ENTREPRENEURSHIP EDUCATION, TEACHER PREPARATION AND PEDAGOGICAL ISSUES

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Abstract  
The teacher-centered, content-oriented teaching approach has become inappropriate to the changing environment of the 21 century. Teachers are expected to produce not just job seekers but job creators but unfortunately are not facilitated to do so. In this difficult situation, there is a growing awareness that a traditional academic education is inadequate to equip young people with the knowledge and skills they will need to be self reliant and an entrepreneur. In order to meet this challenge, an increasing number of countries are introducing Entrepreneurship Education. This, therefore, calls for entrepreneurship education for teacher preparation in Nigeria.

The present article after making a review of pedagogy for Entrepreneurship critically examines teacher education for entrepreneurial education and charts out the path for Entrepreneurship education in school curricula and related pedagogy. Interview with teachers showed that most institutions did not prepare for entrepreneurship; it was found that teachers can’t undertake the teaching of entrepreneur alongside subject matter teaching and also to establish professionalization in entrepreneurial teaching in Nigeria. It was recommended that the federal government should encourage the teaching entrepreneurial education and make it operational at all level of the Nigerian Education.

Introduction  
Nigeria, the most populous country in Africa, is naturally endowed with millions of acres of arable land, 38.5 billion barrels of stated oil reserves, vast gas reserves, a variety of unexploited minerals, and a wealth of human capital by virtue of its estimated population of 150 million (Arunma, 2009). Nigeria is also one of the top three countries in the world that have the largest population of poor people. In addition, Nigeria remains off track on achieving the Millennium Development Goals (MDGs), including the goal of halving the number of people who live in extreme poverty. The economic reforms have not been sufficient to reverse years of economic decline, deteriorating capacity, weakened institutions and inadequate infrastructure.
investment while the recent dramatic stock market decline and banking crisis, and the global economic crisis have accentuated the situation (Arunma, 2009).

In large parts of Africa, the formal economy is weak. Millions of young school leavers on the continent fail to find formal employment in an environment where jobs are scarce. For many of them, post primary education for various reasons is not an option. Their only alternative is to make a living in the informal sector. Without relevant qualifications for self-employment, the outcome is generally meager. In this difficult situation, there is a growing awareness that a traditional academic education is inadequate to equip young people with the knowledge and skills they will need to improve their chances of a decent life.

In order to meet this challenge, an increasing number of countries are introducing Entrepreneurship Education (EE). Previous research has shown the essential role that education plays in the development of such mindsets, and in particular the central role that teachers play in this process requires nothing less than a sea change in the approach to education, emphasising active learning and the provision of new experiences for students outside of the classroom. For many education systems this represents a fundamental shift away from traditional approaches.

Teachers are in the middle of these changes. They need to be equipped with the right skills, knowledge and attitudes to be able to provide their students with the new curricula, pedagogies and learning environments. Teachers need to be trained for the task. This training support the view of Saurio (2003). He opined that before entrepreneur can become a way of life in any country there is need for pre-incubation. That is, entrepreneurship needs to be learnt and not just learning but by actually being involved in business. He classified the activities in to three stages: learning to understand entrepreneurship, learning by actually being involved in business and learning to do business. (Saurio, 2003). Having understood the critical stage Nigeria is presently, this study intends to shine its beam on what an entrepreneur truly is, entrepreneurship education, implication for new role of teacher to participate in the entrepreneurial education, what shape should an entrepreneur school take, what we should expect from a child that has attended the entrepreneur school, how it should be taught, the role of the government and institution of higher learning in entrepreneurship.

**What then is Entrepreneurship**

The concept of Entrepreneurship has long been debated and used in various ways. Even today there is no unanimity on what this term exactly means and who an entrepreneur is. Richard Cantillon was the first to use the term ‘entrepreneur’ and defined it as ‘one who buys factors of production at certain prices, and sells his products at uncertain prices. In a bit further to explain entrepreneurship, Schumpeter (1949) advocated a dynamic theory of entrepreneurship wherein he considered entrepreneurship as the catalyst that disrupts the static flow of the economy and thereby initiates and sustains the process of development. He differentiated between inventors and innovators. An inventor produces new ideas and an entrepreneur implements them by commercialising them. Entrepreneurs are not always born and thus, people can be cultivated or trained to become one.

**What is Entrepreneurship Education**
Recent thinking has shown that narrow definitions based around preparing learners for the world of business may place limitations on both learners and the teaching community. Instead, a broader definition which sees entrepreneurship education as a process through which learners acquire a broad set of competencies can bring greater individual, social and economic benefits since the competences acquired lend themselves to application in every aspect of people’s lives. Entrepreneurship in this sense refers to an individual's ability to turn ideas into action. It includes creativity, innovation, showing initiation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs establishing a social or commercial activity. Entrepreneurship education is thus about life-wide as well as lifelong competence development as well as contributing to Nigerian competitiveness, entrepreneurship education will also help to ensure a number of positive social benefits. The entrepreneurship key competence plays a vital role in Vision 2020 as a consequence.

On this note, Gibbs (1996) proposed three main reasons for the need to pay attention to Entrepreneurship, namely;

- Job creation and economic development
- Strategic adjustments and realignment
- Deregulation and the privatization of public utilities and state-owned enterprises.

The first category deals with creating awareness among students and apprising them of the requirements for setting up and running a business. This usually takes a theoretical perspective. In the next category, education deals with preparing aspiring entrepreneurs to become self-employed and run their own business. The third category of entrepreneurship education focuses on training recognized entrepreneurs for growing their firm to the next level, become bigger in size or become a high growth company.

**Implications … a new role for Teachers to Participate in Entrepreneurship Education**

What do such developments imply for the practices of teaching and learning and hence for teachers? The development of the entrepreneurship key competence is not simply a question of knowledge acquisition. Since entrepreneurship education is about developing the ability to act in an entrepreneurial manner, attitude and behaviours are perhaps more important than knowledge about how to run a business. In short, entrepreneurship education means developing a culture which is through, for and about entrepreneurship. Such competencies are best acquired through people-led enquiry and discovery that enable students to turn ideas into action. They are difficult to teach through traditional teaching and learning practices in which the learner tends to be a more or less passive recipient. They require active, learner-centred pedagogies and learning activities that use practical learning opportunities from the real world. Furthermore, since entrepreneurship education is a transversal competence it should be available to all students and be taught as a theme rather than as a separate subject at all stages and levels of education. Clearly, the implication of these changes for teachers is substantial. They mean nothing less than a new role for every teacher: that of ‘learning facilitator.'
These changes will require significant changes in the way teachers themselves are educated. Research carried out by the Education Trust Fund shows that the core skills and values linked to entrepreneurship education are seldom a priority in initial teacher education programs (such as National Certificate in Education). Creativity is not fully embedded into these programs and there are significant variations in the way programmes are run across colleges of education. Approximately 90% of teachers say that they would like to receive some further training on creativity. Teachers also feel that educational and school cultures do not fully support them in fostering creative and innovative approaches to learning; this requires time to explore new approaches and a culture that encourages experimentation and allows for failure—in short, an environment that itself embodies the characteristics of entrepreneurialism. Teachers thus need support throughout their careers, in their initial education, their continuing professional development and in their day-to-day work (European Union, 2011).

**What Shape Should An Entrepreneurial School Take?**

An entrepreneurial school would have a number of characteristics. Some of these might be developed early on in a school’s ‘journey’ to becoming entrepreneurial; others would take more time. Their exact form would depend on policy and practice of the wider education system, so here we summarise the more generic aspects.

First, an entrepreneurial school would possess a clear vision and policy for entrepreneurship education which expresses it as an entitlement for all pupils. To achieve this, school leadership teams would consult all staff, clearly identifying and agreeing their own understanding and definition of entrepreneurship education, appropriate for the institution. Communication, debate and dialogue with staff are important in developing a shared understanding of what entrepreneurship education means for the school.

In order to develop its approach to entrepreneurship education the school would undertake an audit of existing activity: schools are typically already carrying out a range of activities which are characteristic of entrepreneurship education and identifying these helps build understanding and overcome teacher concerns by demonstrating that much of what they already teach and the way in which they teach it has a good fit with the entrepreneurial approach.

To establish entrepreneurship education as a clear and defined entitlement for all pupils, a range of strategies and procedures can be used, e.g. an agreed list of annual activities, specific timetabling, use of a pupil diary, a school schedule, etc. Reference to entrepreneurship education should appear through explicit references in a number of curriculum policies.

The entrepreneurial school would also be clear as to how entrepreneurship should be introduced to pupils, discussing it with them well before activities take place. It is part of the ethos of entrepreneurship education that pupils are made aware of why they are involved in entrepreneurship activities, and of the intended learning outcomes and longer term benefits of developing entrepreneurship capabilities. All entrepreneurship education activities should be preceded by a structured briefing in which the purposes of the activity are explained and the intended learning outcomes are defined, emphasising the applicability of entrepreneurial skills throughout life, not just at work, and also the ethical aspects.

The entrepreneurial school would explicitly identify time for entrepreneurship education in the school timetable. This would include time identified within the ‘normal’
curriculum across a broad range of subject areas, and also opportunities created through collapsing the timetable, operating ‘themed’ sessions and, in addition, extra-curricular activities.

What Should We Expect From a Child Who Has Attended An Entrepreneurial School

Since Kwiatkowski (2004) opines that skills, knowledge and behavioural/emotional attitudes linked to entrepreneurship can be fostered and nurtured through learning processes, attitudes such as being visionary, creative, passionate or imaginative should be expected from a child that has attended an entrepreneurial school. An entrepreneurial child or learner would be able to identify, link and exhibit range of knowledge, skills and attitudes that are often associated with entrepreneurship behaviour or entrepreneurial persons. This summary is presented in Table 1 below identifies knowledge and skills expected from any one taught in an entrepreneurship school and the behavioural attitude following.

<table>
<thead>
<tr>
<th>Knowledge and Skills</th>
<th>Behavioural/\Affective Attitudes</th>
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<tbody>
<tr>
<td>- Ability to organise a new business</td>
<td>Creativity / innovativeness</td>
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<tr>
<td>- Ability to make decisions and develop strategies</td>
<td>Sense of initiative</td>
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<td>- Ability to find resources</td>
<td>Pro-activity</td>
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<tr>
<td>- Broad understanding of the workings of the economy and the opportunities and challenges facing an employer or organisation</td>
<td>Independence</td>
</tr>
<tr>
<td>- Ability to identify and grasp available opportunities for personal, professional and/or business activities</td>
<td>Risk taking</td>
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<tr>
<td>- Awareness of ethical values and promotion of good governance</td>
<td>Convincing / persuasive</td>
</tr>
<tr>
<td>- Ability to work both as an individual and collaboratively in a team</td>
<td>Desire for independence</td>
</tr>
<tr>
<td>- Ability to judge and identify one’s strength and weaknesses</td>
<td>Motivation and determination to meet objectives</td>
</tr>
<tr>
<td>- Ability to assess and take risks as and when warranted</td>
<td>Need for achievement</td>
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<tr>
<td>- Networking skills</td>
<td>Daring / courageous</td>
</tr>
<tr>
<td>- Creativity / innovativeness</td>
<td>Willingness to face uncertainty</td>
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<tr>
<td>- Sense of initiative</td>
<td>Open-minded to opportunities or solutions</td>
</tr>
<tr>
<td>- Pro-activity</td>
<td>Assertiveness</td>
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<tr>
<td>- Independence</td>
<td>Passionate</td>
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<tr>
<td>- Risk taking</td>
<td>Visionary</td>
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These knowledge, skills and attitudes can be encouraged in the context of education and training. They can of course also be achieved through other means (leisure activities, participation in sport, family environment, etc.). There is little consensus on how certain skills, knowledge and attitudes are (best) acquired. However, the idea behind entrepreneurship
education is that methodology of training has a role to play in strengthening and encouraging these skills and attitudes and providing the related knowledge.

**How Can Entrepreneur Be Taught**

The successful implementation of entrepreneurship education also depends on the pedagogies used in the classroom. As shown by Gibb (2005), entrepreneurship education requires that an emphasis be put on pedagogies that allow students to experience and feel the concept. In order to do so, the learning context needs to be adequate (Gibbs, 2005). In particular, an adequate learning context for entrepreneurship education is defined by Gibb (2005) as follows: the learning environment is controlled and students do not feel insecure during the learning processes. At the same time, the learning process is flexible, interactive, based on multidimensional knowledge development and mistakes are regarded as a part of the learning process.

With regard to the pedagogical methods, Seikkula-Leino (2007) has identified several pedagogical methods for entrepreneurship education. These are, *inter alia*, co-operative learning, problem-based learning, group and peer work, project work, learning by doing, pedagogical drama and learning diaries as well as twin classes, mini-companies, study tours, field visits and inviting visitors to school.

Figure 2 below shows the working methods of entrepreneurship education and how these relate to the skills, knowledge and attitudes addressed by entrepreneurship education.

**Skills, knowledge and attitudes of entrepreneurship education and related pedagogy**

![Diagram of skills, knowledge, and attitudes](Source: Entrepreneurship Education; Anette (2011))

As shown in figure2 above, some working methods are specifically adequate for supporting the acquisition of certain skills and knowledge (e.g. mini companies and field visits for entrepreneurship related knowledge and skills), whilst other working methods can equally be...
applied to the acquisition of several types of skills and attitudes (e.g. learning by doing, project work, problem based learning). Given the wide range of skills, knowledge and attitudes that entrepreneurship education aims at fostering, it is then crucial that a mix of working methods should be used in the classroom.

From observation it appears that most authors tend to agree on the aims of entrepreneurship education. By and large, entrepreneurship education has three objectives:

▪ Equip individuals with the necessary skills, knowledge and attitudes which will allow them to take responsibility of their own learning, career and life. This includes skills such as responsibility for learning, self-awareness and attitudes such as self-drive, motivation, self-confidence and individual responsibility;

▪ Increase individuals’ awareness of and alertness to the outside world, the economy, opportunities and changes in general. This aim entails the acquisition of knowledge (e.g. knowledge of the economy and business world) and specific attitudes (e.g. awareness of and positive attitude towards entrepreneurship and change in general);

▪ Encourage and support entrepreneurial and enterprising behaviour and hence innovation. This entails skills (e.g. creativity and innovation, capacity to discover existing opportunities, cooperation), knowledge (e.g. starting and running a business) as well as attitudes (e.g. sense of initiative).

Several skills and attitudes addressed by entrepreneurship education are not specific to entrepreneurship education alone, but are developed through many other means, which including a range of education and training activities that do not have to be labeled as entrepreneurship education. Distinguishing between the aims of entrepreneurship education and those of other types of education may hence be difficult in certain education contexts. Similarly, certain types of education, although not called entrepreneurship education may actually constitute entrepreneurship education since they aim at fostering skills and attitudes linked to entrepreneurship education. This means that entrepreneurship education is often conceptualised as being embedded in different subject-specific teaching as a cross-curricular competence (rather than subject specific one). On the other hand, some knowledge may need to be acquired through subject specific teaching of entrepreneurship. Furthermore, it can be argued that the content, aims and methods of entrepreneurship education vary according to the level of education and the target group: in certain respects, they will be radically different in primary education than in higher education.

The Role of Government and Higher Institutions of Learning on the Success of Entrepreneurship in Nigeria.

The Role of Government
In the complex economic environment in which most individuals operate, not only is the role of government in entrepreneurship self evident, there is also a considerable room for government to facilitate entrepreneurship in a non-interventionist way. A smooth-running market economy is the best way to encourage entrepreneurship rather than direct support. For instance, the role of government can be to provide business-friendly infrastructure by providing a framework of enforceable competition law that discourage monopolies and unfair competition as well as by
intellectual property rights that protect a firm’s valuable, but often intangible, knowledge assets. Many governments view the entrepreneur as the solution to weak economic performance and job creation. What remains a challenge is a better understanding of the factors that determine entrepreneurship and the environment that motivates and supports the growth of entrepreneurs. However, knowledge of the primary catalyst for entrepreneurship is essential for understanding the microeconomic foundations that will lead to growth in emerging economies.

1. **Creating an enabling environment for innovation and entrepreneurship:**
The very nature of innovation means that entrepreneurs will either take advantage of existing gaps or forge into new territories. Either way, creating an enabling environment that lowers the barriers to market entry will certainly spur entrepreneurship. To achieve this objective, entrepreneurship should be integrated into the country’s economic development efforts by:
- Making entrepreneurship part of the explicit mission of the country’s economic development efforts;
- Creating support mechanisms for entrepreneurs through the establishment of economic development programs that target entrepreneurs;
- Using entrepreneurial, capital, and research networks to deliver services for entrepreneurs.

By integrating entrepreneurship into the country’s development efforts, government lends credibility and draws attention to the role of entrepreneurs allowing them to gather the momentum required to enable them actively participate in the transformation of the economy.

2. **Offering incentives that foster entrepreneurship:** Numerous examples indicate that access to reliable and steady sources of funding is essential to entrepreneurial growth and sustainability. By establishing a framework that encourages the funding of new ventures, government can help ensure that solutions that work will sustain and grow their impact. To achieve this objective, government needs not only to invest in diverse sources of risk capital to fund entrepreneurs, but also to provide the fiscal incentives for investors to provide funding by:
- Developing a rich base of early-stage capital options to fund entrepreneurs;
- Supporting and incentivizing angel investors;
- Ensuring that risk capital is available to the wider society to broaden and enhance entrepreneurial capacity.

3. **Taking successful approaches to scale:** Expanding the reach of a proven solution is often critical if the solution is to become truly transformative. Having observed the difficulties while recognizing and supporting the funding to scale of successful initiatives; government can play a crucial role in expanding the reach of solutions that works by ensuring that knowledge is produced with clear standards and with easily accessible data. Building a repository and disseminating information on what works and what does not. Building entrepreneurial readiness through offering entrepreneurship education in the curriculum. Supporting faculty entrepreneurship in the higher education system.

The Role of Institutions of Higher Learning.
This section reflects the multiple dimensions in which institutions of higher learning promote entrepreneurship. Universities have tremendous impact on innovation and entrepreneurial development. Notable universities that have played this catalytic role in the United States include Stanford and Silicon Valley, University of Texas and Austin; University of North Carolina and Research Triangle. Harvard University and Massachusetts Institute of Technology also illustrate how universities can also serve as a source for talent and ideas, serving as economic magnets for investments, entrepreneurs and talent to a region. Universities equally serve an important networking function connecting innovators across a region through their incubators and technology parks. In developed countries, many entrepreneurs start up their companies at their universities precisely because they can have continued access to knowledge and talent. In addition, many universities have restructured their research capabilities to be more responsive to local industries, setting up specialized research units, joint cooperative ventures, or interdisciplinary projects.

Higher education institutions certainly have a unique and vital role to play in their interaction with the three levels - macro, firm and individual - of entrepreneurship. First, higher education institutions can partner with governments in developing the required strategy for fostering entrepreneurship both at the individual and the firm level. Also critical is the role of higher institutions in originating the content and setting the tone for developing the policy and institutional framework for entrepreneurship.

Second, there is the imperative of dramatically scaling up the quantity and quality of higher education across different disciplines and striving to become world class. Within that context, in addition to the disciplines of science, engineering, entrepreneurship should be promoted. There is very little consensus on the precise contours of entrepreneurial education. The many facets of entrepreneurial education include raising awareness of the central concepts about entrepreneurship by teaching students about entrepreneurs and their individual experiences. A broader view of entrepreneurial education includes encouraging the attributes of successful entrepreneurs by equipping students with the skills and knowledge to start a successful business. A third facet would relate to using the process of the creation of new ventures to help students acquire the range of business skills required to run a successful business. Higher education has the potential not only to teach about entrepreneurship, but also nurture the qualities of entrepreneurship.

Third, a critical role for institutions of higher education is to promote innovation by supporting academic and research activities, often with historical antecedents and far reaching impact beyond their immediate vicinity. Similarly, business and institutions of learning can partner to nurture innovation and entrepreneurship. Germany was the pioneering country where the university/industry relationship helped create the pharmaceutical industry in the early 19th century. Institutions of higher education fuel a more knowledge-intensive approach to development, a viable option for many developing countries and possibly the only route to sustained, outward-oriented development.

Fourth, traditionally, institutions of higher education conducted basic research that contributes to underlying scientific understanding, leaving the process of converting research results to commercial products to the private sector. Recently, institutions of higher education have experienced the limitations of licensing technologies to industry and are forming private corporations from technology developed through their own research. For instance, Helsinki
University of Technology created Innopoli, a business incubator on its campus funded through various public and private sources. Technology-based business incubators managed by institutions of higher education present a myriad of options related to technology transfer, educational opportunities, and community development, creation of wealth and jobs, and scientific freedom. There are more than 4,000 business incubators in the world, according to the American National Business Incubator Association (NBIA). Through these business incubators, entrepreneurial institutions can create the social capital that can sustain development of intellectual capital in their regions and consequently foster the creation and growth of high technology firms that will lead innovation and wealth creation in that society.

Conclusion
From the discovery made so far, we can infer that the inclusion of entrepreneuring into Nigeria educational setting will upgrade people’s awareness and responsibility as well as giving the experts room to take full responsibility and to taking its good tiding to every school which will definitely make entrepreneuring the way of life of every Nigerian citizen. At the same time other subject teachers will not have to be juggling between two subjects in which they will find difficult to deliver the best.

Recommendation
- Federal governments are enjoined to re-awaken the sleeping Technical education for economic revival for national survival, by making the technical schools work again as of old thereby learners entrepreneurial skill would be sharpened to a marketable quality.

- The transition from junior secondary school to technical school and senior secondary school should be revisited.
- Emphasis should be laid on practicals and project work/assignment and higher scores should be attributed to it than theoretical aspect of subjects taught. This will encourage adequate knowledge of how things really work, and not just how things that work look like.
- Entrepreneurial programmes should be a continuous exercise to be staged at all level of Nigeria education.
- Effort should be made to see that home-made materials or products are valued even if they are not as good as the foreign ones but with time we will gain expertise.
- Federal government should make effort to link Nigerian industries with the educational systems so as to avoid waste of research ideas/works done in various Nigerian institutions which cannot be compared or competed with that of any research body in Nigeria.
- Career counselling should be encouraged and there should be no school without at least a Guidance Counsellor.

References


