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"Establishing and Sustaining Entrepreneurship Centres in Tertiary Institutions"

Executive Summary

In recognition of the challenge of widespread poverty and high rates of graduate unemployment, the federal government of Nigeria recently made entrepreneurship education a compulsory component of the higher education curriculum. However, in order for this policy initiative to succeed, universities and other HE providers need to develop the human and the infrastructural capacities around the pedagogies, centres of innovation and entrepreneurship as well as research. This training was facilitated in response to these needs, but also to provide a framework for building the human competencies and the infrastructures around entrepreneurship education effectiveness.

This report outlines models of entrepreneurship education, in response to the question: "how can entrepreneurship education be taught?" These are: teaching and assessment model; process model; and intention-based model of entrepreneurship education. For the intention-based model, around which the core components of this training were designed, there are four types of entrepreneurship education: entrepreneurship awareness education; education for start-ups; education for entrepreneurial dynamism; and continuing education for entrepreneurs. These four types are aligned with the various stages of entrepreneurial development and embedded in CAEL's three-level framework for entrepreneurship effectiveness – 'education about entrepreneurship', 'education for entrepreneurship' and 'education in entrepreneurship'.

The training highlighted the need for provision of entrepreneurship education to develop a new generation of entrepreneurs who will drive the agenda for job creation and poverty reduction. It also emphasized the need for multi-stakeholder partnerships and international collaboration involving institutions, governments and business communities towards effective entrepreneurship education interventions across Africa. Based on the training, recommendations were made to participating institutions to embrace best practices in setting up incubation units, promoting commercialisation of research, and invest adequately in ongoing staff development and capacity building.

Introduction

As part of our ongoing knowledge transfer intervention in the areas of capacity building for entrepreneurship education and enterprise development in Africa, this training was held in April 2012. In attendance were Vice Chancellors, Rectors, Provosts, Bursars, Registrars, Deans and Directors of Entrepreneurship Centres in higher education institutions from Africa. In response to increasing levels of graduate unemployment and poverty despite the recent economic growth in Africa, the training focused on building institutional capabilities around entrepreneurship education for students and graduates' employability. Experts drawn from within and outside the University of Wolverhampton engaged participants on innovative approaches employed by universities in the UK, including the University of Wolverhampton, and how these ideas can be adapted to the particular needs of the Higher Education Sector in Africa, particularly in Nigeria.

Models of entrepreneurship education

While scholars have dedicated much attention to the question of whether entrepreneurship can be taught, more recently the question "how can entrepreneurship be taught?" has attracted considerable attention in the literature. This debate about entrepreneurship pedagogy presents a number of conceptual problems. The first has to do with a lack of consensus or agreement on a standard definition of entrepreneurship (Ács, Autio, & Szerb, 2014), especially as to whether, or to what extent, it should entail new venture creation (Fayolle & Gailly, 2008; Jones & English, 2004). Indeed, terminologies like "entrepreneurship education", "entrepreneurship training", "entrepreneurial education", and "enterprise education" have been used interchangeably, or with slightly different meanings (Hynes, 1996; Mwasalwiba, 2012). Some have suggested that these terminologies often reflect contextual differences associated with peculiarities of geographical contexts, rather than any fundamental difference in concepts (Fayolle, Gailly, & Lassas-Clerc, 2006). Even so, it is clear that entrepreneurship education programmes lend themselves to a wide spectrum of differences in ideas and practice, not only with respect to meanings and definitions of entrepreneurship, but also with respect to objectives, target groups, course content, and teaching method (Mwasalwiba, 2012).

Thus, in general, the identification of learning objectives and the peculiarity of target groups will inform appropriate teaching method and course content. Entrepreneurship education can be for, about, or in, entrepreneurship (Mwasalwiba, 2012). Similarly, Fayolle & Gailly (2008) highlighted three different learning processes in entrepreneurship education: learning to become an enterprising individual, learning to become and entrepreneur, and learning to become an academic; and (Liñán, 2004) distinguished between four types of entrepreneurship

education: entrepreneurship awareness education, education for start-up, education for entrepreneurial dynamism, and continuing education for entrepreneurs . Thus, the type of training required is sometimes associated with the growth stage of the enterprise, from existence through survival, success, take off and resource maturity (Churchill & Lewis, 1983), or the individual's stage in the entrepreneurship career path, from foundation to awakening, specialisation, creation, and maturing (Carayannis, Evans, & Hanson, 2003).

Course contents in entrepreneurship education vary from institution to institution, and are tailored with the need of each learner groups(Hynes, 1996), and often defined by the policy or political contexts of the country or region (Busenitz, Gomez, & Spencer, 2000; Smallbone & Welter, 2001). Nevertheless, some themes are common across the wide spectrum of entrepreneurship modules, and among the most popular ones are: financing and marshalling of resources, marketing, idea generation and opportunity discovery, business plan, and managing growth (Mwasalwiba, 2012). Teaching methods are largely categorised into traditional featuring lectures and case studies and action-based methods, the latter including business/computer simulations, project works and creating business plans (Hynes, 1996; Mwasalwiba, 2012; Walter & Dohse, 2009). In general, while much of entrepreneurship teaching is dominated by traditional, "lecture-style" approaches (Williamson, Beadle, & Charalambous, 2013), most scholars agree that entrepreneurship education should incorporate action-based learning at its core (Leitch & Harrison, 1999; Rasmussen & Sørheim, 2006). A summary of models of entrepreneurship education is presented in table 1.

Table 1: Models of entrepreneurship education

Description/authors	Summary of findings
1. Teaching and assessment model of entrepreneurship education (Fayolle et al., 2006; Fayolle & Gailly, 2008; Mwasalwiba, 2012).	Key components of this model are: institutional setting; audience/target groups; type of entrepreneurship education; objectives, contents, teaching methods, and evaluations/assessments. These components are, in general, sequentially linked.
2. Process model of entrepreneurship education (Hynes, 1996; Leitch & Harrison, 1999).	This has three key components: the content focus, the teaching focus, and the outputs. Content focus typically includes new product development; idea generation and market research, while teaching focus include didactic, skill building, and discovery elements. The outputs can be personal (e.g. self-confidence), knowledge (e.g., enterprise, market skills and problem solving), or career-oriented (e.g. broadening career options).
3.Intention-based model of entrepreneurship education (Liñán, 2004).	This model identified four types of entrepreneurship education, based on the intention and attitude of the learner: a)entrepreneurship awareness education, which is focused more on imparting knowledge about enterprise rather than new venture creation or developing new entrepreneurs; b)education for start-ups, which is geared towards preparing new owners of small firms; c)education for entrepreneurial dynamism, which is focused on helping fledging entrepreneurs grow their businesses; c)continuing education for entrepreneurs, which is usually a more specialised form of training for entrepreneurs to improve their abilities

The Nigerian context

In spite of recent reports and claims of progress, poverty and unemployment remain big problems in sub-Saharan Africa. According to a 2014 report, the number of workers in vulnerable employment in sub-Saharan Africa was very high at 77% in 2012, and labour productivity remains very low (International Labour Organization, 2014). In Nigeria, with an estimated population of 180 million, about 71% of the population are reported to be living in relative poverty, and poverty rate has been put at 64.2% in 2013/2014, increasing from 62% in 2010.

Although there is significant increase in graduate turn out in Nigeria's universities, unemployment and poverty have remained very high, and graduate unemployment in particular has worsened in recent years. According to official statistics, unemployment rate increased from 11% in 2006, to 24% in 2011, and a great number of those employed are under-employed (World Bank, 2013). The group mostly affected by the unemployment crisis is the youth, with one report estimating that the unemployment rate among the Nigerian youth is at least three times the national composite average, and three times the average rate for other sub-Saharan African countries (Federal Ministry of Labour and Productivity, 2011).

A recent assessment of the quality assurance process in Nigerian universities has revealed significant, sometimes drastic, reduction in quality of student recruitment processes, examinations, and staff appointment and promotion, among others (Okebukola, 2010). Increasingly in recent years, employers have complained about troubling un-employability of Nigerian graduates. It is said that a growing number of the Nigerian university graduates are weak in analytical and communication skills, and are especially deficient in entrepreneurial skills (Akinyemi, Ofem, & Ikuenomore, 2012; Pitan & Adedeji, 2012)

In recognition of this challenge, the federal government recently launched compulsory entrepreneurship education programme for all undergraduates in public universities. By means of this intervention, universities and other institutions of higher learning are expected to help "reorient young people enroled in VOTEC and tertiary level institutions towards self-employment and entrepreneurship, and thereby promote an enterprise culture" (Federal Ministry of Education, 2002).

Training review

Entrepreneurship, and entrepreneurship education, was presented in the deeper sense of a way of thinking that is relevant to all of society and economy, and not just in the limited sense of business skills and new venture creation. Therefore, cultivating entrepreneurial mindset is not only relevant for students and graduates, but also for universities and higher institutions as corporate entities. This is in recognition of the need to better exploit intellectual property in

higher institutions, creation of new partnerships with external stakeholders, and harnessing new opportunities emerging in the services sector in the 21st century (Wang, 2012). This paradigm shift does not detract from the traditional role of the university as the centre of scholarship and teaching, but it encourages the university to fully embrace the commercialisation of their ideas as part of their overall contribution to society. This enterprising culture can be achieved by the creation of science parks, incubation units, technology transfer offices and patent protection arrangements, among other things (Gibb, 2001)

The new entrepreneurial mindset will also fundamentally change the way universities approach the design and delivery of entrepreneurship curriculum. An effective entrepreneurship curriculum is not "chalk and talk", but should be based on experiential, "learning by doing" approach, and it is centred on providing solutions to problems and recognising and exploiting new opportunities. The cycle of entrepreneurship education learning should include the following key components: self-awareness; collaborative working; opportunity awareness; practical creativity; strategic thinking and action orientation (McKeown, 2012).

Overview of activities

The workshop featured sessions on topics such as: Developing & Sustaining Entrepreneurial Learning Institutions; Developing an Effective Entrepreneurship Curriculum; Knowledge Transfer Partnerships; University of Wolverhampton and International Collaboration; Practical Enterprise for Students and Graduates.

Participants had a guided tour of the University of Wolverhampton's state-of-the-art e-innovation Telford Campus and University of Wolverhampton Science Park. This activity enabled them to engage with an example of support and incubation facilities that their own institutions can adapt to reinforce entrepreneurship pedagogy and foster the creation of new ventures. In addition, they were able to network with leading experts who spoke at the workshop, including discussions about opening access to regional businesses in the UK. This was in furtherance of the need to engage with local and international businesses towards the goal of knowledge transfer and enterprise development.

The sessions and activities incorporated various components of three key models of entrepreneurship education highlighted in the foregoing section: teaching and assessment model; process model; and intention-based model. For example, with respect to the teaching and assessment model, the training gave significant attention to the peculiarities of the local contexts in which the institutions are located, and how the local contexts should be reflected in curriculum design and implementation. This is especially relevant in the context of the Boko Haram insurgency in North East Nigeria and resource conflict in the Niger Delta

region. Furthermore, in line with both the process and intention models, there is a strong focus on skill development as a principal objective of entrepreneurship education, and how skill development can be an important antecedent of entrepreneurial intention and new venture creation.

Recommendations

Based on the training, the following are recommended for institutions seeking to establish sustainable entrepreneurship centres in the Nigerian Higher Education Sector:

1. Explore opportunities for Knowledge Transfer Partnerships (KTPs) by building new collaborations with the business community. KTPs are three-way partnerships between a higher education institution, a business, and a graduate. It can help businesses to innovate and grow and more jobs and opportunities created in the process.
2. Embark on an aggressive awareness campaign to make researchers aware of various opportunities to commercialise their ideas.
3. Establish patent offices to provide support for academics and students.
4. Explore new opportunities to link research with industry needs.
5. Set up incubation units to support new graduates to develop their business ideas. This can be done with mentorship and practical support from the business community and academics within the institution
6. Explore opportunities for collaboration with other higher institutions, nationally and internationally, in a continuing bid to improve entrepreneurship education practice.
7. Explore new opportunities for internal revenue generation through consultancies, and new services and products provided within the universities.
8. Establish a market research units focusing on exploring new market opportunities domestically and internationally for the sale of products produced by the institutions and/or its graduates and affiliates.
9. Establish a quality control unit to help certify, in collaboration with relevant national agencies, the standards of products and services coming from the university.
10. Have a dedicated programme of continuing training for academic and non-academic staff directly involved with running entrepreneurship education programme within the institution.

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