New entrepreneurial worlds: can the use of role models in higher education inspire students? The case of Nigeria

S. Adesola, B. den Outer, S. Mueller

1. Introduction

Despite being identified as an emerging economy with one of the highest GDP predictions in Africa, Nigeria faces challenges with regards to poverty and graduate unemployment. Entrepreneurship is seen as a way of alleviating these challenges and, furthermore, as creating new, competitive markets and businesses, leading to job creation with a multiplying effect on the economy (Igbinedion and Ehirheme, 2011). Seeing entrepreneurship as the "engine driving the economy" has resulted in "growing interest in the development of education programmes that encourage entrepreneurship" (Gorman *et al*., 1997, pp. 56). Much has been written about enterprise and entrepreneurship education (e.g. Rae, 2000, 2006; Gibbs, 2002; Pittaway and Cope, 2007; Matlay, 2008; Draycott and Rae, 2011), although researchers here are keen to point out that there is a clear distinction between the two (Jones and Iredale, 2010). Enterprise education focuses on the advancement of personal enterprising attributes and attitudes that prepare the individual for self-employment, while entrepreneurship education relates to the development of functional management skills and abilities that train the individual to start, manage and develop a business (Gibbs, 1993). The empirical discussion on the factors that influence the entrepreneurial intentions and behaviour of individuals is comprehensively covered in entrepreneurship studies, for instance by Ajzen (1991), Peng *et al*., (2012) and Sukavejworakit *et al*., (2018). The inclusion of entrepreneurial role models into the intentional model (Karimi *et al*., 2013) serves as a source of inspiration for students to become successful entrepreneurs in business, rather than learning to become an enterprising individual (Rahman, 2014). There is no shortage of research conducted on attitudes and motivation, however, research on entrepreneurial role models is evolving, whilst study on role models in emerging economies and in particular the African context is limited. This is an important claim that justifies our strong emphasis on examining whether role models could inspire student entrepreneurs. In this paper we are focused on taking the study of role model-based entrepreneurship education into a very particular context: the Nigerian higher education system, an emerging economy in Africa. This paper therefore contributes to research on entrepreneurship role model education in emerging economies. The study was carried out in Nigeria.

Today, the subject of entrepreneurship has an established place in higher education (Solomon, 2007) and despite ongoing debate about *what* should be taught, and *how* (Fiet, 2000; Hannon, 2005), there is consensus that it can have a positive effect on learners' entrepreneurial activity (Aronsson, 2004). A number of different models of entrepreneurship education have been suggested by Ronstadt, (1990), Streeter and Jaquette (2004) and Blenker *et al*., (2014). These models include: the composite model, where courses are taught in traditional academic departments with an emphasis on introductory topics in entrepreneurship; the integrated model, delivered through a separate department or centre of entrepreneurship studies where courses include creativity skills, business start-up skills, and so on Kent, (1990); and finally, the network model which results from collaboration between universities for operational synergy. The adoption of models in the Nigerian context has been an interesting issue to consider as despite the efforts of the Nigerian Universities Commission to make entrepreneurship compulsory in tertiary education, there is still a poor uptake of entrepreneurship education among Nigerian graduates (Duke, 2006; Adejimola and Olufunmilayo, 2009; Siyanbola *et al.*, 2012).

Psychology research has demonstrated that role models can be a source of inspiration where individuals strive to meet similar standards, or where they seek to perform better than a negative role model (Baden, 2014). Role models can directly influence an individual by actively participating in the learning process, through advice, counsel or co-participation in the shared learning process (Van Auken *et al.*, 2006). Based on the research conducted on students' entrepreneurial activity in Nigeria (engaging in developing new opportunities or initiatives within the resource constraints), we identified four types of role models and gained an insight into how and why they inspire students at different stages of their entrepreneurship education. This insight gave the impetus to explore role models in entrepreneurship education more broadly to see whether and why they are inspiring to students, given that the lack of financial and material means render most role models unattainable. In this context, a long-term study on the impact of positive role models is thus of particular interest.

Data was collected during a four-day entrepreneurship workshop programme held in Lagos, Nigeria, where Nigerian undergraduate business students worked together in teams with European students to develop business ideas for the European and African markets. Sixteen Nigerian students and four Nigerian academics from seven higher education institutions took part together with four European students from two business schools in the UK and France, accompanied by two academics from these schools. It is important to note that the realisation of this small-scale study was a challenging endeavour. It required a one-year preparatory phase which included the consideration of a number of security measures and high expenses related to the safe transport and full accommodation of white European participants. For financial and security reasons it was therefore not possible to realise the study on a larger scale.

This paper is structured as follows. First, we problematise entrepreneurship education in Nigeria. In our literature review, we introduce the context and challenges of higher education systems. We proceed to highlight developments in the psychology literature on learning from role models (Lockwood and Kunda, 1997, 2000; Baden, 2014) and, related to this, discuss cognitive social learning theories (Bandura, 1977) with regard to the use of role models and how these can inspire students and influence entrepreneurial activity. We then discuss the development of entrepreneurship education in Nigeria as an emerging economy, and point out the particular difficulties related to enterprise creation in an environment of limited resources, undefined entrepreneurship behaviour and an extreme level of uncertainty. This is followed by an introduction to the research design and the methods used to investigate the research question before and after the workshop, as well as through a follow-up study conducted one year after. Analysis of the empirical findings informed the identification of four types of role models, details the attributes that participants linked to these role models, and shows how the different types developed in importance and impact on students over time. We conclude with suggestions for the use of role models in entrepreneurship education, especially in the Nigerian higher education context. Through this study, our research emphasised the need and importance of role models in emerging economies, particularly the African context.

2. Problematising entrepreneurship in Nigeria

Entrepreneurship is not a new phenomenon in Nigeria: traditionally, culturally and habitually, it transferred from one generation to another within the diverse ethnicities and nationalities that are present. During the British colonial rule, self-employment and enterprise development were

less encouraged with emphasis given to developing civil servants for the running of government; this invariably had an impact on motivating individual enterprise development (Anyanwu, 1999). Research by Ekanem (2010), highlighted that since the mid-1980s entrepreneurship activities in Nigeria have covered a wide range of fields, from developments in oil and gas, agriculture, manufacturing and ICT to mobile telecommunications, the film industry, and private school education. In recognition of the strategic role of entrepreneurship in national development, the arms of government at the federal, state and local levels, in cooperation with industry, have worked to create an enabling environment to enhance entrepreneurship. Policies that have been introduced include credit facilities for SMEs and programmes such as the YouWin (Youth Enterprise with Innovation in Nigeria) federal government youth entrepreneurship programme and the Tony Elumelu Entrepreneurship Programme, a philanthropic initiative that spans Sub-Saharan Africa. However, some of the government policies and programmes achieved little or no success in reducing unemployment since many of the students and youths were excluded from these programmes as a result of financial constraints and a lack of access. Thus, it became urgent for higher institutions to address the national problem by exposing students to entrepreneurship knowledge and the skills needed to succeed in the job market after graduation (Alarape, 2008).

Today, Nigeria has a public sector-led economy that is characterised by inefficiency, corruption and general frustration for the average citizen (Igbinedion and Ehirheme, 2011). Anyansi-Archibong, (2010) draws parallels with China's governmental activities and concludes that entrepreneurship is a missing critical factor in Nigeria's economic development. In a review of entrepreneurial studies conducted in Nigeria, Ogundele, (2006) found that the general lack of disciplined behaviour by entrepreneurs and officials charged with the execution of government entrepreneurial assistance programmes was the missing link for successful entrepreneurial development. At the same time, no reliable solutions have been found in the private sector-led economy, where important investments come from foreign sources. Inegbenedor, (2005) states that domestic entrepreneurship must embrace the missing link to ensure that a "concerted effort is being made in growing economies to promote development of entrepreneurs" (Igbinedion and Ehirheme, 2011, p.84).

Potential entrepreneurs in Nigeria face a number of problems, which makes going into business daunting. In a survey exploring what Nigerian entrepreneurs themselves perceive as the factors that hinder the development of entrepreneurship, the problems identified ranged from: management problems and lack of technology, especially for those in the manufacturing and service sectors; stiff international and domestic competition for those in retail and service sectors; financial problems such as high degrees of uncertainty of business success; the indifference of financial institutions; and cultural barriers regarding female entrepreneurs (Nwachukwu, 1990). Emmanuel (2008) added infrastructural constraints, poor implementation of government policies and entrepreneurs' personal problems to this list. Olarenwaju and Olabisi (2012) argue that access to resources, especially financial resources, is difficult. This was particularly the case for female entrepreneurs, who are often victims of discrimination. GEM (2012) succinctly captured the challenges of entrepreneurship in Nigeria as heavily constrained by government programmes and regulation where policies create red tape for new and growing firms, whilst public procurement is fraught with corruption, bureaucracy and multiple tax burdens, and the political and security situation in Nigeria threatens sustainable economic development.

Despite annual GDP growth, the economy of Nigeria has not expanded rapidly enough to absorb the 11.55 million young people that enter the labour market (National Bureau of Statistics 2018; Akande, 2014). The pressure on higher institutions to deliver entrepreneurship education has led to compulsory entrepreneurship education across all tertiary institutions (Alarape, 2008). The struggle and desire by higher education institutions (HEIs) to understand the best ways to encourage students to change their mindset from that of state dependency to developing intentions for entrepreneurial activity and self-employment is continuous (Solvesvik *et al.*, 2012; Mariano *et al.*, 2012). Recent collaborative efforts were made by the Ministry of Industry, Trade and Investment, the Federal Ministry of Education and the Small and Medium Enterprises Development Agency (SMEDAN) to tackle growing unemployment in Nigeria, which is at 23% and with youth unemployment at over 50% (National Bureau of Statistics, 2018). This resulted in the establishment of the University Entrepreneurship Development Programme (UNEDEP). The purpose of the programme is to complement existing universities' teaching resources and to provide students with access to entrepreneurs that can serve as mentors (Economist Nigeria, 2013). The tension between these struggles and the desire by HEIs and government is premised on the belief that entrepreneurship can have positive impacts on job creation, and lead to a reduction in graduate unemployment, an increase in economic growth, poverty reduction, and transformation of the informal sector. This assumption has, however, been the subject of limited investigation in the context of Nigeria (Ăcs *et al.*, 2014).

Colonial educational policy, which still affects decisions in the education sector, placed emphasis on the production of literate nationals and strengthening of the colonial administration, rather than equipping nationals with entrepreneurial skills. Consequently, many of the curricula at the Nigeria tertiary educational level are not geared towards effective national and economic development, and graduates are not easily employed or self-employed. Section 5 of the Higher Education Policy, which concerned itself mainly with the development of 'high-level manpower,' was oriented to science and technology (Aladekomo, 2004).

3. The context, entrepreneurship and role models

3.1 The Nigerian higher education system and the challenge

Since 1932 when Yaba College of Technology was established as the first tertiary institution in Nigeria, the number of established tertiary institutions in Nigeria has grown tremendously. Today, there are over 160 universities: 40 federal, 46 state and 75 private. Universities in Nigeria are monitored by the National Universities Commission (NUC), an arm of the Federal Ministry of Education (FME) (NUC, 2015). The proliferation of universities in Nigeria is desirable for learning; however, curricula do not include development of entrepreneurial skills that would encourage more graduates to consider self-employment. The new challenge for higher education is not only to tackle unemployment of graduates, but also to absorb new entrants into the labour market. Thus, one of the major challenges facing higher education institutions for the attainment of the government's developmental programmes is the issue of the curriculum (NUC, 2017).

Based on the structural and functional flaws found in Nigeria's development, the government reviewed the nation's educational curriculum. An important development was the publication

of a study by the Federal Ministry of Education (FME, 2004) that highlighted the dearth of entrepreneurship and enterprise education in the Nigerian education system. The study found that tertiary educational curricula were therefore inadequate to prepare students for enterprise development. The relevant aspects of the report (FME, 2004) are:

- 363 students of tertiary institutions responded to a questionnaire distributed across the 36 states of Nigeria.
- 79% support the introduction of enterprise education for self-employment as part of the institutional curriculum.
- 61% agreed that entrepreneurial courses must be made compulsory.
- 80% showed willingness to undertake enterprise education if made compulsory.

The findings of the report changed the views of lecturers in tertiary education in Nigeria. It is in this context that Nigerian universities, under the aegis of the National Universities Commission (NUC), committed themselves to train and produce entrepreneurial graduates for the stimulation of private sector growth in Nigeria. This effort was mandated through a two-semester undergraduate level course called 'Introduction to Entrepreneurial Skills'. Compulsory for all students, irrespective of discipline, it was introduced in April 2007 (NUC, 2015). The approach adopted by the NUC is the establishment of entrepreneurship development centres and knowledge transfer to reverse graduate unemployment by facilitating and offering the needed training and courses for business start-up and self-employment as a viable career option (Ekpoh and Edet, 2011). Despite these efforts, there is still an observable poor uptake of entrepreneurship education among Nigerian graduates (Duke, 2006; Siyanbola *et al.*, 2012). As traditional approaches to entrepreneurship education seem not to have resulted in higher engagement with entrepreneurship and/or increased uptake of entrepreneurship education in tertiary education in Nigeria, we need to seek to expand our repertoire of good pedagogy in entrepreneurship education. To this end, we now turn to social cognitive and role model theories of learning.

3.2 Role model theory

Learning from role models plays a central role in social cognitive theory, which focuses on what and how people learn from one another through modelling of good practice. It includes concepts such as observational learning and imitation (Ormrod, 1999). Social learning theory is useful in explaining how role modelling operates (Bandura, 1977). This theory is used to explain how the role model(s) can influence other individuals to act, imitate and follow, to think and to adopt personal characteristics, behaviours, styles and attributes. Researchers have found that individuals tend to learn within their social network by observing the behaviour of others in given situations, and note the outcomes of those behaviours (Bandura, 1977; Singh *et al.*, 2006). Several studies have attempted to define role models. Shapiro *et al.*, (1978) suggested a role model is an individual whose behaviour, styles and attributes are emulated by other individuals. According to Lockwood (2006, p.36), role models are 'individuals who provide an example of the kind of success that one may achieve, and often also provide a template of the behaviours that are needed to achieve success'. The concept of entrepreneurial role model introduced by Gibson (2004) defined role models as "*a cognitive construction based on the attributes of people in social roles an individual perceives to be similar to him or herself to some extent and desires to increase perceived similarity by emulating those attributes*.".

Cognitive learning theory thus considers learning to be influenced by cognitive processes that are controlled by the learner, where the focus of education should be placed on the learner's cognitive understanding of the subject. We are transferring these assumptions to the entrepreneurship classroom where the focus should not be placed on measuring the number of business start-ups as a behavioural consequence of the education (Mueller, 2012). In his later works, Bandura, (1977) developed the theory of self-efficacy that had many implications for classroom teaching and entrepreneurship (Arora *et al*., 2013). He defines self-efficacy as the belief by an individual that his or her actions can produce desired outcomes, and found that a sense of personal efficacy is crucial for understanding a learner's reactions to (entrepreneurship) failures and challenges (Bandura, 1997; Wennberg *et al*., 2013). Convinced that learning happens through *experience*, but also through mere *observation* of social models, Bandura believed that individuals are more likely to serve as a source of social learning when the learner attributes a certain status, power, competence and respect to them. Lockwood and Kunda (1997) reported that power and status are only of impact if the role models' success appears *attainable* and *relevant* to the learner:

> "When an outstanding individual seems relevant, one will compare oneself to this individual. The consequences of this comparison for the self will then depend on the perceived attainability of that individual's success. If the superstar's success seems attainable, one will be inspired (...) On the other hand, if the superstar's success seems unattainable, one will be discouraged and demoralized." (p.93)

Superstars in a particular domain? are often selected as role models when there is some relevance for the comparison and they demonstrate the possibility of attainment for those similar to them. In this respect, they are symbols of *inspiration*. Even though Lockwood and Kunda looked at superstars, there is a close link with entrepreneurs whose success has always had an impact similar to that of role models. In their studies, Shapero, (1975) and Shapero and Sokol, (1982) identified '*desirability'* and '*feasibility'* of a role model behaviour as antecedents of entrepreneurial intention and consequently as essential for stimulating entrepreneurial action. In that sense, social learning theory considers teachers to be highly influential models who may transmit a wide scope of knowledge as well as skills, problem solving strategies, creative thinking, performance standards and moral principles (Hergenhahn, 1993). Learners then learn through *internalising* the knowledge, values and principles transmitted by the model and make them their inner standard for self-praise and self-criticism (Bandura, 1977). This process is called self-regulation. Over the years, these inner standards have become increasingly stable and individuals have become more and more self-regulating and less influenced by social models (Bandura, 1997; Ormrod, 1999). Paice et al. (2002) confirm the educational benefits of role models and look at how positive role models affect student behaviour over an optimum period of learning.

In addition to the transmission of intentions, skills and competences, an essential positive consequence of role models can be *inspiration* "that could arise under circumstances in which basking in reflected glory is unlikely" (Lockwood and Kunda, 1997, p.93). It seems that depending on individual learning objectives, positive role models can inspire entrepreneurial action, while negative role models can prevent negative behaviour such as engaging in corruption or fraud (Lockwood *et al*., 2002). Working with physicians and medical students, Cruess *et al*., (2008) point out another important aspect: learning from *being* a role model to peers or younger learners. "By analysing their own performance as role models, individuals can improve their personal performance" (Cruess *et al.*, 2008, p.718). They emphasise the

importance of creating space for reflection and discussion of their performance in the classroom in order to make the implicit explicit.

In line with the above cognitive learning theory, it seems that learning from role models can be a powerful tool to educate entrepreneurial individuals and inspire entrepreneurial action. Entrepreneurship models that seem attainable and relevant to the learner seem to be particularly inspiring. The conceptual framework used in this study is based on Lockwood and Kunda's (1997 model which postulates that role models can be of positive and inspiring impact if they are, firstly, *relevant* to others and, secondly, if their success is perceived to be *attainable*. While Lockwood's study focuses on superstars, we can transfer its principles to entrepreneurs as role models for business students (Radu and Loue, 2008; Mungai and Velamuri, 2011). We will now take a closer look at how role models are employed in the entrepreneurship classroom.

3.3 An alternative approach: the use of role models in entrepreneurship education

Several previous studies on the importance of, and benefits associated with, entrepreneurship education has warranted research into role models. Ronstadt, (1990) stated that the programme focus of entrepreneurial education is the business plan, but predicted that this focus would change. Two decades later, business planning courses still seem to be an integral part of entrepreneurship education (Béchard and Grégoire, 2005; Finkle *et al*., 2006; Carrier, 2007; Solomon, 2007). Whilst Finkle *et al*., in their 2006 study across 146 entrepreneurship centres in the US, found that 33% offer a course called 'business planning', it is unsure whether the contents of the programmes are similar across institutions. Indeed, many scholars argue that today the problem has shifted to a profusion of offers and critique that entrepreneurship education proposes diverse teaching goals, radically different teaching methods and highly fragmented research methodologies (Fayolle and Gailly, 2008; Albornoz-Pardo, 2013; Blenker *et al*., 2014).

Based on the general appreciation of experiential learning, Verzat *et al*., (2009) state that the entrepreneurship discipline has developed massively and now uses experiential exercises and simulations as an integral component of the education process. Carrier, (2007) also proposes simulations and games, and insists on the importance of method rather than content. She suggests further methods such as original proposals related to classic literature, role play and videos, as well as the use of life stories and practitioners in the training process (Carrier, 2007; Fayolle and Gailly, 2008).

Despite the continuous popularity of business planning courses and a parallel profusion of methods and approaches, Solomon *et al*., (2007) identified a shift to more frequent use of guest speakers, discussion and other more *knowledge sharing-based* forms of education. In line with this observation, Carrier, (2007) recommended a stronger and more diverse integration of practitioners into the classroom, especially to support the process of opportunity identification. Although there is no full consensus on this point, the identification and development of business opportunities is at the heart of entrepreneurship and considered to be the starting point of any entrepreneurship activity (Gibbs, 2002; Carrier, 2007). DeTienne and Chandler, (2004) have furthermore demonstrated that opportunity identification is a competence that can be learned in the scope of entrepreneurship education. In this process, practitioners can be particularly useful as they can potentially become inspiring role models as successful entrepreneurs (Katz, 1995; Carrier, 2007; Radu and Loué, 2008). While Katz (1995) argues that practitioners' wealth and popularity will be the source of impact on students, Fayolle and Gailly (2008) assign the 'role

model' school of thought to policy makers and educators who "believe that 'real-life' entrepreneurs are more credible and more effective than 'traditional' professors to teach entrepreneurship" (p.570). They do, however, recommend the use of role models as a method to stimulate the education of entrepreneurial individuals. In this context of role models, entrepreneurial *inspiration* is a "change of hearts (emotion) and minds (motivation) evoked by events or inputs from the programme and directed towards considering becoming an entrepreneur" (Souitaris *et al*., 2007, p.573).

In the context of business ethics education, Baden (2014) found that both positive and negative role models can impact students by either motivating or preventing action. Looking at the influence of social entrepreneurs, Baden (2012) found that students were inspired by exposure to these role models and strongly expressed intentions for business activity that is both ethical and successful. Tkachev and Kolvereid (1999) demonstrated that role models are a dominant factor for the prediction of status choice (being self-employed or an employee). Mungai and Velamuri (2011) reported that the influence of parental role models (of self-employment) is highest when the business is successful and the offspring are at the age of young adults, where the activity seems more relevant to them. Students in higher education may thus be at a good age to integrate learning from role models. An important point here is that there is an optimum age for engagement with a role model approach within entrepreneurship education.

Further literature exploring entrepreneurial role models investigated entrepreneurial behaviour through adoption (*identity*). Grounded in the literature on identity, studies by Ibarra (1999) and Ibarra and Barbulescu (2010) proposed a notion of identity as 'provisional-selves' through role emulation when engaging with a new work environment. The individual wishing to adopt the new identity of, for example, the manager, identifies a role model in the workplace while also constructing a new 'transitional' identity that is validated by the social environment in real time (Lundqvist *et al.,* 2015). This understanding of entrepreneurial identity as a possible self is reflected in the extant literature on entrepreneurial learning. Rae (2006) provides a triadic model of entrepreneurial learning, emphasising an individual's competence in acting 'as the entrepreneur' developed through contextualisation, personal and social emergence, and negotiated experience. Murnieks and Mosakowski (2007) stated that a role is a concept used to represent expected behaviours attached to a social status or position.

3.4 The status quo solution - entrepreneurship education in Nigeria as an emerging economy

Entrepreneurship education in Africa is an emerging phenomenon with several challenges such as,limited policy support for its wider introduction and inadequate funding and infrastructure (Akhuemonkhan *et al.,* 2013; Mensah, 2013). According to Cotton et al. (2002), the rationale for including entrepreneurship curricula in universities is to help graduates acquire an increased understanding of entrepreneurship and the entrepreneurial world of work, and to prepare them to act as entrepreneurs and managers of new businesses. The level of interest in entrepreneurship amongst higher education institutions and business school students has intensified to such an extent that most of these institutions are introducing courses on how to start and finance businesses (Matlay, 2005). However, a great deal of disparity continues to exist in the content and quality of entrepreneurship education programmes on offer, particularly curriculum design, delivery methods and assessment strategies (Matlay, 2005).

Entrepreneurship education in Nigerian universities is still evolving. While most Nigerian universities have introduced the subject into their educational curricula, limited research is available to assess the impacts on students and the correlation between students taking entrepreneurship courses and their entrepreneurial intents (Ekpoh and Edet, 2011). The entrepreneurship education curriculum in Nigeria is not universal. Abereijo (2015) developed a simple guideline for teaching entrepreneurship to help students understand concepts, to appreciate the relevance of the knowledge gained in relation to the needs of the society, to understand how this knowledge can add value, and to generate needs-based business ideas. However, the number of universities in Nigeria that are following these guidelines are limited. This therefore suggests that learning does not lend itself to application, but rather to learning for learning's sake (Mathieson, 2015). A recent study by Babatunde (2016) on entrepreneurship education assessed students' entrepreneurial capital in Nigerian universities and found that most students across the sampled universities generally expressed optimism at the possibility of pursuing an entrepreneurship career in the future, though with a caveat of wanting some experience first.

Research by Alarape (2008) argues that there is a paradigm shift from the teaching of entrepreneurship as a factor of production in classical schools, to the development of skills and competences unique for start-up and management of businesses for growth. Whilst the network model has the advantage of creating a critical mass for entrepreneurship activities, Blenker *et al*. (2006) argue that the model is plagued by a number of administrative and practicality problems relating to income and cost allocations among collaborating institutions. Streeter *et al*. (2002) stated that entrepreneurship education may be 'focussed' (like, for example, entrepreneurship programmes at Harvard University and the University of Maryland), or 'university-wide' (like programmes at Babson, MIT and Stanford). Applying the approach developed by Streeter *et al*. (2002), most universities in Nigeria practise the magnet model which draws students into entrepreneurship courses, by operating entrepreneurship centres that facilitate entrepreneurship classes for all students from all departments. Whilst this approach is resource efficient, it is limited in the ability to facilitate an integrated and school-specific structure to meet students' needs. According to Alarape (2008) the adoption of an entrepreneurship education approach should be based on the purpose of the programme, the resources available and the impact made. Recent study in Ghana by Nyadu-Addo and Mensah, (2018) examined how a university in an emerging African economy is implementing and managing the entrepreneurship clinic (EC) as a viable pedagogy for the provision of experiential entrepreneurship education. The failings of mainstream entrepreneurship education practice relate to an inadequate supply of experienced entrepreneurship teachers that can develop high-quality programmes, and a lack of institutional commitment, as highlighted by Milner (2012). These factors, coupled with inadequately skilled manpower, a poor state of infrastructural facilities and inadequate instructional materials/curricular contents hinder the ability to foster entrepreneurship education (Nwambam, 2018).

We are applying our reflections on role models to the Nigerian context: an emerging economy where resources are limited and entrepreneurship has different legal implications. Previous research on the emerging economy of Malaysia conducted by Mustafa *et al*. (2016) found a significant correlation between a proactive personality and university support on entrepreneurial intention. In the light of the theoretical background sketched above, the following question emerges: *To what extent can role models inspire students' entrepreneurial interest and activity in the Nigerian education system, given that a lack of financial, material and societal means render most role models unattainable?* Answers to this question can provide new insights into how higher education in emerging economies can foster entrepreneurial role

models in the curriculum. Before we turn to the findings of our project, we present the research design and workshop plan as well as our approach to data collection and analysis.

4. The experiment with an alternative approach

As the intention of this study was to understand the extent to which entrepreneurial role models inspire students and have a lasting effect, an exploratory, qualitative and longitudinal case study approach was chosen.

The project was conducted in Nigeria from 2011 to 2012 between Oxford Brookes University Business School, UK and Burgundy School of Business, France, in collaboration with Yaba College of Technology, Nigeria. The workshop brought students from the two European institutions together with Nigerian undergraduate students to initiate mutual cultural learning from an entrepreneurial perspective. The programme was designed to fill four full days. Participants worked in multidisciplinary teams to develop a business opportunity between the Nigerian and European market. Sixteen Nigerian students from the seven major higher education institutions[1], as well as four European students from two business schools in the UK and France took part in the learning experience. The average age of Nigerian students was 20, compared with 24 for the European students. The workshop had four student teams each consisting of four Nigerian students and one European student. The overall workshop task was to develop a cross-cultural entrepreneurial idea that would combine African and European markets. The European students were to provide a Western perspective on entrepreneurial culture and had been chosen based on their knowledge and experience in the European market. By contrast, the Nigerian students were selected based on their intentions and knowledge of local culture; only a few had some experience and knowledge of business. Inspired by additional input through lectures, workshops and discussions on diverse entrepreneurship subjects, every student team continuously worked towards the final presentation of their business idea on the last day of the programme.

4.1 Samples and selection of participants

The target population of the study was undergraduate and graduate students from European (UK and France) and Nigerian tertiary institutions, with particular institutions selected because of an existing alliance. A project invitation flyer was mailed via the Nigerian Enterprise Educators Network (NEEN) for publicity and distribution to universities and polytechnics. At one of the participating institutions, Oxford Brookes University, awareness was raised via the department/faculty/WAVE, and an Africa Business Forum information session. Sixteen Nigerian students and four European students were selected using a two-stage selection process. The reason for the small sample was financial constraints.

4.1.1 Stage 1: Protocol for the selection of participants

The first stage of the selection process was sending the recruitment flyer to our partners in Nigeria and France to allow them to distribute the flyer to their higher education networks. Selection of candidates was to be based on pre-defined selection criteria, such as commitment, intrinsic motivation, entrepreneurial aspirations etc. The plan was to recruit a homogenous group (Fowler, 2009), that is, final year and postgraduate students who have something in

1 Yabe College of Technology, University of Jos, Joseph Ayo Babalola University, Federal University of Technology Akure, Kwara State Polytechnic, University of Ibadan, Redeemer University, Igbinedion University, University of Uyo.

common in that they are deciding whether to take up a job or become business founder after graduation. European applicants would then submit their CVs and letters detailing their motivation for screening to ensure the presence of an entrepreneurial attitude related to creativity, risk taking and social responsibility (rather than entrepreneurship intentions). For the Nigerian applicants, the screening was completed by a UK academic who had a good cultural awareness of Nigerian higher education institutions, and by the partner institution in Nigeria. The European applicants were screened by the authors for shortlisting.

4.1.2 Stage 2: Interviews for the shortlisted

Shortlisted applicants were interviewed depending on availability and technical preference, by teleconference, Skype, and face-to-face. The interviews each lasted about 30 minutes.

4.1.3 Recruitment of experts

In order for the research to reliably inform teaching of entrepreneurship in higher education in Nigeria, as well as ensuring it be well-connected with the market, convenience sampling was adopted through NEEN and Pan-Atlantic University. This was mainly due to the accessibility of participants. Four observer lecturers were selected from the network, invited from four institutions (University of Ibadan, University of Uyo, Joseph Ayo Babalola University and Yaba College of Technology). Their roles were to observe the process of teaching and learning to enable them to embed good practices in their institutions. The eight local entrepreneurs that were invited (selected via the Alumni of Enterprise Development Centre, Pan-Atlantic University) represented men and women in diverse sectors including social enterprises, and for-profit and professional service firms. These local entrepreneurs were considered successful because of their association with the Pan-Atlantic University's entrepreneur alumni group, and are recognised as having made an impact on the economy and in the community. The participants selected comprised the following:

- Sixteen Nigerian undergraduate students from nine tertiary institutions (government, state, and private). Two polytechnics and seven universities were represented
- Four European students: two postgraduate students from Burgundy School of Business and two final-year undergraduate students from Oxford Brookes Business School.
- Four observer lecturers
- Eight local entrepreneurs

4.2 The workshop programme

The four-day programme was organised to contribute to the overall objective of the workshop: a cross-cultural collaboration to investigate students' attitudes towards entrepreneurship and to develop sustainable entrepreneurial competences. In addition to receiving the varying input provided by the lecturers, workshops, exercises and entrepreneurship exchanges, students were tasked with developing an international business concept throughout the entire week. In Table 1 the workshop overview shows how and at what point in the process the role models were identified. From a pedagogic perspective, the design of the workshop followed the design of a previous European project entitled 'COEUR' - Competence in European Entrepreneurship (Mueller, and Anderson, 2014).

Day/subject	Objective	Overall objective
Day 1: Diversity	Creating mutual understanding and learning from and about participants' cultural backgrounds; entrepreneurial profile of the European and Nigerian business market; and creating diverse working teams	Developing an entrepreneurial idea to exploit business opportunities between the European and African market
Day 2: Creativity	Idea generation and development based on creative techniques and input; and reflection on the business model	
Day 3: Analysis and network(ing)	Exchange with Nigerian entrepreneurs; feedback on students' group work; and understanding the importance and basics of network creation and	
Day 4.1: Communication	Final presentation of group work to an expert jury	
Day 4.2: Sustainability	Evaluation of the event together with participants and observing lecturers; developing ideas on how to embed the education into the curriculum of Nigerian HEIs in a long term perspective	

Table I. Entrepreneurship workshop plan

Throughout the programme, several examples of successful entrepreneurs were introduced to students. The chosen entrepreneurs' successes, and the fact that they represented a desirable future job profile (self-employment, independence, and flexibility) were provided to create *relevance* to students. To increase a sense of *attainability*, the chosen businesses were small and medium-sized, and the selected entrepreneurs were older than the participants so that students would feel they still have time to achieve comparable success (Lockwood and Kunda, 1997).

The students were exposed to role models at two levels. Firstly, famous entrepreneurs were used in case examples during the teaching sessions on creativity, innovation and the European and African entrepreneurship markets. Secondly, face-to-face contact with indigenous entrepreneurs was provided through exchange and feedback sessions. Each entrepreneur presented a story about their business to the group. Furthermore, using a speed-dating format, every entrepreneur met with all of the student groups in order to provide advice in preparation for the students' final presentations.

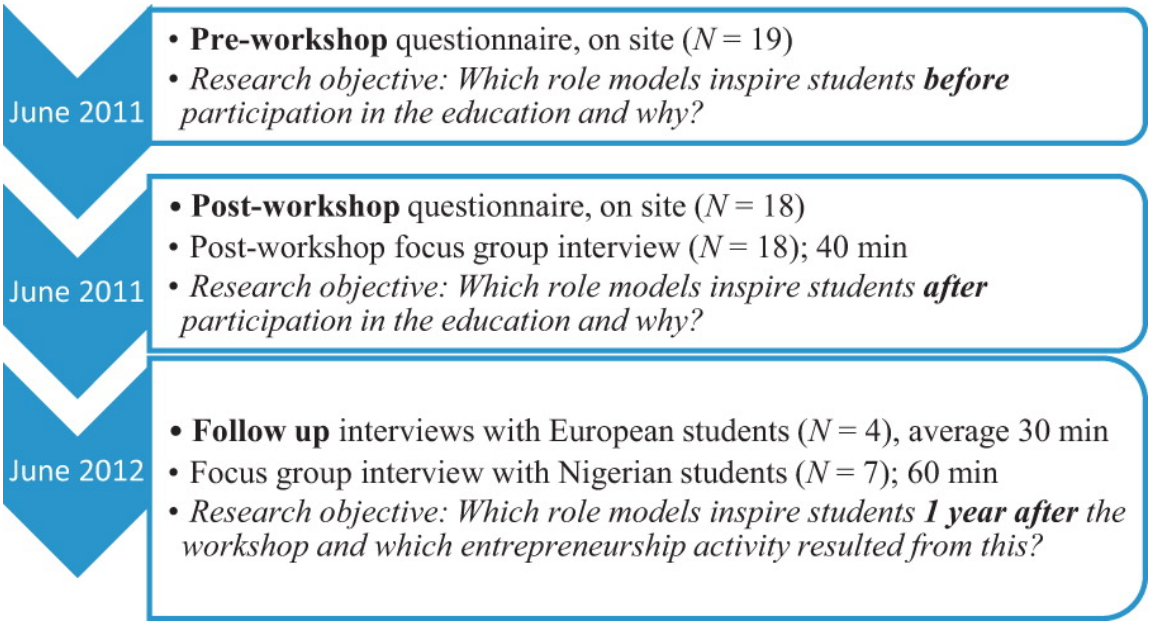
4.3 Data collection and analysis

This is a small exploratory study and though qualitative in its design and main data collection methodology, the study also collected some numerical data, specifically around understanding

the impact of entrepreneurial role models on students. Due to the need to provide a rich understanding of the research context, a qualitative method was adopted as it was understood to be the best choice of method in order to meet the research objectives. Data gathering comprising both methodologies took place in three different stages (see Figure 1). The pre-workshop survey questionnaire was designed to understand the general context and initial impressions of the students; the post-workshop survey questionnaire and focus group obtained new insights acquired at the workshop. A follow-up exercise that took place one year later aimed to track students' progression in relation to their start-up intentions. The questionnaires were self-administered, distributed and collected in one sitting before and after the student entrepreneurship workshop and completed by 18 students. One questionnaire was not returned, and one student dropped out, as detailed in Figure 1.

The one-year focus group and follow-up interviews were carried out by the researchers. The aim was to establish which role models inspired students one year after the workshop. For the Nigerian students, this happened over a day at Yaba College of Technology. Only seven students attended. It was an all-day event which started with an overview of the project, set out the aim for the day, and was followed by the focus group which lasted an hour. The afternoon was then used for individual conversations which lasted 30 minutes. For the European students, four students were interviewed by Skype. The focus group collectively explored the use of role models in entrepreneurship education and the possible lasting effects on entrepreneurial activity. The individual interviews explored particular entrepreneurial journeys one year on.

All focus group data and interviews were recorded via video and audio, where applicable, and later transcribed. Key words or phrases were searched and transferred to a Microsoft Excel document which was linked to identifiable participants. Using the approach determined by Saunders *et al*. (2012) for analysing qualitative data, categories were developed to identify patterns of type of role model. Examples of the questions asked before, after, and one year after the workshop are shown in Table 2.



[Figure 1]

Pre-workshop questionnaire	Post-workshop questionnaire	One-year follow-up interview
Please name an entrepreneur who inspires you or who you admire for what that person achieved (put name and company name if available) What is it that inspires you about that entrepreneur? Please name three attributes	Were any of the business examples or entrepreneurs presented throughout the workshop particularly inspiring to you? If so, why? (The above question is followed by a table providing space for several entrepreneurs and reasons for inspiration)	Try to think of the various business examples, entrepreneurs and entrepreneurship projects that were presented throughout the workshop. Do you remember any of them? If so, do you remember one or more that were particularly inspiring to you? How did these examples inspire you? Which elements/ characteristics of their person or business were particularly inspiring to you?

Table II. Questions from the pre-, post- and follow-up investigations

A major focus of the data analysis was to determine whether there was a difference in the relevance of the role models one year after undertaking the workshop. The expectation was that possible changes would be measured through changes in the variables, i.e. the names and attributes of role models, before and after the learning stimulus. The attributes used emerged from themes generated from the questionnaire responses. From the responses, we were able to link these attributes to the four identifiable role models as detailed in Section 5 below. We chose to ask for 'inspiring' entrepreneurs rather than 'role models' because inspiration (who or what changes hearts and minds towards entrepreneurship) is a major impact of role models (Baden, 2014) and the vocabulary is more likely to be understood by students.

5. Empirical findings

Four types of role models emerged from our analysis and these changed in importance and impact on students over time. We will start by briefly introducing the *types* of role models that students mentioned, and then describe how the *perception and importance* of these models developed before, immediately after, and one year after the workshop experience, and how this is linked to attainability and self-relevancy of the model adopted for this research (Lockwood and Kunda, 1997). In the third step, we will look at students' entrepreneurial activity one year after the workshop and identify links with the use of role models in education.

5.1 Types of role models in entrepreneurship education

For the post-workshop evaluations, we linked the questions to examples from the workshop. Based on the analysis of each entrepreneur's public image and the qualities attributed by students, four categories of role models that influenced students were identified. To facilitate the understanding of these types, we first briefly introduce the types of entrepreneurs before detailing the inspiring qualities attributed to them.

5.1.1 'Stars'

We named this type of role model 'stars' because it captured very famous personalities such as Alan Sugar, Bill Gates or Rockefeller, as well as famous Nigerian entrepreneurs such as Aliko Dangote, one of Africa's richest men and the head of Africa's leading diversified business conglomerate (Dangote Group). As stars, they were characterised as being unapproachable and of a significant hierarchical distance to participants. They were known for outstanding actions or achievements and due to their wealth possess an almost unlimited access to resources, in particular financial resources.

5.1.2 'Mentors'

This category captured examples of entrepreneurs who are less famous, but closer to respondents' reality and are thus potentially approachable. They were perceived as examples owing to outstanding and/or courageous initiatives at regional or national level, and thus on a smaller and less popular scale than the stars. We called them 'mentors'; they were potentially available to transmit a message, share their knowledge and give advice, there was less hierarchical distance, and an increased but not unlimited access to resources. This group included local entrepreneurs from Lagos, Nigeria who came to present and exchange their business concepts during the workshop, but also other SME-based examples from mostly regional initiatives that inspired others with what they do and why they do it.

5.1.3 'Inventors'

Here we summarised examples that inspired others through their creative and innovative character. An example of this type is Sir James Dyson, the British inventor of the bag-
less vacuum cleaner, who was one of the most famous Western examples provided by students. Money, access to resources, as well as the hierarchical difference to respondents appeared to be secondary to their creative mind and their capacity to contribute new solutions to the world, which was what really inspired students.

5.1.4 'Neighbours'

While the first three categories consisted of entrepreneurs that were purposefully integrated into the educational programme by researchers, this fourth type of role model emerged unexpectedly. 'Neighbours', here, refers to peers (students) at the workshop. The relationship for these role models was marked by closeness, the absence of hierarchical difference and a comparable access to resources.

In the section below, a detailed analysis is presented. Attributes (rows) are the themes generated from the questionnaire responses. The four types of role models (columns) were identified through the model of Lockwood and Kunda, and the workshop plan. The role model types were coded according to the total number identified by the students for each role type (column), and the number of attribute counts for each role model (rows).

5.2 Pre-workshop results: perception and importance of role models

Before the workshop, participants primarily named famous entrepreneurs as inspiring examples. Most had not taken part in entrepreneurship education before and those might therefore be the only examples they knew. Table 3 captures the number of example role models

that were named per group and lists the number of attributes that were given to each example (note that those could be multiple and exceed the number of examples).

Pre-workshop result/entrepreneurs inspire through...	Stars (15)	Mentors (6)	Inventors (0)	Neighbours (0)
Commitment/perseverance	6	6		
Social and societal care	5	2		
Job and wealth creation	7			
Creativity	6			
Courage	5			
Strategy and vision	5			
Passion		3		
Productivity/action taking	2	2		
Profit-oriented	2			
Leadership	2			
Versatility/flexibility		1		
Responsibility	2			

Table III. Pre-workshop evaluation of inspiring role models and their attributes

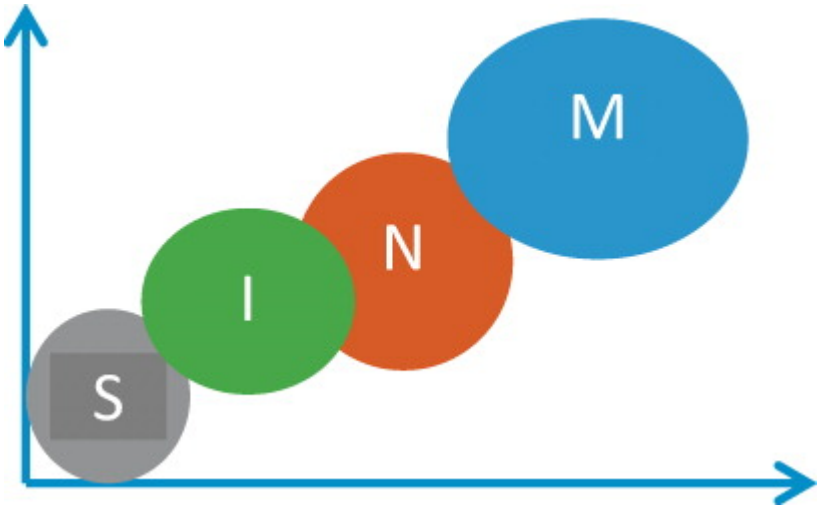
We can see that the primary category of attributes linked to the group of stars is the *creation of jobs and wealth* for society. This aspect is inspiring to students when looking at 'poverty' and 'unemployment' in Nigeria. The Nigerian example, Aliko Dangote (one of the richest entrepreneurs in Africa and head of Africa's leading diversified business conglomerate, Dangote Group) was named for his capacity to, in the words of the students, "create jobs", "disseminate wealth" and "face the labour market". The simple aspect of generating monetary profit inspired only two students. More often, job and wealth creation were seen to be closely linked to *care for social and societal aspects* through the entrepreneur's activity and their mission, by being "charitable and generous", and "understanding the basic necessity of life" (from student responses), such as providing electricity and clean water. Furthermore, stars inspire strongly through their *creativity*, but also through their *courage*, as some students put it, "to move on", for instance, after a negative event had occurred, or to "face challenges". Another important source of inspiration was their business strategy and vision. Those are connected to the "logic of their thinking", "pricing strategies" or their "business model". Unlike mentors, stars were also connected with leadership, profit orientation and the responsibility that, in the eyes of participants, seems to come with the scope of their activities. However, mentors and stars both inspired others through their *commitment and perseverance*. The mentors further inspire through the passion they transmit, but also the social dimension of their business. These were all aspects that were related to the individual person and their motivation to do what they are doing. A very human profile of a dedicated and caring person emerged through these descriptions. Interestingly, before the workshop, students were only able to identify stars and mentor role models.

5.3 Post-workshop results: perception and importance of role models

In terms of the most significant group of role model, we see a shift from stars to mentors. 27 mentors have been named and 39 qualities have been attributed to them (Table 4 and Figure 2). Also, we observed that the written responses in the post-workshop evaluation are of greater depth and length than the pre-evaluation responses that consisted mostly of key words.

Post-workshop evaluation/entrepreneurs inspire through...	Stars (2)	Mentors (27)	Inventors (3)	Neighbours (4)
Commitment/perseverance		2		
Social societal care		8		
Creativity		4	3	
Strategy and vision	1	4		2
Passion		6		
Versatility/flexibility	2	2		
Responsibility		2		
Confidence	1			
Simplicity/practicality	1	3		1
Differentiation		1		2
Independence		2		
Experience		1		
Mentoring		1		
Knowledge		1		
Courage		1		
Trust		1		
Quality of products	1			
Profit orientation				1

Table IV. Post-workshop evaluation of inspiring role models and their attributes



[Figure 2]

We can see that stars have almost disappeared: only two examples were named. The characteristics attributed to stars before seem to have shifted to the mentor models students encountered, especially the attributes of '*social and societal care'*, '*creativity'* and the entrepreneur's '*strategy and vision'*. Thereby, 'social and societal care' refers to objectives and vision expressed by the entrepreneur as per the following:

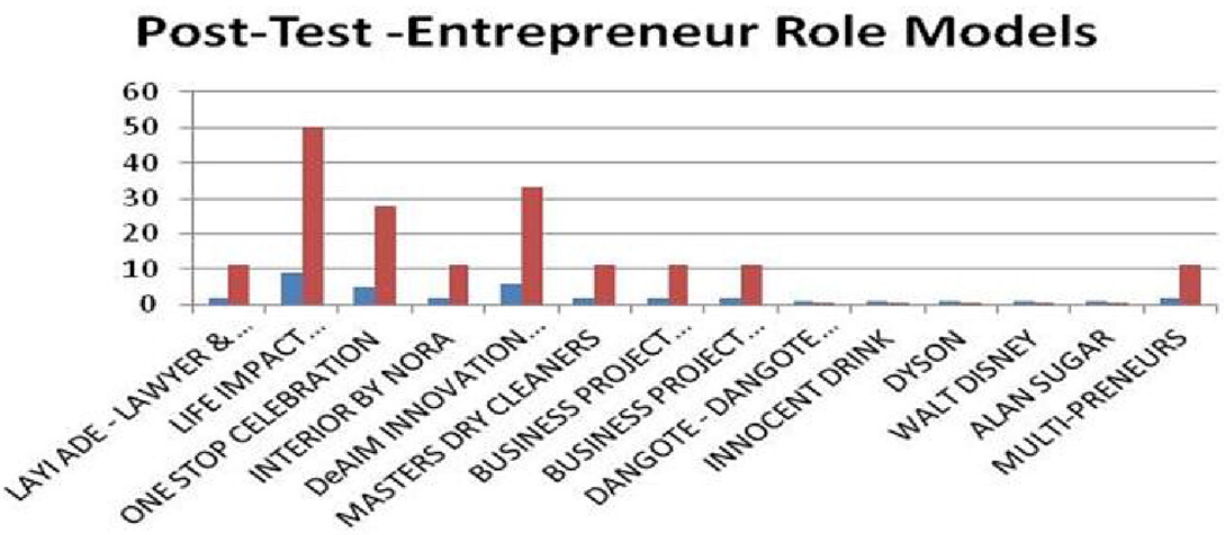
> [The entrepreneur is] taking responsibility for others and developing them
> [The entrepreneur] has a serving culture, with trust in business and its workers
> [Because] the entrepreneur is a resource centre helping to cater for human needs and wants

Caring for others beyond the self seems to be an essential aspect and is closely linked to intrinsic passion for what these entrepreneurs are doing. Altruism is the second most important source of inspiration for students after the workshop and is strongly attributed to the mentor type.

> "She has passion for other people, not just herself (…) (Nigerian student)"

After learning about inventor-type entrepreneurs during the workshop, inventors were mentioned in the evaluation as source of inspiration, however, solely related to their "creative mind". Depicted in Figure 3, results of the inspirational entrepreneurs post-workshop clearly revealed data showing that three role model entrepreneurs emerged that students felt had impacted their attitudes during the entire workshop. These role models included a social entrepreneur, with 50% of impact (Life Impact Foundation); a fashion design house, scoring 27.7% of impact (One-stop Celebration); and a human resource consultancy, scoring 33.3% of impact (DeAim Innovation Resources). The other three role model entrepreneurs each scored 11.1%. These role models were admired for their humanitarian vision, standing out from the crowd, their passion, for inspiring and encouraging others, and experience. Finally, another group of role models emerged based on students' peer business projects: "the neighbours". These included: Connect, with 11.1% impact (fashion export project) and Dynamo, also with 11.1% impact (transportation project). These neighbour business projects were admired for their capacity to *differentiate* from existing offers through cross-border solutions, for their *strategy and vision* since "they are feasible" and "propose a viable business model", as well as

for their *simplicity* ("easy to start") and the potential for *profit generation*. Of significance are the low scores linked to the world entrepreneurs (stars), which were all at 0.5% impact.



[Figure 3]

5.4 One-year follow-up results: perception and importance of role models and entrepreneurship action

In the one-year follow-up evaluation, which was based on individual and focus group interviews, the 'star' role models had completely disappeared from the list of inspirational entrepreneurs (see Table 5). One female Nigerian student named two examples of inventors based on their creative minds. Interestingly, the same student demonstrated the highest level of entrepreneurship activity since the workshop and had started an on-campus food delivery business only a few weeks after the workshop. The 'inventor' role models inspired this same student in the following way:

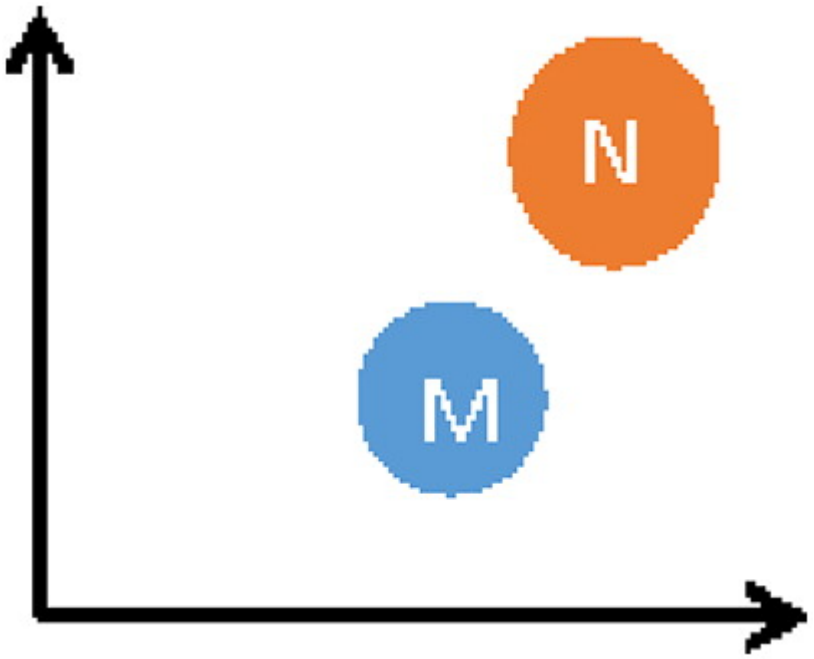
> "(…) I realised that I can start small (…) and that I can innovate inside my business"

This was exactly what she did. Starting with bike-based delivery, she now employs a team of bike-based deliverers and expanded from food to offer a more diverse selection of products that are needed on university campus.

Follow-up evaluation/entrepreneurs inspire through...	Stars (0)	Mentors (6)	Inventors (2)	Neighbours (8)
Commitment/perseverance		2		1
Creativity			2	1
Strategy and vision		1		4
Passion		1		2
Productivity/action taking		1		2
Versatility/flexibility		1		1
Confidence		1		
Team motivation		1		
Hope				1

Table V. Dominant types and characteristics of role models in the follow-up evaluation

We furthermore observed that the 'mentors' had a less significant role one year after the workshop (as illustrated in Figure 4). Still, commitment and perseverance continued to be a source of inspiration as well as passion, ability to take action, flexibility, confidence and the capacity to motivate a team. This finding agrees with the findings of Bandura (1997) and Ormrod (1999) that individuals become more self-regulating and less influenced by social models. The 'neighbours', however, had become the most significant group, mainly owing to their strategy and vision.



[Figure 4]

The examples of entrepreneurial action below represent the perception of the Nigerian students on the attainability of their ideas.

> *"The **transformer project** inspired me because I could see application possibilities."* (Nigerian student)

The peer projects allowed students to visualise their ideas becoming reality, but this wasn't true of just any idea: just the ideas connected to their own passions and interests.

> *"The **connect project** inspired me because it is in line with my personal passion, and also because it seems achievable and possible."* (Nigerian student)

From the conversations with Nigerian participants during the workshop and one year later, it appears that the participants possess a stronger capacity to see themselves becoming involved in entrepreneurial activity. Furthermore, an inspirational idea is more easily perceived as achievable by Nigerian students and the entrepreneurship workshop seemed to have inspired action more easily. One year after the workshop, one of the Nigerian participants started running a catering business. A second student had a full business plan for an education technology business, and a third student was preparing her entrepreneurial idea for fashion design, following a recent fashion show event she had organised on her own. While none of the peer 'neighbour' projects from the workshop had been further developed owing to capital constraints, visible entrepreneurial action had resulted from their participation, although it is worth stating there is no way of knowing whether students would have not engaged in entrepreneurial activity without involvement in the project. In addition to the follow-up interviews, authors were able to track students' entrepreneurship activity on the Facebook project page. Participants regularly posted their entrepreneurship activities, first successes, entrepreneurship awards attained and positive motivations.

5.5 Linking findings to self-relevancy and attainability models

To investigate further attainability and self-relevancy (Lockwood and Kunda, 1997) of the provided role models, we analysed whether respondents were close to age, race and gender (Tesser, 1986) of the role models they named. According to Lockwood and Kunda, attainability implies that role models are older so that their success appears attainable by the time one has reached the age of the role model. For a role model to be attainable, they should thus not be of the same age as the respondent. Regarding self-relevancy, being of the same race and gender is supposed to have a positive impact on the role models' relevancy for the respondent (Tesser, 1986).

Similarity of a role model with respondent	Pre-workshop evaluation (R=21)	Post-workshop evaluation (R=39)	Follow-up evaluation (R=16)
	Responses	Responses	Responses
Same age	5	4	8
Same race	17	30	11
Same gender	12	16	10

Table VI. Similarity of respondents with their role models according to age, race and gender

Table 6 summarises the similarities between students and the named role models regarding age, race and gender in the pre-, post- and follow-up evaluation. The 'R' identifies the total number of role models named by students, since multiple responses were possible. In the pre-workshop evaluation, students primarily named 'star' types of role models. The most significant similarity they shared with them was their race. Most Nigerian students named black entrepreneurs, most of them Nigerians. The second most significant similarity was their gender: most male students chose male role models, but only few female students chose female models. This could be due to the perception of female entrepreneurs in Nigeria and consequently there are fewer female entrepreneurs in Nigeria known to the respondents. The question of gender falls beyond the scope of this study, but this appears to be an interesting development for future investigation. In line with the theory on attainability, age appeared to be the least significant aspect; having the same age would reduce attainability of the model. In the post-workshop evaluation, race remained the most significant similarity between students and their role models. In this evaluation, 'mentors' were the dominant type of role model named by students; those were visibly older than the participants and accordingly, age was the least significant similarity. In the follow-up evaluation, the 'neighbour' type role model was most dominant and, accordingly, there was greater proximity to the age of the role models. Herein lies a contradiction to Lockwood and Kunda's (1997) theory where role models of the same age may not be perceived as attainable.

6. Contributions to research

This small exploratory study provides empirical evidence of the influence of role models in entrepreneurship education as experienced by students in the Nigerian higher education context. Our paper contributes to an understanding of role models in education as follows:

- The use of famous examples in entrepreneurship education (***stars***) is particularly inspiring to learners *before* getting closer to entrepreneurship reality.
- When approaching the process of opportunity identification and development, role models are needed for learning from regional initiatives (***mentors***) and peer projects (***neighbours***).
- Consequently, the use of ***'mentors'*** to inspire student learners in an environment where they can meet, 'touch' and exchange with has a long-term inspirational impact. The highest impact was achieved through *real-life exchange* with *local entrepreneurs*. This might be due to the fact that students can better identify with their careers, but also to the fact that there was direct communication and exchange.

- The use of highly innovative examples (***inventors***) might be impressive and inspire creative thoughts at the time of learning, but is too distanced from students' realities and hardly remembered and so does not have a long-term impact.
- Most importantly, peer projects **(*neighbours*)** seem to have a long-term effect on students' inspiration. The idea of participation in the development and the closeness to peer projects might play an important role.
- **Attainability** (Lockwood and Kunda, 1997) seems less important than **self-relevancy** to inspire action and be remembered by learners. The key value lies less in the project itself than its inspirational impact on students' entrepreneurship activity and a stretching of their idea-horizon.

7. Implications and further research

In a three-staged approach, this research has investigated the use of role models to inspire student entrepreneurs in higher education with a particular focus on Nigeria as an emerging economy. This section now examines the potential implications of this study.

7.1 Implications for entrepreneurship education

Based on the results, we identified four types of role models and gained insight into how and why they inspired students at different stages of their entrepreneurship education. Our findings align with Lockwood and Kunda's (1997) social cognitive learning and Baden's (2014) theory of role models as inspiration. Our research outcome differed from Lockwood and Kunda's self-relevancy, being of the same race and gender could have made a positive impact on the students' entrepreneurial learning, particularly the 'neighbour' type role model. The use of role models makes an original contribution to the theory of entrepreneurship education in Nigeria and emerging economies, as well as the understanding that the closer the relationship of role models to students, the greater the impact on their entrepreneurial learning process.

7.2 Implications for higher education, practice and policy

In view of financial, material or societal constraints to attain role models, the result of this study suggests that role models can inspire student entrepreneurial activity. Entrepreneurship education in Africa is in development. It is hoped that the conceptual model developed and tested in this study can be applied in other African contexts or emerging economies in order to further develop our understanding of the relationship between role models in industry, higher education practices and government policy. This can then lead to improvement of entrepreneurial and educational support for providers of entrepreneurship education. The findings of this study show that the highest impact gained is from 'real-life' exchanges between students and entrepreneurs. The 'mentor' looks to serve a significant role in student entrepreneurship development in higher education. There is no doubt that much work is required to strengthen the relationship between higher education, industry and government. By involving local entrepreneurs in the development of curricula on entrepreneurship courses in Nigeria, students receive expert advice and guidance to help them develop their business ideas. In an environment where there is a constraint to funding and resources, the use of local entrepreneurial role models is a cost effective way of making/enhancing entrepreneurial education to be more relevant and applied, and it fosters collaboration between industry and educational establishments.

7.3 Further research

This research is highly contextual with an emphasis on Europe and Africa. Given the relatively small sample of the European students in this study, this paper only presents findings from the Nigerian students. In view of time and sample size constraints, it would be useful to do a longitudinal international study to compare the approaches taken by European and African higher education institutions in order to develop an understanding of role models in entrepreneurship education and entrepreneurial activity. Further study is needed to explore whether role models are the way forward to address the processes of student entrepreneurial learning in the context of entrepreneurship education in Nigeria, other emerging economies, and in particular the African context. Further work could also consider implications for collaboration between university and industry.

References

Abereijo, I.O. (2015). "Developing entrepreneurial competencies in university lecturers: Obafemi Awolowo University experience"; *KCA Journal of Business Management*, Vol. 6 No. 1, pp. 30-42.

Ăcs, Z. J., L. Szerb, and E. Autio (2014). "*National Systems of Entrepreneurship." In Global Entrepreneurship Development Index*, Kindle Edition: edited by Z. J. Ăcs, Z. J., L. Szerb, and E. Autio. CreateSpace Independent Publishing Platform.

Adejimola, A. and Olufunmilayo, T. (2009), "Spinning off an entrepreneurship culture among Nigerian university student: prospect and challenges", *African Journal of Business Management*, Vol.1, No. 3, pp. 80-88.

Ajzen, I. (1991) "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp.179-211.

Akande, T, (2014) "Youth unemployment in Nigeria: a situation analysis". www.brookings.edu/blog/africa-in-focus/2014/09/23/youth-unemployment-in-nigeria-a-situation-analysis. Accessed: 11/2/2018

Akhuemonkhan, I.A., Raimi, L. and Sofoluwe, A.O. (2013), "Entrepreneurship education and employment stimulation in Nigeria", *Journal of Studies in Social Sciences*, Vol. 3 No. 1, pp. 55-79.

Aladekomo, F.O. (2004). "Nigeria Education Policy and Entrepreneurship". *Journal of Social Sciences*, Vol. 9, Issue 2 pp. 75-83

Alarape, A. A. (2008) "Improving the Effectiveness of Entrepreneurship Programmes Designed for Owner-managers of Small Businesses" *Journal of Advances in Management*, University of Ilorin, Nigeria

Albornoz-Pardo, C. (2013), 'Is Business Creation the Mean or the End of Entrepreneurship Education? A Multiple Case Study Exploring Teaching Goals in Entrepreneurship Education', *Journal of Technology Management & Innovation*, Vol.8, No.1, pp. 1-10.

Anyansi-Archibong, C. (2010), "Entrepreneurship as a Critical and Missing Factor in Economic development of Poor Nations: A Systematic Analysis of Factors of Production" *The IUP Journal of Business Strategy*, Vol. 7, Issues 1&2, pp. 7-20.

Anyanwu, A. (1999), *New Perspective of Entrepreneurial Development*. Owerri: Klet-Ken Publishers

Aronsson, M. (2004), "Education matters – but does entrepreneurship education? An Interview with David Birch", Academy of Management Learning and Education, guest co-editors: Patricia G. Greene, Jerome A. Katz and Bengt Johannsson, Special Issue: *Entrepreneurship Education*, Vol.3, No.3, pp. 289–92.

Arora, P., Haynie, J., and Laurence, G. (2013), "Counterfactual Thinking and Entrepreneurial

Self-Efficacy: The Moderating Role of Self-Esteem and Dispositional Affect", *Entrepreneurship: Theory & Practice*, Vol.37, No. 2, pp. 359-385

Babatunde, S.A. (2016). "The Impact of Entrepreneurship Education on developing Entrepreneurial Graduates: A comparative study of similar Nigerian and UK Higher Education Institutions" PhD Thesis, Birmingham City Business School, Birmingham City University

Baden, D. (2014), "Look on the Bright Side: A Comparison of Positive and Negative Role Models in Business Ethics Education", *Academy Of Management Learning & Education*, Vol.13, No.2, pp. 154-170.

Baden, D. (2012, "The effect of normative beliefs on ethical intentions: Implications for Pedagogy", Paper presented at the EBEN Annual Conference, Barcelona.

Bandura, A. (1977). "Self-efficacy: Toward a unifying theory of behavioural change". *Psychological Review*, Vol.84 No.2, pp. 191-215

Béchard, J. P., and Grégoire, D. (2005). "Entrepreneurship education research revisited: The case of higher education". *Academy of Management Learning & Education*, 4, pp. 22-43

Blenker, P; Trolle, S.; Signe, E.; Frederiksen, H.; Korsgaard, S. and Wagner, K. (2014), *"How do we improve the methodological quality of enterprise education?"* Paper presented at the 3E conference, April 10-11, Turku, Finland.

Blenker, P., Dreisler, P., Faergeman, H. and Kjeldsen, J. (2006), *"Learning and teaching entrepreneurship: dilemmas, reflections and strategies"* In International Entrepreneurship Education; Fayolle, A. and Klandt, H. (eds.), Aldershot: Edward Elgar Publishing.

Carrier, C. (2007), *"Strategies for teaching entrepreneurship: What else beyond lectures, case studies and business plan?"* In Fayolle, A. (ed.) Handbook of Research in Entrepreneurship Education, Vol. 1, Cheltenham (UK): Edward Elgar, pp. 143–159.

Cotton, J., O'Gorman, C. & Stampfi, C. (2002). "*Can national education policies meet the call for more entrepreneur?*" A project supported by the European community (Project Number - FIN/00/C/P/RF/92650) (www.google.com); March, 2005

Cruess, S., Cruess, R., and Steinert, Y. (2008), *"Role modeling— Making the most of a powerful teaching strategy"*. BMJ (Clinical Research Ed.), 336, pp. 718–721.

DeTienne, D. and Chandler, G. (2004), *"Opportunity identification and its role in the entrepreneurial classroom: a pedagogical approach and empirical test"*, Academy of Management Learning and Education, Vol. 3, No. 3, pp. 242–57.

Draycott, M and Rae, D. (2011) "*Enterprise education in schools and the role of competency frameworks*", International Journal of Entrepreneurial Behavior & Research, Vol. 17 Issue: 2, pp. 127-145

Duke, J.E. (2006). "*Entrepreneurial strategy for the economic development of the Niger Delta Region of Nigeria: a study of selected projects/organizations in the region*", PhD Thesis, University of Calabar, Nigeria

Ekanem, N. F. (2010). *Management and Entrepreneurship: Two sides of the same coin*, Uyo: Abaam Publishing Company

Ekpoh, UI, and Edet, A.O. (2011). "*Entrepreneurship education and career intention of tertiary education students in Akwa Ibom and Cross River State, Nigeria*". International Education Studies, Vol. 4. No. 1, pp. 172-178

Economist Nigeria. (2013), *"FG to tackle unemployment with graduate entrepreneurship Scheme"*,http://theeconomistng.blogspot.com/2013/05/fg-to-tackle-unemployment-with-graduate.html [Accessed 7 December 2018]

Emmanuel, C.L. (2008). *Entrepreneurship: A Conceptual Approach*, Lagos: Pumark Nigeria Limited

Fayolle, A, and Gailly, B. (2008), 'From craft to science: Teaching models and learning processes in entrepreneurship education', Journal of European Industrial Training, 32, 7, pp. 569-593

Federal Ministry of Education (2004). National policy on education. Lagos : NERDC (FME/Federal Republic of Nigeria

Finkle, T., Kuratko, D. and Goldsby, M. (2006), *"An Examination of Entrepreneurship Centres in the United States: A National Survey"*, Journal of Small Business Management, Vol. 44, No. 2, pp. 184-206.

Fiet, J. (2000), *"The theoretical side of teaching entrepreneurship theory"*, Journal of Business Venturing, Vol. 16, No. 1, pp. 1-24.

Fowler, F. J., Jr (2009). *Survey research methods*. California: SAGE Publications, Incorporate

GEM (2012). *"An abundance of willing and able entrepreneurs encouraged by internal market openness but constrained by government programmes and regulations"*. Available at: http://www.gemconsortium.org/country-profile/93. (Accessed 4 June 2015)

Gibbs, A. (2002), *"In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge"*, International Journal of Management Reviews, Vol. 4, No. 3, pp. 213.

Gibbs, A. (1993), *"Enterprise culture and education understanding enterprise education and its links with small business, entrepreneurship and wider educational goals"*. International Small Business Journal, Vol. 11, No. 3, pp. 11-34.

Gorman G; Hannon, D; and King, W. (1997). *"Some research perspectives on*

entrepreneurship education, enterprise education and education for small business management: a ten year literature review". International Small Business Journal, Vol. 15 No. 3, pp. 56-77

Hannon, P. (2005), *"Philosophies of enterprise and entrepreneurship education and challenges for higher education in the UK"*, International Journal of Entrepreneurship and Innovation, Vol.6, No. 2, pp. 105- 114.

Hergenhahn, B. and Olson, M. (1993), *An Introduction to Theories of Learning*. 4th Edition. Englewood Cliffs, NJ: Prentice Hall.

Ibarra, H. (1999). *"Provisional Selves: Experimenting with Image and Identity in Professional Adaptation."* Administrative Science Quarterly Vol. 44 No. 4, pp. 764-791.

Ibarra, H. and R. Barbulescu (2010). *"Identity as Narrative: Prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions."* Academy of Management Review Vol. 35 No. 1 pp. 135-154

Igbinedion, V. and Ehirheme, P. (2011) 'Enterprise Culture: An Educational Imperative for Nigeria Social, Economic and Cultural Re-engineering,' Ozean Journal of Applied Sciences 4, 1, pp. 83-89.

Inegbenebor, A. (2005), *"Education for Entrepreneurship: Experience at the University Benin, Benin City, Nigeria"*. Paper presented at the Inaugural Conference of the Academy of Management Nigeria, November 22nd and 23rd, Abuja, Nigeria.

Jones, B., and Iredale, N. (2010), *"Enterprise education as pedagogy"*, Education + Training, Vol. 52, No. 1, pp. 7-19.

Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., Mulder, M., & Mahdei, K.N (2013). *"Understanding role models and gender influences on entrepreneurial intentions among college students"*. Procedia-Social and Behavioral Sciences, Vol. 93, pp. 204-214

Katz, J.A. (1995). *A psychological cognitive model of employment status choice"*. Entrepreneurship Theory & Practice. Vol. 17 No. 1, pp. 29-37

Kent, C.A. (1990). "*Entrepreneurship education at the collegiate level: a synopsis and evaluation*". In: Kent, C.A. (ed) Entrepreneurship Education, New York: Quorum Books

Lockwood, P. and Z. Kunda (1997*), "Superstars and Me: Predicting the Impact of Role Models on the Self" Journal* of Personality & Social Psychology, Vol. 73, No.1, pp. 91-104.

Lockwood, P. and Kunda, Z. (2000), *"Outstanding role models: Do they inspire or demoralize us?"* In A. Tesser and R. Felson (Eds.), Psychological perspectives on self and identity, Washington, DC: American Psychological Association. pp. 147–171.

Lockwood, P, Jordan, C, & Kunda, Z (2002), *"Motivation by Positive or Negative Role*

Models: Regulatory Focus Determines Who Will Best Inspire Us", Journal Of Personality & Social Psychology, Vol. 83, No. 4, pp. 854-864.

Lockwood, P. (2006). *"Someone like me can be successful: Do College students need same gender role models?"* Psychology of Women Quarterly, Vol. 30, pp. 36–46

Lundqvist, M; Middleton, K.W, K; and Nowell, P (2015*). "Entrepreneurial identity and role expectations in nascent entrepreneurship"*, Industry and Higher Education Vol. 29 No. 5, pp. 327-344

Mariano, J.A; Gorgievski, M; Laguna, M; Stephan, U. and Zarafshani, K. (2012*). "A Cross-Cultural Approach to Understanding Entrepreneurial Intention"*. Journal of Career Development, Vol. 39 No. 2, pp. 162-1135

Matlay, H. (2005), *"Researching entrepreneurship and education: Part 1: what is entrepreneurship and does it matter?"*, Education + Training, Vol. 47 Issue: 8/9, pp. 665-677,

Matlay, H. (2008) *"The impact of entrepreneurship education on entrepreneurial outcomes"*, Journal of Small Business and Enterprise Development, Vol. 15 Issue 2, pp. 382-396

Mathieson, S. (2015). *"Student learning"*. In : Fry, H; Ketteridge, S. and Marshall, S. (ed). A Handbook for teaching and learning in higher education enhancing academic practice. London : Routledge, pp. 63-79

Mensah, M.S.B. (2013), *"Entrepreneurship education on wholesale? Considerations on didactics and pedagogy for enhanced graduate employment in Ghana "*, European Journal of Business and Management, Vol. 5 No. 15, pp. 105-113.

Milner, A. (2012). *"Training of entrepreneurs and future challenges for indicator construction"* In : Kotzeva, M. and Schmiemann, M. (ed) Entrepreneurship determinants: culture and capabilities, Luxembourg: Publications Office of the European Union, pp. 56-74

Mueller, S. and Anderson, A. (2014), *"Understanding the entrepreneurial learning process and its impact on students' personal development: A European perspective"* The International Journal of Management Education Vol. 12,No. 3 pp. 500-511.

Mueller, S. (2012), *"The mature learner: Understanding entrepreneurial learning processes of university students from a social constructivist perspective*". Dissertation published at the Robert Gordon University, Aberdeen, Scotland

Mungai, E. and Velamuri, S. (2011), *"Parental Entrepreneurial Role Model Influence on Male Offspring: Is It Always Positive and When Does It Occur?"* Entrepreneurship: Theory & Practice Vol. 35, No. 2, pp. 337-357.

Murnieks, C. and Mosakowski, E. (2007). *"Who Am I? Looking Inside the 'Entrepreneurial Identity"***.** Babson College Entrepreneurship Research Conference (BCERC) 2007 Frontiers of Entrepreneurship Research, Dec 2007, pp. 1-14

Mustafa M, J., Hernandez, E., Mahon, C., & Chee, L.K. (2016), *"Entrepreneurial intentions of university students in an emerging economy"*. Journal of Entrepreneurship in Emerging Economies, Vol. 8 Issue 2 pp. 162 - 179

Nwachukwu, C.C. (1990). 'The Practice of Entrepreneurship in Nigeria, Onitsha'; Africana-First Publishers Limited

Nwambam, A. S ; Nnennaya, O.O ; and Nwankpu, I.S. (2018) *"Evaluating the Entrepreneurship Education Programme in Nigeria Universities for Sustainable Development"*. Journal of Entrepreneurship Education, Vol. 21, Issue 1, pp. 1-13

National Bureau of Statistics 2018. "Unemployment and under employment report – Q4" 2016. www.nigerianstat.gov.ng

National Universities Commission (NUC), Nigeria. [Online] Available at: http://www.nuc.edu.ng/ [Accessed 7 December 2018].

Nyadu-Addo, R. and Mensah, M.S.B. (2018) *"Entrepreneurship education in Ghana – the case of the KNUST entrepreneurship clinic"*, Journal of Small Business and Enterprise Development, Vol. 25 No. 4, pp.573-590.

Ogundele, D. (2006), *"Entrepreneurship studies and development in Nigeria: the missing link"*, Lagos Organisation Review Vol. 2, No. 4, pp. 69-74.

Olarenwaju, O. and Olabisi, Y. (2012), *"Women's Access to Entrepreneurial Resources in Informal Economy: a Qualitative Analysis of Yoruba Women Textile* Traders Access to Entrepreneurial Resources at Balogun Market, Lagos - South-West, Nigeria", Economic Insights - Trends & Challenges, Vol. 64, No. 3, pp. 30-43.

Ormrod, J. (1999), *Human Learning*. 3rd Edition. Upper Saddle River, NJ: Merrill.

Paice, E., Heard, S., and Moss, F. (2002), 'How important are role models in making good Doctors?' BMJ 325, pp.7 07-710.

Peng, Z., Lu, G. and Kang, H. (2012), *"Entrepreneurial Intentions and its Influencing Factors: A Survey of the University Students in Xi'an China"*. Creative Education, Vol. 3 (Supplement): pp. 95-100.

Pittaway, L. & Cope, J. (2007). *"Entrepreneurship Education: A Systematic Review of the Evidence"*. International Small Business Journal 2007; Vol. 25 No. 5, pp. 479, 510

Rae, D. (2000). *"Understanding entrepreneurial learning: a question of how?"* International Journal of Entrepreneurial Behaviour & Research, Vol 6, No. 3,

Rae, D. (2006). *"Entrepreneurial learning – a model for technology based entrepreneurs"*. Technology Analysis & Strategic Management, Vol.18, No.1

Radu, M. and Loué, C. (2008), *"Motivational impact of role models as moderated by "Ideal"*

vs. “ought self-guides” identifications’, Journal of Enterprising Culture Vol.16, No. 4, pp. 441-465.

Rahman, H. (2014). *“Involving the entrepreneurial role model: a possible development for entrepreneurship education“*. Journal of Entrepreneurship Education, Vol. 17, No. 2, pp. 163-171

Ronstadt, R. (1990). *“The educated entrepreneurs: A new era of entrepreneurial education is Beginning“*. In C.A. Kent (Ed.) Entrepreneurship education: Current developments, future directions, pp.69-88. New York: Quorum Books

Saunders, M., Lewis, P. and Thornhill, A. (2012), *Research Methods for Business Students*, 5th edition, Pearson Education India.

Shapero, A. (1975), *“The displaced uncomfortable entrepreneur“*, Psychology Today, Vol. 9, November, pp. 83-88.

Shapero, A. and Sokol, L. (1982), *“The social dimensions of entrepreneurship*“, Encyclopaedia of entrepreneurship, pp. 72-90. Englewood Cliffs, NJ: Prentice Hall.

Shapiro, E. Heseltine, F. and Rowe, M (1978). *“Moving up: Role models, Mentors and the ‘Patron System“*. Sloan Management Review, Vol. 6 No. 1, pp. 19-47.

Singh, V; Vinnicombe, S; and James, K. (2006) *“Constructing a professional identity: how young female managers use role models“* Women in Management Review, Vol. 21, Issue 1, pp. 67-81

Siyanbola, W.O; Afolabi, O.O; Jesuleye, O.A; Egbetokun, A.A; Abiodun, A; Dada, A.D; Aderemi, H.O; Sanni, M. and Razak, M. (2012). *“Determinants of entrepreneurial propensity of Nigerian undergraduates: an empirical assessment“*. International Journal of Business Environment, Vol. 5 No. 1, pp. 1-29

Solesvik, M.Z; Westhead, P; Kolvereid, L. and Matlay, H (2012*). “Student intentions to become self-employed: the Ukrainian context“*. Journal of Small Business and Enterprise Development, Vol. 19 No. 3, pp. 441-460

Solomon, G. (2007), *“An examination of entrepreneurship education in the United States“* Journal of Small Business and Enterprise Development 14, 2, pp. 168-182.

Streeter, D. and Jaquette, J. (2004) *“University-wide entrepreneurship education: alternative Models and current trends“*. Southern Rural Sociology, Vol. 20, No. 2, pp. 44-71

Souitaris, V, Zerbinati, S, and Al-Laham, A (2007). *“Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources“*. Journal of Business Venturing, Vol. 22 No. 4, pp. 566-591

Sukavejworakit, K., Promsiri, T. and Virasa, T. (2018). *“OETEL: An Innovative Teaching Model for Entrepreneurship Education“*. Journal of Entrepreneurship Education, Vol. 21 No. 2: pp. 1-11.

Tkachev, A . and Kolvereid, L. (1999), *"Self-employment intentions among Russian students"*, Entrepreneurship & Regional Development, Vol. 11, No. 3, pp. 269-280,

Tesser, A. (1986). *"Some effects of self-evaluation maintenance on cognition and action"*. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: Foundations of social behavior*, pp. 435-464. New York, NY, US: Guilford Press

Van Auken, H; Stephen, P; Fry, F.L, and Silva, J (2006). *"Role model influences on entrepreneurial intentions: a comparison between USA and Mexico"*, Entrepreneurship Management, 2, pp. 325-336

Verzat, C., Byrne, J. and Fayolle, A. (2009), *"Tangling With Spaghetti: Pedagogical Lessons From Games"*, Academy of Management Learning & Education, 8, 3, pp. 356-369.

Wennberg, K, Pathak, S, and Autio, E. (2013*), "How culture moulds the effects of self-efficacy and fear of failure on entrepreneurship"*, Entrepreneurship & Regional Development, 25, 9/10, pp. 756-780.