator(s) and peers" (Bechard and Gregoire, 2007, p. 265). The competence teaching model in entrepreneurship is linked to educating for entrepreneurship as the focus there is on coaching and training entrepreneurs (Kozlinska, 2016). In the competence model of teaching in entrepreneurship, one of the characteristics of the students is their active participation in the co-construction of their knowledge (Bird, 2002).

Bechard and Gregoire (2005) apply the three teaching models - supply, demand and competence - in the context of entrepreneurship education, and go on to propose two more teaching models by combining the elements of the three teaching models. One hybrid model combines elements from the supply and demand models (supply-demand model); the other combines elements from demand and competence models (demand-competence model) (Bechard and Gregoire, 2005).

The first hybrid model - supply-demand model - contains the characteristic from both supply and demand models, but is more closer to the demand model than to the supply model since this conception of education begins from the needs of the students (Bechard and Gregoire, 2005). However, educator is still the one who defines the essence of entrepreneurship and the entrepreneurial experience (Benson, 1992). In other words, it is one of the key tasks of the educator to impart the essence of entrepreneurship to the learners, although his or her "primary role is to be a facilitator, a coach and a cheerleader in helping students to go through a process of self-discovery and self-appropriation with regard to entrepreneurship as a field of study and a career path" (Benson, 1992, p.137). According to Kozlinska (2016), traditional entrepreneurship education falls under supply and supply-demand models.

The second hybrid model - the demand-competence model - comprises the characteristics of both demand and competence teaching models (Bechard and Gregoire, 2005). "More open, simple, supportive, equal and interactive relationships are a sign of demand-competence models" (Kozlinska, 2016, p.169-170). Adopting a highly experiential teaching, this model of education creates space for more entrepreneurial activity, and these educators develop friendly and supportive relationships with students (Kozlinska, 2016). Here the "content is primarily defined by students' needs vis-a-vis entrepreneurship, and by problems to be solved by competent actors in real-life situations" (Bechard and Gregoire, 2007, p. 269). Teaching goals include: 1 "helping students develop basic learning skills; fostering student development and personal growth; helping students develop higher order thinking skills and preparing students for jobs/careers" (Bechard and Gregoire, 2007, p. 269-270).

## Methods of teaching

As Cieslik (2011) and Aluthgama-Baduge (2017) argue, there is no single recipe of teaching used in EEE context. "It is difficult to point out methods that are universally effective; instead, mixed methods and tools for teaching entrepreneurship have proven to be most effective" (Cieslik, 2011, p. 108). However, there are some popular, dominantly used methods (e.g. case based teaching, content delivery, project-based and problem-based teaching/learning) can be noted (Aluthgama-Baduge, 2017).

Gibb (1994, quoted in Gibb, 2007, p. 73) asserts that the use of traditional case based teaching can actually turn into an anti-entrepreneurial approach to teaching "if its emphasis is upon rationale analytical analysis rather than intuitive decision-making and creative experiment". Traditional case method means here is the "in-class discussions of cases of five to twenty pages in length, which students prepare in advance and where the instructor's role is that of the sole moderator of the case" (Maiksteniene, 2013, p. 61).

As Venesaar (2008) and Aluthgama-Baduge (2017) find out, there are cases of teachers tend to using content delivery methods to raise awareness of entrepreneurship and the theoretical constructs underpin the phenomenon. Nonetheless, when considering entrepreneurship which requires incorporating both practical experience and personal practice, adopting content delivery methods are a mismatch in EEE context (Zunfeng and Chunling, 2011).

Project based education where the learning is not linear matches the non-linear process of entrepreneurship, thus, projects are used as a dominant teaching method in EEE context (Kennedy, 2016; Aluthgama-Baduge, 2017). Despite these commonalities, "projects can certainly be pursued in a way that is not at all entrepreneurial" (Gibb, 2002, p. 239). Therefore,

using projects in a way that supports and sparks entrepreneurial attributes (e.g. creativity, problem solving and critical thinking) is important.

The skill of problem solving is essential in the entrepreneurship journey since entrepreneurs usually tend to evaluate a problem by looking at it from every possible angle (Kuratko, 2009). San Tan and Ng (2006) find that learning through solving 'real-world' problems, particularly the ones that simulate entrepreneurial circumstances, are effective in enhancing "students ability to think and respond strategically towards new venture creation; students' appreciation and capacity for entrepreneurship" (p. 416).

#### **Conceptions of teaching**

For a deeper investigation of teaching in EEE, developing a deeper understanding of teachers' beliefs and conceptions of teaching is significant (Brown, 2003; Kember, 2009). When examining the conceptions of lecturers in EEE, Aluthgama-Baduge's (2017) study finds that EE educators hold conceptions about students (e.g. students who just want to pass) and conceptions of entrepreneurship process (e.g. learn via making mistakes), which have significant impact on conceptions of teaching (e.g. whether entrepreneurship can be taught or not). However, the dearth of knowledge of conceptions of teaching in EEE context can be noted within HE teaching and learning literature, thus, there is a need of further research to understand both conceptions and if the conceptions of effective teaching are translated into practice (Aluthgama-Baduge, 2017).

## **Learning Environment**

Both the teacher's role and teaching/learning environment are of great importance in EEE context (Jones and Iredale, 2010). The attempt of entrepreneurship educators to make the learning environment active (Engel *et al.*, 2016), and stimulating to make sure all can contribute, develop and enjoy the learning experience, can clearly be noticed in EEE setting (Bouchard, 2007). The study of Aluthgama-Baduge (2017) finds out that the lecturers in EE are in fact active, key contributors in designing and developing the learning environment needed for entrepreneurship in the education establishments they are part of. EEE is still a growing and relatively new discipline (Solomon and Matthews, 2014), thus, the lecturers in EE are in a distinctive position to be able to design the learning environment and curriculum in a way that suits the journey of entrepreneurs (Aluthgama-Baduge, 2017; O'Connor, 2015), however, are these educators capitalizing on this unmatchable opportunity is still a question.

## Other activities that support learning

Alexander and Hjortso (2013) assert that, business plan writing activities are actually one of the key instruments utilised by entrepreneurship educators. The main reason for this is that business plan writing and competitions are considered as a convenient method to assess student progress and performance (Collet and O'Cinneide, 2010). Business plans are undoubtedly important (Blundel and Lockett, 2011), nonetheless, the researchers, practitioner and policy makers (Gibb, 2008; Weber and Funke, 2014) critique the education approach of 'only writing business plans' by stating that it is insufficient, as it is possible for an individual to go through an entrepreneurship / new venture creation program and end up with a business plan without ever experiencing the 'feel' of what it is like to be an entrepreneur. Schindehutte and Morris (2016) suggest an experiential learning portfolio that can be used to enrich student experience in EEE context.

Out of these suggested activities, Aluthgama-Baduge's (2017) study finds five activities that are frequently used and more popular among current EE lecturers in UK, which are: business plan writing, bring in guest lecturers, elevator pitch competitions, interviewing an entrepreneur and business clinics.

### **Experiential learning portfolio**

Course-basedCo-curricularIdea diariesIdea jams

Business models

Business plans

Entrepreneurial mentors for students

Entrepreneurship study abroad programs

Written or video case studies Elevator pitch competitions

Mini-and full case studies Pitching to a banker

Live cases Campus business plan competitions

Interviews of entrepreneurs Students competing in regional or national

YouTube videos of entrepreneurs competitions
Hollywood movies Student venture hatcheries

Hollywood movies

Entrepreneurial audits

Campus-based business run by students

Entrepreneurial audits

Marketing inventions

Campus-based business run by stud

Prototype development/fab labs

Marketing inventions

Small business consulting projects

Prototype development/rab labs

Website development

In-class games or exercises

Start-up weekends

Simulations

Adopting a family firm

Shadowing entrepreneurs
Student venture fairs

Adopting a family firm

Role plays

Speaker series

Negotiations Community outreach initiatives (e.g. bootcamps,

Guest lectures by entrepreneurs women's symposia)

Lean start-up methodologies Technology commercialization projects

Experiential exams Students mentoring high school or disadvantaged

students

Source: Schindehutte and Morris (2016, p. 167, Table 8.1)

However, research (Pittaway and Edwards, 2012; Collet, 2011; Gibb, 2008) indicates that the current EEE environment is heavily influenced by the more traditional, passive, mainstream HE teaching styles, methods and conceptions, which are learning 'about' entrepreneurship delivery rather than more active, experiential, learning 'for' approach. Andrijevskaja and Mets (2008) point out that, even in a country such as the UK, which is known for its business supportive environment, is critiqued for its entrepreneurship teaching practices. Studies of Birch et al. (2017); Matlay (2008) and Kirby (2004; 2007) are good examples that have questioned the EE teaching practices in UK HEIs. As Andrijevskaja and Mets (2008) critique, numerous entrepreneurship programs in the UK are delivered with no clear structure and objectives, and focus on promoting the innovative curriculums rather than the quality of the education experience. Isn't this still a valid argument when considering the following outcomes of UK HEIs?

### Entrepreneurship education practices in UK and graduate entrepreneurship

In the UK, the urge from higher education stakeholders such as educators and researchers (Kirby, 2004; Matlay, 2005; Wilson, 2012), and policy makers (QAA, 2018; Lord Young, 2014; Department for Business Innovation & Skills, 2015) for higher education institutions (HEIs) to concentrate more on nurturing entrepreneurs is distinctly evident. Studies of Birch *et al.* (2017); Hanage, Scott and Davies, (2016); Nabi, Walmsley and Holden (2015); Matlay (2008) have emphasised the need of graduate entrepreneurs in the UK. In fact, enterprise and entrepreneurship education is present in almost all the UK HEIs (Rae *et al.*, 2014), with a considerable amount of dedicated resources to stimulate entrepreneurial activities among students, scholars, policy makers and professionals. The constantly updating policy initiatives such as QAA (2018; 2012) policy documents (i.e. EEE guidance for UK HEIs), entrepreneurship centers (Jones and Maas, 2017), entrepreneurs in residence (Lloyd-Reason, 2016), are some good example for such dedicated resources. However, has this ambition been embraced by the existing, dominant teaching practices within higher education institutions?

Despite these evidences of reorientation of UK universities towards preparing students for enterprise initiatives, the figures actually are still unconvincing, even though the recent reports (e.g. Higher Education Business and Community Interaction survey published by the Higher Education Funding Council for England/HEFCE, 2016), indicate substantial gains of existing university spin-offs, in terms of employment and turnover growth. Studies such as Blackburn and Iskandarova (2014) reveal that the entrepreneurial intentions of UK graduates are actually declining. "In England the percentage of students who would like to pursue an entrepreneurial career (potential founders and successors) right after finishing their studies dropped significantly - from 19.7% in 2011 to 8.8% in 2013/2014" (Blackburn and Iskandarova, 2014, p. 29). Also, the percentage of students who would like to pursue an entrepreneurial career 5 years after their studies, has declined from 49% in 2011 to 37.9% in 2013/2014 (Blackburn and Iskandarova, 2014) in England. Saridakis, Iskandarova and Blackburn's (2016, p. 11) report finds that, in the UK only 7.17% intend to pursue an entrepreneurial career (6.52% founders and 0.65% successors) straight after their studies and, 33.36% (28.98% founders and 4.38% successors) after five years. In fact, more than eighty percent (81.73%) of the students in the UK prefer to work as employees immediately after their studies (Saridakis, Iskandarova and Blackburn, 2016).

More interestingly, a study carried out in 2012 by the OECD (2013, p. 83) found that, about 35% of the people in the UK consider that the school education provided them with the required "sense of initiative and a sort of entrepreneurial attitude", and that nearly 30% considered that they were provided with enabling skills and know-how to start and run a business (see Fig 4). Nonetheless, after entering and going through the university education process, only 1.0% of the students starting-up a business six months after graduation (Higher Education Statistics Agency, 2016). This in a way implies that, there is a higher proportion of individuals with appropriate attitude, skills and know-how to start-up a business enter the university, however, only 1% of them starting up an own business after six months of graduation (see Fig 5). In other words, does this not indicate that there are individuals with entrepreneurial intentions and skills to start-up a business, yet they become less likely to choose entrepreneurship as a career option after going through the university process?

Fig 4 School education provided enabling skills and know-how to start and run a business (UK)

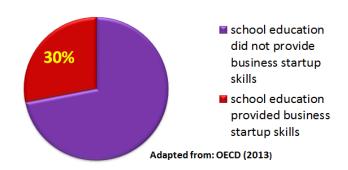
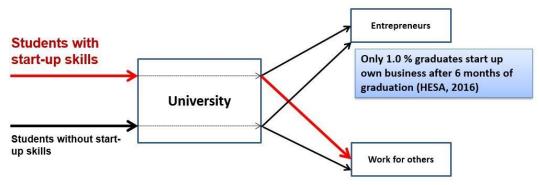


Fig 5. Destination of university graduates in the UK (after 6 months of graduation)



Adapted from: Jayananda and Mulholland (2014a)

It is only 3,890 students left university to start up their own businesses in 2015/2016 in the UK (Higher Education Statistics Agency, 2017). Equally the universities that top the start-up leagues are not those with the highest profile or university ranking. On the one hand, this portrays the complex relationship between the aspirations of young people entering tertiary education, the experiences they receive whilst in that education and the resultant intentions of graduates upon graduation. On the other hand these results revealed by the various studies lead to critique the UK higher education system including the business educators therein. For example, questions come about such as why only a small percentage of graduates consider entrepreneurship as a viable career option; whether it has to do with the way students are taught in the universities and business schools?

#### Conclusion and recommendations

The analysis suggests that this dominant higher education theories - the input-output, didactic teaching/education approaches depicted in the more widely recognised and cited academic theories and models - are not sufficient to underpin and develop a deeper understanding of teaching practices in EEE, and 21st century HE teaching practices in general. Therefore, the need of new frameworks and theories can be clearly observed. When the teacher's role in EEE context is investigated, there is a need of adopting context specific, individual focused research methods to comprehend teaching in EEE (Aluthgama-Baduge, 2017).

Numerous research on individual cases of diverse courses, curriculums and teaching practices can be found within EEE literature. Bechard and Gregoire's (2005; 2007) work is a notable start for research to focus on styles of teaching in EEE, however, as Aluthgama-Baduge (2017) concludes, there is a dearth of knowledge in HE literature about styles of teaching in this specific context of education.

Entrepreneurship education is different from teaching in other disciplines in HE (Beugre, 2017). The QAA (2012; 2018) guidance for EEE providers in HE is a good example that indicates this uniqueness within the sector. Nonetheless, the research (Pittaway and Edwards, 2012; Collet, 2011; Gibb, 2008) portrays that the existing EEE environment is heavily influenced by the more traditional, passive, mainstream HE teaching styles, methods and conceptions, which are learning 'about' entrepreneurship delivery rather than more active, experiential, learning 'for' approach despite the continuing critiques against these education methods.

Aluthgama-Baduge (2017) finds out that the lecturers in EE are in fact active, key contributors in designing and developing the learning environment needed for entrepreneurship in the education establishments they are part of. EEE is a growing and relatively new discipline (Solomon and Matthews, 2014), thus, the EE educators are in a distinctive position to be able to design the learning environment and curriculum in a way that suits the journey of entrepreneurs (Aluthgama-Baduge, 2017; O'Connor, 2015). However, are these educators capitalizing on this unmatchable opportunity, is an area that needs to be further investigated.

When considering the other activities that support learning, Schindehutte and Morris (2016) suggest an experiential learning portfolio to be used in EEE context, however, Aluthgama-Baduge (2017) concludes that the educators tend to use certain activities (e.g. business plan and elevator pitch competitions) frequently and predominantly. Making use of these experiential learning portfolios can enrich student experience in EEE setting. Is HE turning off potential graduate entrepreneurs (Birch *et al.*, 2017), an argument that is becoming increasingly persuasive, particularly the recent outcomes associated with the UK higher education are taken into account. Aluthgama-Baduge's (2017) study indicates that there is something happening within UK HEIs contributing to lessen the entrepreneurial intentions and behaviors of students. Whether this 'something' is teaching, learning environment or other activities within the universities, is an area for further research. When this recent outcomes of UK HEIs are carefully considered, Kirby's (2004, p. 517) recommendation for UK EE educators and practitioners to bring about "significant changes in not only what is taught but how it is taught", contains a valid argument that needs to be revisited.

As Birch *et al.* (2017) argue, the university students have been educated to be employees for far too long, not entrepreneurs. Additionally, the pedagogical practices have not been corresponding with the aspiration of the students who wish to develop entrepreneurial skills (Birch *et al.*, 2017), which hints the need of significant changes to current EEE practices and theories that underpin teaching within the discipline.

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