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Abstract:

Purpose: We aim to provocatively enter four imagined worlds of enterprise education with the express aim of contemplating an emerging future. We do so not to expressly determine what positioning is most appropriate for enterprise/entrepreneurship education, but rather to consider the issues associated with each of the four imagined worlds.

Design/methodology/approach: Our approach is built around a combination of cycles of reflective practice and the use of scenario development processes. We seek to suspend our collective judgement whilst entering the four imagined worlds, but ultimately we do not claim to have hidden our personal biases.

Findings: We conclude that enterprise/entrepreneurship education should be shared across the university and not owned by any school or faculty. While we find it difficult to dismiss the underlying purpose of each scenario, we sense an opportunity to unite their common focus on the development of a transformative student experience.

Practical implications: This process has provided unexpected insights into the potential of scenario planning as a tool that could conceivably be employed more often to tackle complex issues, such as the positioning of enterprise/entrepreneurship education in Higher Education.

Originality/value: This paper, despite its inherent biases, offers the reader an opportunity to gain a sense of the various roles forced upon enterprise/entrepreneurship education by its various key stakeholders. In doing so, the shortcomings of the current situation are highlighted.

Keywords: Enterprise Education, Entrepreneurship Education, Scenario Development

Paper Type: Research Paper

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Introduction

Should enterprise/entrepreneurship education be the concern of all, or just some? Increasingly, enterprise and entrepreneurship education have become commonplace in Higher Education institutions the world over. Governments globally have also been increasingly supporting the provision of enterprise/entrepreneurship education in its many forms (see Rae et al., (2012) and Matlay, (2009)). It would be easy to see the enterprise/entrepreneurship landscape as one full of promise and deliberate purpose. However, we argue that it is not. We argue, with much sympathy to Hannon (2007), that the current state of enterprise/entrepreneurship education and its immediate future are very much under question. Adding to this confusion is the inherent diversity and complexity associated with enterprise/entrepreneurship education (see Jones and Matlay, 2011). The question that begs asking is; are our contextual differences making us stronger or are we being viewed as weaker because of such differences? Further, are we as the current custodians of our domain in control, or at least contributing, to its future development? To address these important questions we embark on a speculative journey aimed at suspending judgement. We argue the need for such suspension on the basis that our collective future journey will more profitably be travelled from such musing.

As such, this paper steps back from the current rhetoric regarding the ever-increasing importance of enterprise education (Matlay, 2006; 2008) to ponder what the world might be like under several provocative scenarios. Scenarios provide the means to conduct thinking at a meta-level (Mietzner and Reger, 2005). As such, scenarios provide a window towards possible future situations without assuming any predicative power. Our thinking has been provoked by the recent challenge of Storey (2009) to the widespread assumption that enterprise education is on the verge of (metaphorically) saving the world. Essentially, if general accounts of the world’s history reveal no absence of entrepreneurs in terms of frequency and importance, why assume enterprise/entrepreneurship education will change the supply and/or quality of future entrepreneurs? Why concern ourselves with such issues when many other issues regarding the provision of enterprise/entrepreneurship education seem more pressing? Well, as the old saying goes; if you don’t know where you’re are going; any road will take you there. Our fundamental
concern is that at some point in the not too distant future, enterprise educators will be brought to account for the lack of focus (or purpose) in their collective, but isolated journeying.

At present, we see primarily four main ways in which enterprise/entrepreneurship education is positioned in Higher Education, although we don’t exclude other possibilities. First, it is promoted as a subject area for all, a transformative experience capable of creating an entrepreneurial mindset in all who participate. Second, it is supportive pathway towards business start-up and/or the specific skills required to do so. Third, it provides skills and knowledge to students in the sciences and arts who seek to commercialize their intellectual property. Fourth, it is just another subject of equal standing in the suite of offerings provided by the business school, alongside marketing, finance and economics etc. Initially, we do not seek to comment on the merits of each of the four types of positioning. Rather, we seek to envisage a world where one type of positioning exists at the expense of the other three. Therefore, to the best of our ability, we aim to suspend opinion as to what we may individually believe.

Method
First, our approach is best captured with direct reference to Hayward’s (2000) cycle of reflective practice. This approach incorporates the philosophical approaches of Dewey (1933), Kolb (1984) and Schon (1983; 1987) to facilitate a process of reflective practice designed to allow the self-reflection of our own practices with the aim being the development of new knowledge that is personally relevant. That is, we have relied upon our collective knowledge of enterprise/entrepreneurship education. Second, we adopt the process of scenario development of Wilson (1988) who argues that the golden rule is for no fewer than two scenarios, and no more than four scenarios. Scenario 1: enterprise/entrepreneurship education should be positioned as a transformative experience capable of creating an entrepreneurial mindset in all who participate. Scenario 2: enterprise/entrepreneurship education should facilitate a supportive pathway towards business start-up and/or the specific skills required to do so in the near future. Scenario 3: enterprise/entrepreneurship education should provide skills and knowledge to students in
the sciences and arts who seek to commercialize their intellectual property. Scenario 4: enterprise/entrepreneurship education should be just another subject in the suite of offerings provided by the business school, alongside marketing, finance and economics.

In addition, we have ensured that our scenarios are: capable of happening; structurally different and not simply variations of the same theme; not prone to any built-in internal inconsistency; capable of prompting specific insights into the future; and finally, designed in such a way as to challenge conventional wisdom. The development of scenarios in our enterprise/entrepreneurship education approach forces us to take a holistic view of our current and future environment – including, importantly, social values and expectations (Wilson 2007). We see an integration of scenarios and enterprise/entrepreneurship education theory for practice sake perspectives as appropriate to explore and provide insights into the further development of enterprise/entrepreneurship education (Bradfield et al 2005; Fayolle, 2010).

**Imaging Four Different Worlds**

Before entering our four imagined worlds, let us briefly reflect upon the purpose of enterprise/entrepreneurship education, as espoused in the literature (Matlay, 2008; Fayolle, 2010). Garavan and O’Cinneide (1994) have distinguished between various objectives of enterprise/entrepreneurship education. In their view, some of the most common objectives include: to acquire knowledge about entrepreneurs and entrepreneurship; to develop skills and techniques to be used to analyse business situations; to stimulate an entrepreneurial drive; to cope with and assess risk; and to encourage new start-ups. Then, Gibb (1999) distinguished three types of enterprise/entrepreneurship education programmes. Each type of programme includes separate objectives, target populations, and operationalization measures. The first type of programme helps participants learn to understand entrepreneurship. The second type of programme is aimed at helping participants to become entrepreneurial, and the third type of programme is to help participants become entrepreneurs. More recently, Liñán (2004; also see Hynes 1996) distinguishes four objectives of enterprise/entrepreneurship education. Each of these four objectives is directly related to the audience of the
programme with the objective of “shifting” them from one stage of entrepreneurship to another. The three types of programmes defined by Gibb (1999) have received empirical support in the research of Hytti and O’Gorman (2004) who reviewed 50 enterprise/entrepreneurship education programmes. They found most programmes were designed to help individuals become entrepreneurs, followed by programs to help individuals understand entrepreneurship and become entrepreneurial in their lives. Despite the importance of programme objectives, there is “still a limited understanding of how best to achieve these quite diverse objectives” (Hytti and O’Gorman 2004, p. 12). These objectives shape the nature of the discussion presented below.

**Scenario 1**

*Enterprise/entrepreneurship education should be positioned as a transformative experience capable of creating an entrepreneurial mindset in all who participate.* This scenario is very consistent with many recent contributions to the literature. For example, whilst cautioning against the limitations of graduate entrepreneurship (i.e. actual startups), Hegarty and Jones (2008) argue strongly using resource profile logic that enterprise/entrepreneurship education should be transformational. A clear challenge to this position is that different types and/or stages of enterprise/entrepreneurship education are not fully appreciated. For example, in Liñán’s (2004) classification, the most basic objective of entrepreneurship education is *awareness education*. The goal of awareness education is to increase the quantity of people with knowledge of entrepreneurship so they might consider self-employment as an option. It would not necessarily seek to increase the supply of entrepreneurs, but would help individuals see their future career choice with a greater perspective (Garavan and O’Cinneide 1994). These are typically university-level courses and, according to Jack and Anderson (1999, p. 122), are “relatively straightforward.” According to Liñán (2004), this is an essential starting point for entrepreneurship education. The key issue here is that they are relatively straightforward and/or a starting point; that they are not an ending point.

Regarding the creation of an entrepreneurial mindset in all who participate, a direct relationship between entrepreneurial intentions, attitudes and motivation is commonly
assumed. Entrepreneurial intentions can be generally defined as a conscious awareness and conviction by an individual that they intend to develop a startup venture in the future (Nabi and Linan 2011). Much research has been done with models of entrepreneurial intentions, with Ajzen’s Theory of Planned Behaviour (TPB) probably being the most dominant (Krueger et al 2000). Opportunities centred on creating an entrepreneurial mindset are reflected in the literature on entrepreneurial intentionality, with many outcomes such as an increase in propensity to entrepreneurial motivation and attitudes. Threats are that an entrepreneurial mindset does not necessarily result in entrepreneurial outcomes (Krueger et al 2000). Consequences are that whilst intentionality may be deemed an appropriate scenario (Nabi and Linan 2011), it may well not result in the most assumed of enterprise/entrepreneurship education outcomes, being the launch of new startups. Indeed, the growing attachment to entrepreneurship education as a cure for current and future economic renewal is most likely seriously misplaced.

So there are some challenges that arise from settling on positioning enterprise/entrepreneurship education as a transformative experience capable of creating an entrepreneurial mindset in all who participate (Matlay, 2008). When we equate enterprise/entrepreneurship education as a process that accommodates the presumption of future action oriented towards business creation we lose sight of the initial importance of the enterprising mindset. To move towards adopting scenario 1, we might consider the context appropriate for developing such a mindset without inclusion of a business startup focus. In the secondary school context, enterprise education serves a similar role vis-à-vis the development of an enterprising mindset (see Draycott, Rae and Vause, 2011). The question that would appear in need of asking is; to what extent is an 18 year old secondary student less prepared/capable than a 21 year old university graduate to start a business? We suggest, on the whole, there is little difference. Young students typically are short of life experience and have a shallow resource profile (Jones, 2011). Consequently, scenario 1 is best achievable when the focus is primarily upon the student, their individual learning and not the mythical holy grail of enterprise/entrepreneurship education; the business startup. However, this increasingly is not the case, with the focus remaining on the process of starting a business being central to the many
enterprise/entrepreneurship education curriculums. What is frequently ignored is the application of an enterprising mindset to other contexts, such as gaining employment and/or engaging in social entrepreneurship activities. The work of Jones (2011) and his reasonable adventurer focus demonstrates the explicit trade-offs required to bring scenario 1 to life. The reasonable adventurer focus is positioned as an intermediate outcome, a resting place for the student upon graduation, from where to contemplate and plan for the future. Little expectation is placed on the student’s resource profile; that is to be played with during education and developed after. Let us move forward to the apparent antithesis of this world, scenario 2.

**Scenario 2**

*Enterprise/entrepreneurship education should facilitate a supportive pathway towards business start-up and/or the specific skills required to do so in the near future. A second objective in Liñán’s (2004) classification is education for startup, which prepares an individual to be the owner of a new business or venture. Gibb (1999) separates the individual capacity building and organizational contexts, and in doing so introduces the issue of defining small business owner as potentially distinct from the dynamic entrepreneur. This scenario would seem to place too much emphasis on assuming commercial activities are born from engaging in startup activities. The reality is that many business owners gain their start buying an existing business; a process that we observe tends to be poorly addressed by entrepreneurship educators.*

In developing specific skills towards a supportive pathway to successful startup, we most often refer to entrepreneurial self-efficacy (ESE). ESE is a construct that involves the individual’s belief about their capabilities for attaining success and controlling cognitions in order to manage challenging goals during the business start up phase (Drnovsek et al 2010). The roots of self-efficacy are in social-cognitive theory (Bandura 1986), and correlates well with the process of scenario development (Wilson 1998). Given the variety and multitude of tasks associated with starting a new venture (Cooper and Lucas 2006), it is not surprising that entrepreneurship studies show that high ESE is an asset for aspiring entrepreneurs. Opportunities centre on ESE as an appropriate measure of skills
required as a pathway towards business start-up (Drnovsek et al 2010), however, research indicates threats in areas of rare use as an outcome measure (Wilson et al 2009). That enterprise/entrepreneurship education should facilitate a supportive pathway towards business startup is almost universally recognised (Krueger and Brazeal 1994), despite the optimal need for longitudinal measures and studies beyond the convenient studies of students (Chen et al 1998).

So there are challenges in accepting the suitability of scenario 2. Doing so means that the purpose of enterprise/entrepreneurship education is to facilitate the creation of businesses; now and into the immediate future. The problem? Entrepreneurship reveals itself in society in every aspect of our daily lives and is not therefore only associated with the act of starting a business. An ontological crime is being committed here within this world, or an epistemic fallacy (see Scott, 2000). With reference to Bhaskar’s (1975) stratified reality, what we can know (ontology) is being mistakenly wrapped up with how we can know (epistemology). Casting our students’ minds as generative mechanisms, there is typically a separation in time and space between developing attitudes and skills and their actual use in business startup activities. That is, the mechanisms development, the eventual events they may give rise to and their ultimate outcome are so sufficiently separated that extreme care must be taken to ensure students truly understand what expectations surround their performance. Alternatively, we could seek the rarefied air of scenario 3.

**Scenario 3**

*Enterprise/entrepreneurship education should provide skills and knowledge to students in the sciences and the arts who seek to commercialize their intellectual property.* Increasingly, cross-campus entrepreneurship education has become ever popular, particularly where universities see opportunities to gain addition research income from commercialisation activities of local intellectual property. Ultimately, such aims seek to be transformative, transforming university and programs rooted in local communities. Thus, clearly there are opportunities to developing entrepreneurial competencies on as well as enhancing more broadly an entrepreneurial culture university wide. This may
further develop into the *entrepreneurial university* (Frederick 2012). Threats however centre on the willingness of university leaders to adopt such an approach, together with making such transformative purpose a strategic intention of the university. Consequences are that only a limited number of students in the sciences and arts may wish to commercialize their intellectual property, resulting in dissonance amongst the majority of students.

The key it would seem is to elevate the focus from the *process* of commercialisation to also simultaneously include the specific *development* of the student. This is not so easily achieved as enterprise/entrepreneurship education curriculums tend to get highly scrutinised as they encounter the consideration of science faculties. Of most concern is the development of soft skills (e.g. selling, communications, the capacity for personal reflection etc). The manner in which such skills are developed are often at odds with traditional pedagogical approaches used in the sciences. So again, in general terms, this scenario is problematic too, as the *process* tends to trump the *development* despite the obvious required interaction between the two. All getting too hard, why not let the business schools have their way?

**Scenario 4**

*Enterprise/entrepreneurship education should be just another subject in the suite of offerings provided by the business school, alongside marketing, finance and economics.* Worryingly, many enterprise/entrepreneurship educators fear this is a looming reality. Increasingly business school classes are poorly attended by time poor students who feel confident to be able to catch up on their inattention through applying themselves during the exam period or availing themselves of online course materials. In contrast to authentic experiential entrepreneurship education, their individual self is rarely revealed throughout the course of their business school studies. However, understanding the heterogeneity of an audience (or programme participants) for enterprise/entrepreneurship education is crucial, as participants have different learning needs and might even fit into multiple categories at different times (Ghosh and Block 1994; Jones, 2011). For example, classification of participants can occur based on socio-demographics (age, gender), stage
of venture (idea stage, startup), or, in the case of a university entrepreneurship course, type of degree (undergraduate, postgraduate), to mention just a few areas. Clearly, understanding the needs and wants of the audience of a program will influence the objectives of the program (Fayolle and Gailly 2008).

With few exceptions the academic research on enterprise/entrepreneurship education has been based on university courses, which are typically taught to undergraduate students, ages 18-25. For example, Krueger (1993) used a sample of 126 upper-division university students in a business program. Audet (2000) conducted research on 89 undergraduate students in an entrepreneurship program. Zhao et al., (2005) had a sample of 265 MBA students at 5 universities, and Souitaris et al., (2007) conducted research on 232 science and engineering students. Research on the large pool of potential entrepreneurs who are non-business university students is less common (Levie 1999), despite their backgrounds and motivations suggesting the need for tailored programs (Brand et al., 2007). This represents a research opportunity, clearly we need to better informed in this respect.

Opportunities for enterprise/entrepreneurship being fully housed in the business school centre on the resources and willingness of leaders to integrate such an approach. Threats are however domain outcome dominated, whereby dominant MBA type courses are typically resource outcome driven, whereas entrepreneurship specific courses are frequently opportunity outcome driven (Maritz et al. 2010). Therefore enterprise/entrepreneurship education is most often seen to be an inappropriate outcome of business schools, being predominantly MBA driven (resource versus opportunity output). Not to mention the appropriateness of unionized left leaning educators being granted the keys to the entrepreneurship education cupboard. Challenging isn’t it?

**Discussion and Conclusion**

There is a clear need to recognise the importance of factoring in pedagogical and andragogical differences in terms of the assumed contexts and processes related to each of the four scenarios. Our work was designed to stimulate further debate. Indeed, in suggesting four possible future states related to the provision of
enterprise/entrepreneurship education we have deliberately aimed to be provocative. Our natural biases are not overly hidden; we remain committed and passionate to the survival of enterprise/entrepreneurship education. In this sense, we believe our musings have potentially exposed some of the fallacies related to enterprise/entrepreneurship education and its positioning in Higher Education. The diversity of contexts related to the provision of enterprise/entrepreneurship education has recently been the focus of Penaluna, Penaluna and Jones (2012). Interestingly, their study highlights an apparent tendency amongst enterprise/entrepreneurship educators to hold substantial personal startup experience. They also reported a significant willingness to engage with a broad array of stakeholders in developing their respective curriculums.

Incorporated inside the nature of diversity is the issue of the size and breadth of enterprise/entrepreneurship education programmes. Some programmes are delivered via a single subject, others across 8 to 10 subjects. Returning to the observations of Garavan and O’Cinneide (1994), Liñán (2004) and Gibb (1999), once we recall the different types and/or stages of enterprise/entrepreneurship education programmes, we run into problems. Regardless of one’s personal preference for any of the four scenarios discussed above, they all are dependent upon the context of enterprise/entrepreneurship education in any particular institution (Jones and Matlay, 2011). Put simply, there can be no off the shelf solutions imported to support the provision of enterprise/entrepreneurship education. Returning to our scenarios, this point becomes more obvious.

In scenario 1, enterprise/entrepreneurship education is positioned as a transformative experience capable of creating an entrepreneurial mindset in all who participate, a noble but problematic aim. Consider this, how many subject offerings are required to enable diverse cohorts of students (with differing aspirations) to develop an enterprising mindset via a transformative educational experience? We will all differ in our answer to this question, but we should be able to largely agree that it would be more than one or two subjects. Thus, this scenario is highly dependent upon institutional contexts. The presence of enterprise/entrepreneurship educators (excellent or otherwise) will not ensure the development of enterprising graduates (across the board) if insufficient curriculum space
is not created. At present, the Higher Education sector is attempting to reduce course/subject offerings as online technologies herald in the prospect of significantly lower operating cost structures.

For scenario 2, enterprise/entrepreneurship education facilitates a supportive pathway towards business startup and/or the specific skills required to do so in the near future. Again, assuming the relationship between enterprise/entrepreneurship education and business creation is positively related, again, a potentially noble aim. However, it ignores the fact that globally, only around 10% to 20% of university graduates studying enterprise/entrepreneurship engage in startup activities during or at graduation (Jones, 2011). Essentially, such a focus is akin to creating a focus on the research and writing skills required by PhD students within a graduate programme, because, they might enrol in a PhD one day. Worse still is the almost impossible task of achieving constructive alignment in curriculum development (Biggs, 2003) when the ultimate learning objective cannot be properly know in advance. That is, not all business startups are governed by a universal set of processes and circumstances. Therefore, how can we know what our current students learn when we don’t know what their future behaviours will be? (see Jones 2011). So this scenario is also quite difficult to support.

Moving on to scenario 3, enterprise/entrepreneurship education as a means to provide skills and knowledge to students in the sciences and arts who seek to commercialize their intellectual property. In reality the process of commercializing science discoveries is often complex, long-winded and made possible all too frequently via complex negotiations. This does not mean we shouldn’t enable a focus on such issues, but realistically, those students who find they need such knowledge/skill development (typically) will also require intensive mentoring along the way. Otherwise, we risk reducing our teaching pedagogies to teaching about rather than for, through and/or in. Aronsson (2004) in an interview with David Birch discusses the merits of apprenticeships for entrepreneurship education. They argue that certain learning needs can be satisfied outside the classroom through immersion in the right mentored environments. We too can see the merits of enabling students to gain a deeper understanding of the process of
commercialization through immersion in its actual real-life processes. Scientists, and entrepreneurship educators for that matter, that do not have genuine first-hand experience of commercializing science should not *educate* in this space. We argue they should *facilitate* their students’ exposure to environs where appropriate mentoring and immersion is possible.

The extent to which such knowledge and skills should be developed during the actual process of commercialization as a component of the research process, rather than as a teaching/learning interaction will undoubtedly remain open for debate. The jury is still yet to form an opinion as to what is most appropriate. As always, the institutional context appears to matter. Those universities that place a greater emphasis on commercialization of local research may indeed favor teaching organized around this scenario. Alternatively, other institutions may be more guided by the emphasis placed on such processes by their educators. Whichever the approach, this scenario is also difficult to adopt as it potentially reduces enterprise/entrepreneurship education to a highly specialized area.

Finally, Scenario 4 proposes that enterprise/entrepreneurship education simply be just another subject in the suite of offerings provided by the business school, alongside marketing, finance and economics. The size and quality of the enterprise/entrepreneurship education literature that has emerged (relative to business school related literature) is nothing short of amazing. While the outputs appear quite equal in terms of publications, in reality the enterprise/entrepreneurship education literature is essentially being produced by less than a tenth of the academics employed across business schools. Ask yourself, how many dedicated marketing education conferences have you attended lately? What is clear from this literature is that enterprise/entrepreneurship education relates to the creation of that which doesn’t already exist; not the maintenance of that which does. It is about the use of scarce resources; not strategic resources. It is experiential or it is of little or no value to its recipients. The ongoing differences of opinion around a host of pedagogical issues provides obvious evidence of the difficult fit between enterprise/entrepreneurship education and it frequent host, the business school (see Hindle, 2007).
Clearly there is a need for the subject offerings that traditionally exist in the business school to relate to entrepreneurship and vice versa. However, there is a major difference, and that is that enterprise/entrepreneurship education can offer value to any other area of learning in Higher Education, and vice versa. Whereas the traditional subject offerings of the business school cannot make such a claim. As a result, enterprise/entrepreneurship education should have the opportunity to act as a free agent in terms of how it is structured and able to interact with other faculties/schools. So again, from the perspective of the enterprise/entrepreneurship educator we engage with, this final scenario is difficult to support as well.

In summary, this process has provided unexpected insights into the potential of scenario planning as a tool that could conceivably be employed more often to tackle complex issues, such as the positioning of enterprise/entrepreneurship education in Higher Education. But for now, we have briefly travelled four distinct roads with purpose and we are satisfied that we have indeed learned along the way. We conclude that enterprise/entrepreneurship education should be shared across the university and not owned by any school or faculty, although we accept that technically this is difficult to achieve. We find it difficult to dismiss the underlying purpose of each scenario. We sense an opportunity to unite their common focus on the development of a transformative student experience. To this end, we sense that a united pathway forward can be built around providing genuine choice and allowing individual students to travel a learning pathway that is most appropriate to their life circumstances. This we believe perhaps offers enterprise/entrepreneurship education its best chance to fulfil its promise with in the context of Higher Education. While such an approach may never lead to continuous economic renewal led by the youth of the day, it should remove the possibility of disappointment for any and all of the stakeholders who stand to gain from the development of truly enterprising graduates.
References


