

# Comparing Attitudes to Entrepreneurship Education Among Business and Non-Business Undergraduate Students\*

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## Abstract

This reflective paper aims to explore attitudes to entrepreneurship education among both business and non-business undergraduate students. Reporting on findings from a small pilot study of final year university students, the paper highlights attitudes to the current and perceived importance of entrepreneurship in the curriculum, and examines the role students believe the topic should actually play in their courses.

Findings reveal a considerable gap, especially among non-business students, between the current importance placed on entrepreneurship education in the curriculum, compared to the role they believe it should play. The majority of business students believe entrepreneurship should play a major role in their course, while the majority of non-business students believe that entrepreneurship has a part to play in their course, albeit in a 'minor' role. Only a small minority of non-business students believe that entrepreneurship has no role at all to play in their course.

Limitations and suggestions for future research are provided, the latter focusing on more qualitative enquiry to probe some of the issues raised in much greater depth.

**Keywords:** Entrepreneurship education, entrepreneurship, non-business, business, students.

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## 1. Background And Context

Entrepreneurship has become a well-established and embedded component of most business and management schools (Marques et al., 2012; Hatten, 2015). In non-business related disciplines, however, entrepreneurship is still seen as being peripheral (Heriot et al., 2014; Srianta and Trisnawati, 2010); an 'inserted' rather than an 'integrated' element of the curriculum (Hannon, 2006). This is at odds with the agendas of the UK government (Wilson, 2012), European Commission (2014; 2015), UN (UNCTAD, 2010) and World Economic Forum (2010), all of which have highlighted the need for providing greater enterprise education and entrepreneurship opportunities for students in higher education, especially among those students in STEM (science, technology, engineering and mathematics) disciplines.

In a regional context, entrepreneurship education has moved up the agenda, with the Irish Government's Framework for Sustainable Economic Renewal, pledging specifically to progress the provision of entrepreneurship and management training to students from non-business disciplines (Cooney and Murray, 2008); an explicit recognition that entrepreneurship should not just reside in the business domain.

Indeed, if Higher Education Institutions (HEIs) are to increase the overall level of students engaged in enterprise, then concentrating on entrepreneurship education activities across other faculties is a necessity (Hartshorn and Hannon, 2005; Lourenço et al., 2013), especially given that non-business undergraduate students account for 87 per cent of the overall student population in the UK (Higher Education Statistics Agency, 2014).

This reflective paper examines the topic from the students' perspective. With some notable exceptions (Hynes and Richardson, 2007; Souitaris et al., 2007; Henry and Treanor, 2010), the examination of attitudes to the teaching of entrepreneurship is still a relatively under-researched area. In order to provide some comparative analysis the views of both business and non-business students (including those in STEM subjects) are also considered and similarities and differences highlighted. Set in this context, the overarching research aim of the paper is "to compare attitudes to

entrepreneurship education among business and non-business students". Consequently, our two core research questions (RQs) are as follows:

*RQ 1: What is the perceived importance of entrepreneurship education among business and non-business students?*

*RQ 2: What should the role of entrepreneurship be in business and non-business courses?*

We hope that our findings can help inform what part (if any) entrepreneurship should play in the overall curriculum for non-business students; whether it should be 'central' and 'integrated', or a more peripheral, 'nice to have' piece of added value, or if it should have no place at all.

The remainder of the paper is organised thus: the next section presents the research context for the paper by examining the academic imperative in terms of relevant literature. This is followed by a description of the methodological approach adopted; we also highlight limitations of the approach. The subsequent section presents the key findings from the survey, followed by conclusions and suggestions for future research.

## **2. The Academic Imperative**

There is some debate in the literature with regard to what constitutes entrepreneurship education (Kuratko, 2005). For the purposes of this paper, the following definitions are most relevant. According to the QAA (2012), entrepreneurship education should focus on encouraging students to apply enterprising skills and attributes to a range of different contexts (not just business), as well as equipping students with those skills which may be useful in different life situations (Caird, 1990; Hitty, 2008). Entrepreneurship education can also be thought of in terms of conveying knowledge about entrepreneurship to students with the aim of informing them and developing awareness about the subject (Béchar and

Toulouse, 1998), or more broadly as an 'ecosystem' of interdependent activities that create an entrepreneurial culture supporting student and staff entrepreneurship (what Gibb (2005) terms the 'Entrepreneurial University'). Therefore, entrepreneurship education is not just solely related to business disciplines.

There is limited literature discussing the impact and challenges involved in the provision of entrepreneurship education among non-business-related subjects and professional disciplines in particular. Henry and Treanor (2012: 486) highlight this, stating: "*The majority of research studies conducted to date on the teaching of entrepreneurship are focused within traditional and mainstream business disciplines, with a dearth of research in non-business, especially scientific disciplines*".

Reinforcing Henry and Treanor's (2012) findings from veterinary students, Jones and Jones (2014:729) conducted a study of Attitudes of Sports Development and Sports Management undergraduate students towards entrepreneurship, concluding that: "*the results reinforce the importance of entrepreneurship education to non-business disciplines*". Teixeira and Portela Forte (2009) also state that it is essential that entrepreneurship programmes are offered to all academic disciplines. This is in spite of general agreement in the literature that students in scientific, non-business disciplines should also have, at the very least, a general appreciation of business and entrepreneurship (see, for example, Henry et al., 2005; Hynes and Richardson, 2007; Jones 2010; Henry and Treanor, 2010; Lourenço et al., 2013).

Even if we assume entrepreneurship to have a role in non-business curricula, there is still debate over its nature and scope. There is, for example, a strongly held view that entrepreneurship is an "*inserted*" rather than an "*integrated*" element of undergraduate curricula (Hannon, 2006:297); this is particularly true in scientific discipline areas, where entrepreneurship specifically and business subjects generally are often seen merely as peripheral rather than as a fully integrated and core part of the course (Henry and Treanor, 2010).

With the above in mind, this paper seeks to examine and compare attitudes to entrepreneurship among both business and non-business undergraduate students to determine if the discipline of entrepreneurship is seen as peripheral or core, and whether it is determined – from the students' perspective - to be 'inserted' or 'integrated'.

### **3. Methodology**

#### *3.1 Research Design*

The authors used a quantitative approach by means of a self-completion survey. A questionnaire was designed and developed based on the overall research aim, a review of the literature, and in consultation with entrepreneurship lecturers. The questionnaire was then piloted among a small number of business and non-business students to determine if the questions made sense to respondents. A copy of the final questionnaire is included in Appendix 1. It should be noted that this paper focuses on attitudes to entrepreneurship and not on the methods of teaching entrepreneurship. However, with regard to the latter, questions are also included in the questionnaire purely for the purposes of signposting areas for future research.

A common questionnaire was used for both business and non-business students. Questions related to how important they felt entrepreneurship should be in teaching to undergraduate students compared with how important it is currently, as well as examining to what extent students felt it should be taught in business and non-business undergraduate courses. Related to this were questions around the benefits for students of being taught entrepreneurship, as well as their thoughts on *how* it should be taught and the most effective delivery methods. These questions provide the main focus of this paper. SPSS version 22 was used to input and analyse the data.

A 'convenience' sampling approach was adopted by identifying and subsequently approaching university colleagues from across faculties who taught final year undergraduate modules. Questionnaires were then administered to final year

undergraduate students in class. Final year undergraduates were chosen as it was felt they would have a better appreciation of the issues under discussion and could provide a more critical and informed evaluation.

A total of 237 usable questionnaires were returned, with 139 (58.6%) from business students and 98 (41.4%) from non-business students. The non-business students were from a range of degree disciplines, including STEM-related, for example, Construction Engineering and Management, Engineering Management, Quantity Surveying and Building Surveying. The majority of business students were from the Business Studies and Marketing degrees.

### *3.2 Limitations*

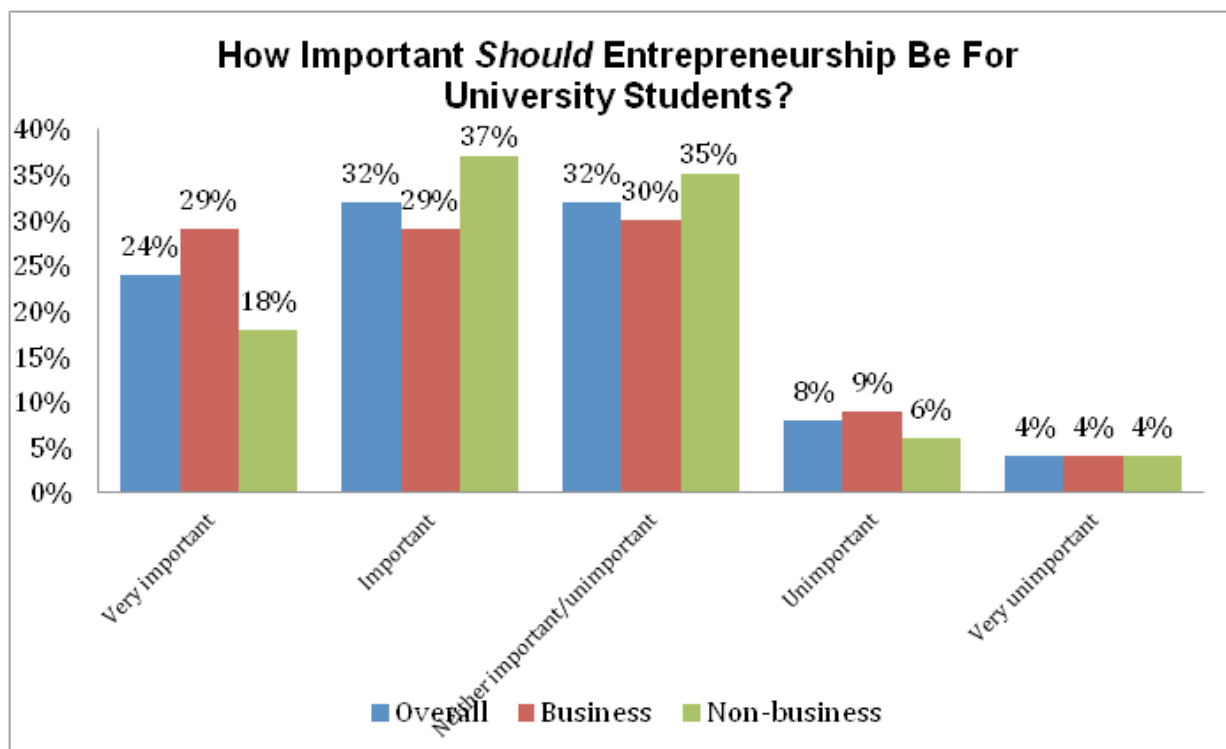
The limitations of self-completion methods are well documented (e.g. lack of control over the data capture process, non-response, no opportunity to probe or clarify), but McGovern (2013:201) states that self-completion surveys can be an effective method of collecting data if four criteria are met, namely: “the nature of the research and the topic are suited to this method of delivery; the topic is relevant and of interest to the target population; the method is a suitable way of reaching and achieving a response from the target population; and the questionnaire is well-designed – clear, easy to follow and easy to complete and a suitable length for the medium – and presented in a professional manner”. Each of these criteria was met in this instance, making the approach wholly appropriate and applicable for this pilot study.

The authors fully recognise the limitations of this approach in terms of potential measurement error, response bias (which was somewhat limited as students completed the questionnaires ‘in situ’), and selection bias in terms of the sample being comprised of students selected from one university and self-selected courses, raising questions of reliability. The pilot study is strong in terms of internal validity as the questionnaires do measure what they were intended to measure, although less so in terms of external validity, where the ability to make wider generalisations is more limited.

#### 4. Findings And Reflection

*RQ 1: What is the perceived importance of entrepreneurship education among business and non-business students?*

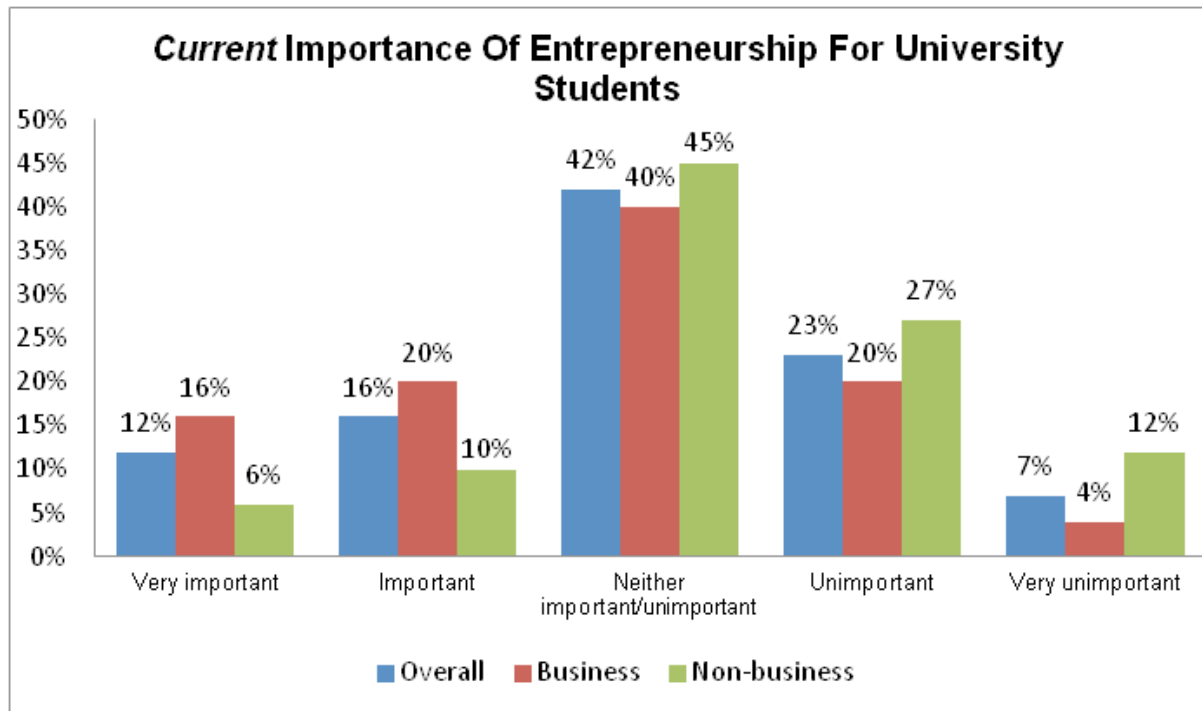
Overall, almost three in five respondents (56%) felt that entrepreneurship *should* be important for university students (see Figure 1). Interestingly, at a combined 'importance' level, there was very little difference between business (57%) and non-business (54%) students, highlighting that non-business students equally recognise the importance of entrepreneurship in the curriculum. Only 12% felt that entrepreneurship was unimportant.



**Figure 1: How important should entrepreneurship be for university students?**

Having determined how important students felt entrepreneurship *should* be, respondents were then asked how important they felt it is *currently*, in order to highlight any perceived gaps in provision (see Figure 2). There was a significant gap in this regard, with just over one quarter of all respondents (28%) believing that entrepreneurship is seen as important currently, just half the level they felt it should be. There is an even more marked discrepancy between business and non-business

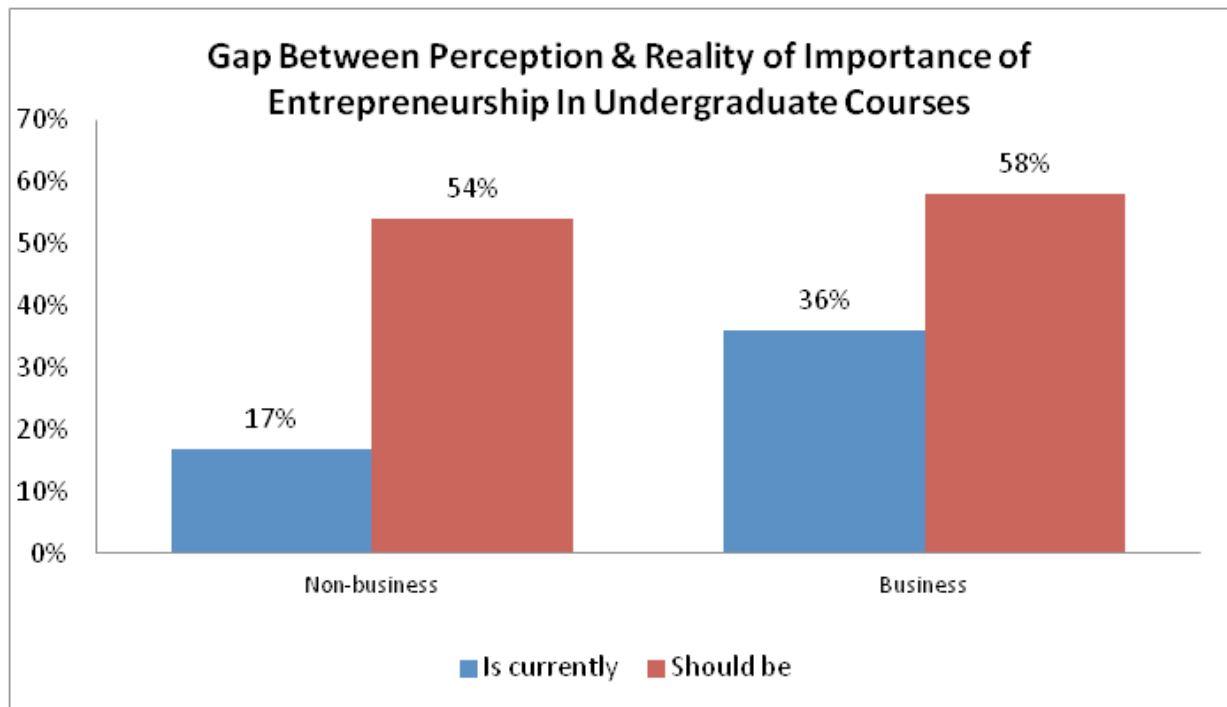
students in this regard, with just 17% of latter believing it is important currently.



**Figure 2: How important is entrepreneurship currently for university students?**

Figure 3 highlights the gap between the perception (i.e. how important entrepreneurship should be) versus the reality (i.e. how important it actually is currently). This clearly shows the disparity among this perception and reality, especially among non-business undergraduate students where just 17% believe entrepreneurship is currently seen as important for university students, compared to 54% who believe it should be important. This gap shows that there is a genuine desire among all students, but particularly among non-business students, for entrepreneurship to move higher up the agenda and be given a more prominent role in university courses.

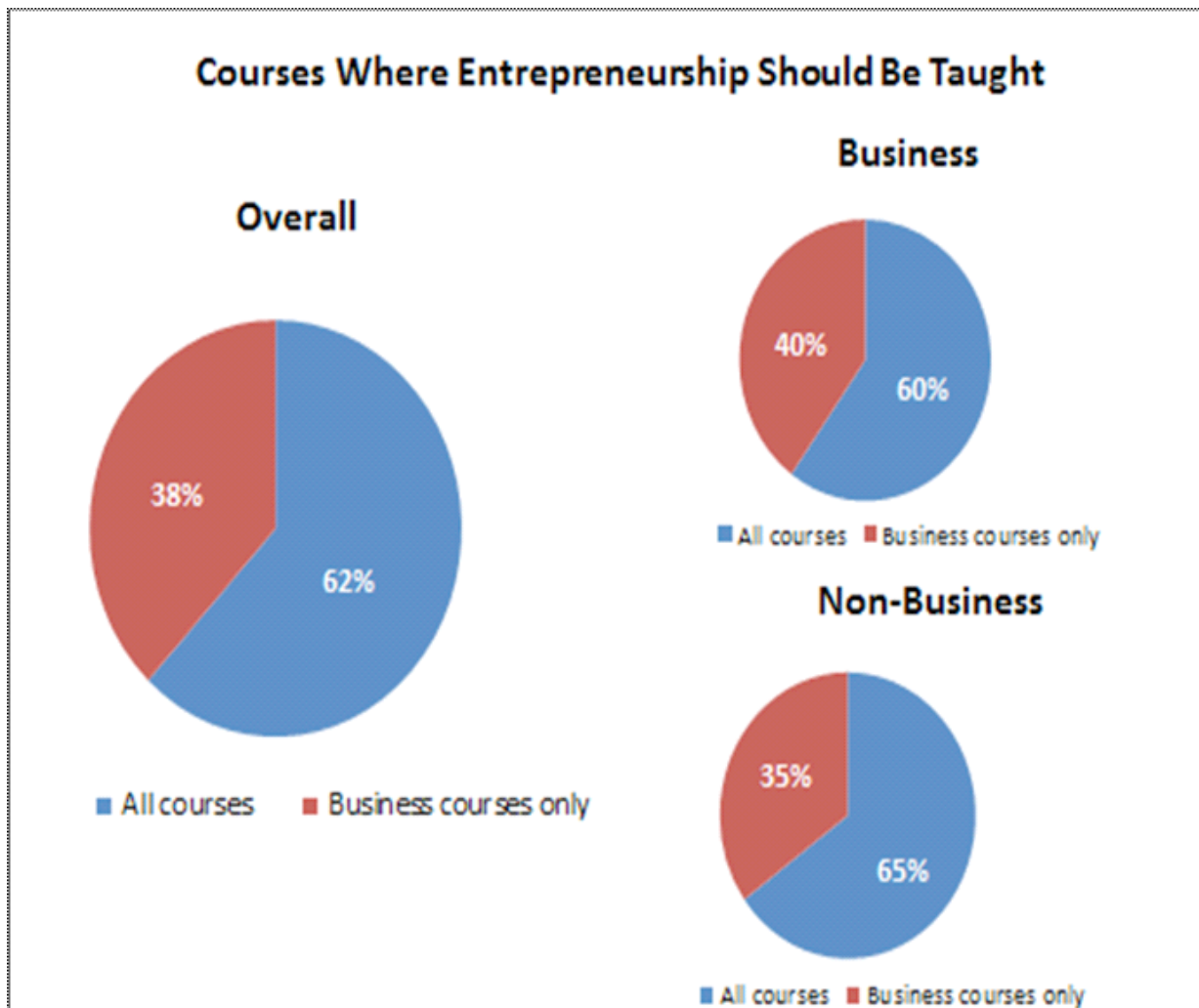




**Figure 3: The gap between the importance of entrepreneurship currently and how it should be**

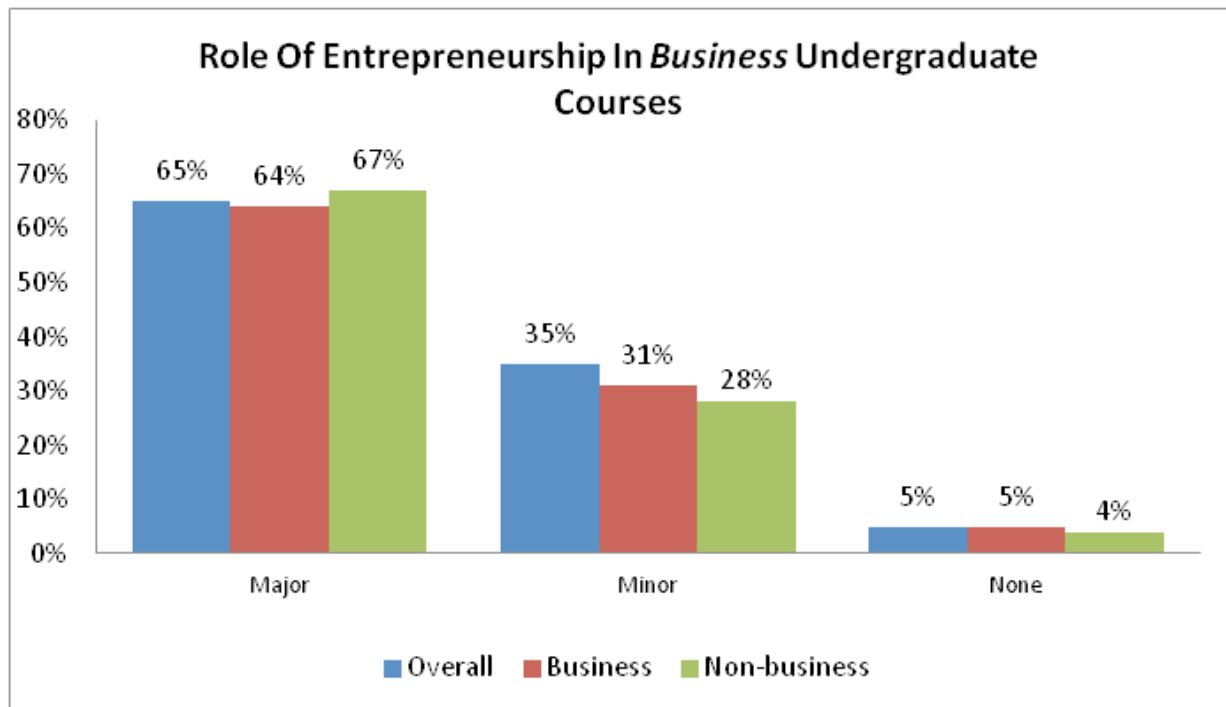
**RQ 2: What should the role of entrepreneurship be in business and non-business courses?**

In order to assess the role entrepreneurship should play in the curriculum, respondents were asked if they felt entrepreneurship should be taught across all courses, or whether it should be taught on business related courses only (Figure 4). Overall, almost two-thirds of respondents (62%) felt that entrepreneurship should be taught across all courses; interestingly, this figure was actually higher among non-business students (65%) compared to their business counterparts, where it was 60%.



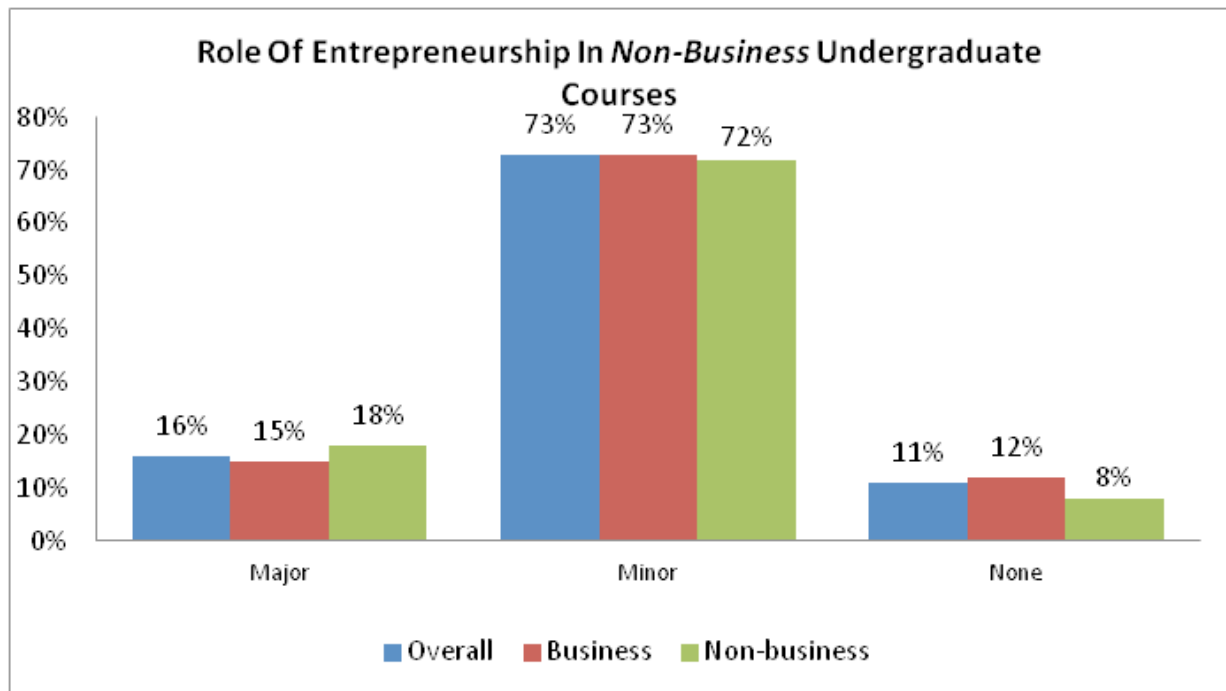
**Figure 4: Courses where entrepreneurship should be taught**

Leading on from this, respondents were then asked to state the role they felt entrepreneurship should have in business and non-business undergraduate courses (Figures 5 and 6). For business courses, almost two-thirds (65%) felt it should have a major role (i.e. a dedicated taught entrepreneurship module), while a further 30% believed it should play a minor role (i.e. be part of a module). Just 5% felt that there was no role for entrepreneurship in business undergraduate courses.



**Figure 5: Role of entrepreneurship in business undergraduate courses**

In terms of non-business undergraduate courses, the findings were quite different. Just 16% felt that entrepreneurship should have a major role in terms of there being a dedicated entrepreneurship module. However, almost three quarters of all respondents (73%) felt that entrepreneurship should still have a role in non-business undergraduate courses, albeit at a minor level (i.e. that it should be part of a module on the degree programme). Just one in ten (11%) believed that there was no role for entrepreneurship in non-business undergraduate courses. This finding is extremely significant as it shows that while students believe that entrepreneurship should not have as large a role in non-business courses as it does in business courses, it still has a role to play.



**Figure 6: Role of entrepreneurship in non-business undergraduate courses**

## 5. Conclusions

This pilot study has uncovered some valuable insights into the current perceptions of entrepreneurship education among business and non-business students. Our findings revealed a gap between the importance of the role entrepreneurship currently plays in undergraduate courses and the role students feel it should play. This is especially true among non-business students, where just 17% believe that entrepreneurship currently *is* seen as important in university courses, compared to 54% who think that it *should* be important. Bridging this gap between perception and reality should be a priority for both government and education providers in order to move entrepreneurship further up the agenda (both within the university context and the wider agenda).

In terms of the role that entrepreneurship should play in the curriculum, two-thirds of business students believe that entrepreneurship should have a major role (i.e. a dedicated module at least) in their course, which is perhaps not that surprising. However, of greater interest is the fact that although almost one-in-five non-business

students believe entrepreneurship should play a major role in their courses, the overwhelming majority (almost three-quarters of respondents) believe that it should only play a minor role. This, frustratingly, does not provide a definitive answer as to whether or not entrepreneurship should be a fully integrated, central part of non-business programmes, or if it should be more peripheral. What it does show, however, is that the subject needs to be included in some shape or form, as only 8% of non-business respondents believe that it has no role to play. Clearly, there is an appetite among non-business students to be, at the very least, aware of the topic of entrepreneurship and what it entails; this is encouraging for the discipline as a whole and for making it part of the wider curriculum across faculties rather than in its traditional business home.

## 6. Future Research

This pilot study has uncovered some valuable insights into the current perceptions of entrepreneurship education among business and non-business students with regard to how important it *should* be in undergraduate degree programmes and the role it *should* play in such courses. In terms of future research, there is a need for a more qualitative approach to get behind some of the findings outlined above and explore them in greater detail and depth. For example, what exactly do students mean when they say that entrepreneurship should play a 'minor' or 'major' role? What exactly does this entail and what does it 'look like' in practical terms for curriculum development?

In future research, the scope of this study could also be expanded. For example, students from a wider range of degree disciplines could be included to determine attitudes to entrepreneurship education more widely. Similarly, the study could be expanded geographically to include other institutions (both nationally and internationally) to determine if the findings obtained in one university are replicable in others.

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