Entrepreneurship education: A tale of two countries

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Introduction

As the research field of entrepreneurship and its counterpart, entrepreneurial education, evolve within countries, it is valuable to explore the differences between nations and the effect that these distinctions have on the development of curricula in higher education. This paper explores entrepreneurship and entrepreneurial education in two very discrete countries; Ireland and Saudi Arabia. Firstly, these regions will be discussed in terms of their current ecosystem and climate for entrepreneurship generally. Following this, the teaching practices and pedagogical approaches commonly deployed in the areas are explored in relation to the teaching of entrepreneurial competencies at third level.

In the knowledge based economy, the transfer of labour, skills and programmes between companies, universities and institutions is now commonplace. In this research paper the process of transferring a curriculum of entrepreneurial education between these two regions is explored in terms of design, implementation and feasibility. To investigate this, a conceptual model is created to highlight the key themes to be considered when initiating an entrepreneurial education module. This model is designed based on the development of an entrepreneurial education curriculum in an Irish university and is analysed in terms of its relevance and usefulness in the Saudi context. It is hoped that the findings of this paper will allow researchers and educators to gather inferences about the state of entrepreneurial education in both regions and receive recommendation on how best to initiate and handle the transfer of knowledge and pedagogical approaches between these two countries.

The state of entrepreneurship in Saudi Arabia and Ireland

Emerging in US business schools during the 1970's, the training for and of entrepreneurship has spread exponentially and internationally ever since (Carey & Matlay, 2011; Kuratko 2007; Fiet, 2000; Solomon, Weaver & Fernald, 1994). Entrepreneurial education was designed at the outset for purely economic reasons; to improve the growth and development of small business ventures (Flewellen 1977). The link between EEP's and new venture creation has been witnessed many times (Matlay, 2006a; Shane, 2004; McMullan, Chrisman & Vesper, 2002; Varela & Jiminez, 2001) and significant investment has been devoted to its development in all countries (Jones, 2010; Fayolle, Gailly & Lassas-Clerc, 2006; Kuratko, 2005; Flewellen, 1977).

Saudi Arabia

In Saudi Arabia like in many countries, the economic policy includes substantial reform in education designed to use entrepreneurship as a strategy through which to lower unemployment (CDSI, 2015). It is particularly important in a modern context, because based upon the anticipated decline in oil revenues and the urgency of addressing unemployment future competitiveness is likely to be based upon innovation and knowledge rather than oil (Andersson & Djeflat, 2012). The extent to which the country has embraced entrepreneurship is reflected in the Global Entrepreneurship Monitor (GEM) and the Global Entrepreneurship and Development Index (GEDI), which placed Saudi Arabia in forty-fifth place in the world

rankings in 2014 (GEDI, 2014). There is also a substantial effort on the part of the Saudi government to promote the entrepreneurship eco-system launched by the government, which features forty-four different support agencies (SBIN, 2015). This includes twenty incubators, three accelerators and twenty-one other support agencies (SBIN, 2015).

From a financial perspective there are a considerable amount of different avenues through which government support for entrepreneurship flows. There are also a substantial number of business incubation programmes including the Badir, Riyadh techno valley, Dhahran techno valley, Waed, and National Entrepreneurship Institute Riyadah (Alshumaimri, Aldridge, & Audretsch, 2010). These programs help to grow young businesses and entrepreneurial ventures by providing them with support from a technical and financial perspective (Al-Ohali & Shin, 2013).

Ireland

In terms of entrepreneurship and innovation, Ireland performs relatively well in comparison to its European neighbours, ranking 9th in the 2014 Innovation Union Scoreboard for innovation performance (REF). Key sectors for Ireland in terms of international trade include ICT, engineering, electronics and cleantech and consumer goods, all of which are spurred by innovation and entrepreneurial thinkers. Entrepreneurship has been supported for many years backed by various government initiatives and agencies such as the Department of Jobs, Enterprise & Innovation; Enterprise Ireland; Intertrade Ireland and the National Technology Transfer System (cTTO). Of late the government has attempted to revitalize their systems by streamlining the 35 County and City Enterprise Boards in 2013. In addition, Ireland has concentrated on encouraging research and development and has increased the support for companies through tax and revenue incentives.

In terms of the public perception of entrepreneurship, the career path is prevalently discussed in the media in Ireland and while the 'entrepreneur' is respected in general, there is a clear fear of failure apparent in the country relating to the career (O'Gorman and Fitzsimons, 2012). The ramifications of this is quite apparent in relation to failed start-ups as these are considered as substantial problems which may even discredit the entrepreneur, rather than being seen as a normal part of the entrepreneurial process. When examining the GEM report 2013, Ireland is the best performer in terms of entrepreneurial activity across all stages (as a percent of population aged 18-64). This may be in part due to the extensive number of mentorship programmes, start-up programmes and incubator centres in the country, as well as competitions and incentives catering to student entrepreneurs also. Thanks to many initiatives aimed at the female population, the gap between male & female entrepreneurs has narrowed considerably from 2010 where it was 2.4:1 to 2013 where it is 1.9:1. Entrepreneurs in Ireland tend to be very well educated, the majority having a third level degree (GEM, 2013). This is backed up by the Global Competiveness report which puts Ireland in 17th place for Higher Education and Training out of 144 countries.

Entrepreneurial education in Saudi Arabia and Ireland: The present situation

Entrepreneurship or entrepreneurial education is defined by Heinonen & Poikkijoki (2006, p. 81) as '*activities aimed at developing enterprising or entrepreneurial people and increasing their understanding and knowledge about enterprise and entrepreneurship'*. When discussing the notion of a module or curriculum in entrepreneurship (or entrepreneurial) education we use the term coined by Fayolle, Gailly & Lassas-Clerc (2006, p. 702) of the entrepreneurship education programme, or EEP which was deemed to be '*any pedagogical process that develops entrepreneurial attitudes and skills as well as personal qualities'*. Entrepreneurial education has been taught in numerous ways internationally, causing it to be quite ambiguous in terms of best practices pedagogically. Consequentially, developing a curriculum for this subject is far from easy as pointed out by the OECD;

'The psychological, social and cultural constraints, coupled with questions of timing and the very nature of skills or competency development, make the teaching of entrepreneurship a rather difficult preposition when compared to other disciplines' OECD Entrepreneurship and Higher Education Report (2008, p.55)

Saudi Arabia

It has already been shown that the Saudi Arabian government has provided a significant amount of support for entrepreneurship in the country. It is a central goal of the government to transform the country into a knowledge-based economy and reforms in education play a key role in this (Shin, Lee, & Kim, 2012). Since 2005 education has appeared as a priority in almost all of the Kingdom's development plans and strategies for building a knowledge-based economy (Wang, 2014).

In a tentative investigation of the pedagogical approaches utilised in Saudi Arabia, a number of universities were analysed in terms of their provision for entrepreneurial education. In total 32 universities (24 public, 8 private) were assessed, exploring the types of entrepreneurial programmes offered and teaching methods utilised. Of those investigated, only 40 percent taught entrepreneurship specifically, others preferring to use terms such as 'innovation management' or 'new venture planning'. There was no specialized degree in the field of entrepreneurship at any public university (neither bachelor nor masters), while only two private universities were found to offer entrepreneurship as a specialized program. Similar to many countries, entrepreneurship were located only within the faculties and departments of business management/ management science in the sample observed.

Pedagogical techniques and teaching methods used in these universities were mostly focused on lectures, case studies and the preparation a business plan. A number of the courses also integrated guest speakers in their EEP's also. Yet the external supports for entrepreneurship appear strong in adopting universities as funding is available to develop infrastructure for innovation. Of those researched, nine of the forty have readily available infrastructure to support entrepreneurship; including business incubators, centers of creativity and innovation, entrepreneurship research centers, a technology park, and an intellectual rights office.

Ireland

Ireland has become known worldwide in terms of its skilled workforce, owed in no small part to its educational system. Enterprise and entrepreneurial education modules have become prolific in Irish universities and colleges of late, prompted by Government and stakeholder calls to develop more innovative and creative citizens tailored toward wealth creation in a recovering economy (Fitzsimons and O'Gorman, 2005; Forfás, 2011; Hunt, 2011; Miller, 2012). The National Strategy for Higher Education 2011 highlights the crucial role universities play in developing such students, calling on them to 'foster a spirit of entrepreneurial imagination in graduates' (Hunt 2011). Emphasising this point, the national strategy for Higher Education to 2030 with regard to undergraduate education asks for 'creativity and entrepreneurship to be encouraged to a much greater extent' at all levels.

At 3rd level, almost every institution and university in Ireland teaches entrepreneurship to some degree and it is a key element of many strategies, with 42 percent of Presidents reporting that entrepreneurship was highlighted in the mission statement of their respective University (ACE, 2009). In a similar investigation of a sample of 3rd level institutions in Ireland (*n=30*) it was observed that entrepreneurial education was taught specifically and explicitly in all of the faculty's tested. Yet, only in three of the institutions was there a degree or master programme specialising in the area. It would appear that while 3rd level institutions in Ireland recognise the advantage of the subject as part of the educational system of many programmes

(including some engineering, teaching and even nursing), it is not deemed worthy of its own specialisation as yet. Echoing the KSA investigation, all modules were housed within the business school despite claims by authors such as Gibb that perhaps they would be best catered for in a discrete school/facility.

A difference was noted between the Saudi and Irish context in terms of the teaching approaches adopted in entrepreneurially related modules. While the majority had aspects of traditional and theory based lectures, there was a much wider spectrum of pedagogical approaches witnessed in the Irish context. This was due in part to the wider discipline base that was taught entrepreneurship in our Irish sample; the fact that many of the modules were cross-disciplinary necessitated more novel approaches to delivery. It was observed that the Irish sample of 3rd level institutions appeared to have a high level of industry engagement with many applied projects with companies. In contrast to the Saudi sample however, supports outside the classroom were not as comprehensive or well-resourced in Ireland. While some universities had incubator centres, these were few and very fragmented.

Curriculum Design in Entrepreneurial Education: a case study

During the summer of 2010 an undergraduate module was developed in the Business School of an Irish University with the aim of enhancing the entrepreneurial competencies and employability of its participants. Named Digital, Innovation, Creativity and Enterprise (DICE), the module allows students to build student awareness of enterprise and innovation using real projects and role models. The module which by all accounts has been a success, yet necessitated a large investment of time, resources and planning in its journey from inception to establishment. Due to its success, the module has been invited to be part of a business programme in September of 2015 in a female university in Saudi Arabia. This has led the parties involved to analyse the development process of the module in order to replicate it in a very different context. Focused on in the next section are elements that pertain to the transfer of an entrepreneurial curriculum specifically.

The transfer process: A Conceptual Model

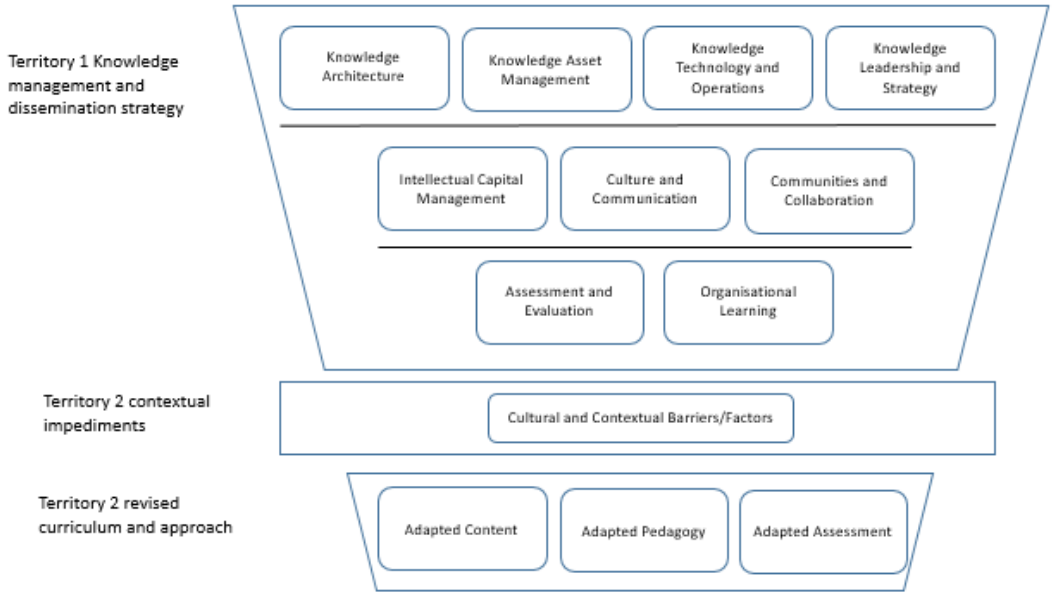

Fig 1.0 Conceptual model of entrepreneurship programme knowledge structure and transfer

The proposed framework (Fig 1.0) gives an overview of the factors that need to be considered when moving a module of entrepreneurial education from one region to another. A

programme transfer of entrepreneurial education should be seen in terms of numerous aspects including technology applied, initialising industry collaboration, developing a climate for support within faculty and many more elements. In order to encapsulate these many factors, a number of principles of knowledge management are applied to the transfer framework (Bedford, 2012). These elements are ordered in terms of levels of priority in terms of initialising a course transfer, in line with the learnings obtained in the initiation process of DICE in its original form. Initially the developers of a module need to consider the structures surrounding a module which support the management of knowledge. In the initial stages, these include the architecture (design and transfer processes for entrepreneurial learning), asset management (including aspects relating to mapping knowledge and recording it), technology management (platforms to be used etc.) and leadership and strategy (attaining support from higher levels of the university). Once these aspects have been clarified and established, a curriculum development team can consider the more social aspects of knowledge transfer which involve receiving support from other faculty and staff (Culture and Communication) and from external parties such as industry (Communities and Collaboration). Lastly, in attempting to capture the pertinent knowledge for the transfer of the programme, the assessment standards/processes are established and thought it put into training and development in the institution regarding entrepreneurial learning.

While these aspects may help to systematise and record all knowledge aspects they must be considered in context. There can be many factors impeding the transfer process from one territory to another including economic, cultural and technological. These must be highlighted and addressed in line with the model described above before the knowledge can be converted to a feasible and effective curriculum.

Barriers in the Saudi Context

As mentioned above economic, cultural and technological factors may affect the knowledge transfer. In the context of Saudi Arabia, economic factors may have the least effect on the curriculum design. On the other hand cultural factors including gender segregation and cultural sensitivity are prominent issues in the transferral of knowledge from territory 1 (Ireland) to territory 2 (Saudi Arabia). Communication between genders is restricted by strict social and religious restrictions, which could cause difficulties for entrepreneurial education. For example, the interaction with male guest speakers and lecturers/students can only take place via closed circuit televisions. In terms of university level support, the accreditation process for new curriculum is quite difficult and time consuming, which may affect the implementation of any new approach of entrepreneurial education and model transfer. However, with the support of the university top management, many of the barriers could be overcome, especially when it comes to shortening the process time, and easing the paper and administrative work.

In terms of Linguistic barrier, English language is not spoken widely among Saudi university students; this in fact have a huge effect on the way they perceive information, thus interpreting the main concepts of the curriculum being transferred. Furthermore, pedagogical strategies in general in Saudi universities are following traditional teaching methods. It is a teacher-centred education, while it should be moving toward student-centred teaching approach to enable a smooth transfer of knowledge. This movement toward student-centred will consequently gain the students the entrepreneurial skills from the curriculum being designed, including creative thinking, problem solving, etc. Furthermore, A very few Saudi universities have a joint initiative with both the governmental and the private sector. While the majority are working in isolation from the industry and the community. This has an effect on knowledge creation and transfer in terms of applied research and projects. Finally, there are

technological barriers to consider, as online education is still a relatively new concept, and not yet fully implemented or supported in all Saudi universities (Alnassar, & Dow, 2013).

Discussion and Conclusion

Entrepreneurial education is a complex and multi-faceted subject which necessitates a rich experiential and action-based curriculum design, with large investment of time and capital by both the staff and institution (Hytti & O'Gorman 2004). Thus before an institution takes on the burden of such a programme or module, research should be carried out on the most feasible approaches. Designing a curriculum involves a large degree of planning, design and evaluation in order to meet standards of effectiveness. The proposed model may aid this transference process in a more effective and contextually sensitive manner.

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