

## YOUTHS EMPOWERMENT THROUGH THE DEVELOPMENT OF ENTREPRENEURIAL SKILLS IN BIOLOGICAL SCIENCE

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### Abstract

*Nigeria as a nation has an earnest vision popularly called the vision 20:2020, which implies that Nigeria should be one of the world 20 largest economies by the year 2020. But no Nation can attain such greatness without the full participation of its youths. As the most energetic and contemporary set of people who have the vigor to face the challenges of this millennium, youths need to be empowered in order to be fully engaged in meaningful development ventures. One of the effective and affordable means of empowering youths is by inculcating in them, entrepreneurial skills in their various fields of educational endeavors. Biology is one of the science subjects that is rich in entrepreneurship opportunities. This paper therefore highlights the concept of entrepreneurship, entrepreneurship opportunities, problems associated with teaching of entrepreneurship education in schools, and strategies to develop entrepreneurial skills in students so that when they graduate they are employable or self employed or employment providers and not as employment seekers. The paper concludes that all stakeholders' hands must be on deck to make sure youths are empowered and recommends that Government should make available in schools all equipment required for teaching of entrepreneurship and local Resource- Persons should be employed to teach entrepreneurship in schools.*

### INTRODUCTION

Nigeria like most other developing nations of the world is faced with myriad of problems and harsh realities which include poverty, unemployment, conflicts and diseases (El, 2012). These situations, which have unemployment as the worst, pose great challenges and threat to the realization of the Nigeria National Vision 20:2020. According to Ikeotuonye (2012), economic transformation blueprint of 2009 states that by the year 2020, Nigeria will have a large, strong diversified sustainable and competitive economy that will effectively harness the talents and energies of her people and responsibly exploit her natural endowment to guarantee a high standard of living and quality of life to her citizens. This therefore, calls for the training of youths, who are the major workforce of any country, in entrepreneurship skills in order to curb the menace of unemployment. This will boost and exploit their talents and energy needed by the country to emerge among those globally economically competitive nations of the world. The federal Bureau of statistics says the youths constitute about 70% of the country's 140 million people, of which more than 45% are unemployed (Anaja 2012). This buttressed Idoko, and Fagbemi's (2009) report that World Bank's claim that about 40 million Nigerian youths between 18 and 25 years were unemployed. According to UNFPA (2010), Nigeria has a population of 140 million people which makes her the most populated nation in Africa. One third of her population is young people between the ages of 10 to 24 years. As a giant of Africa, Nigeria has every course to integrate her academic programmes with entrepreneurial skills to reduce her alarming unemployment rate, which is spiraling upwards, growing at 16% per year. The youth of the nation are the most impacted, with a youth unemployment rate over 50% (Doreo Partners n.d.).

Despite these challenges, Nigeria hopes to be one of the 20 largest economies in the world by the year 2020, able to consolidate her leadership role in Africa and establish herself as a significant player in the global economic and political arena ([http://en.wikipedia.org/Nigeria\\_vision20:2020](http://en.wikipedia.org/Nigeria_vision20:2020)). This is a daunting task because according to Wasagu (2009) already the world has on ground a group of 20 world largest economies that Nigeria hopes to knock one out to join the group by 2020. This group is as listed on table 1.

**Table 1: 20 World Largest Economies**

1	Argentina	11	Japan
2	Australia	12	South Korea
3	Brazil	13	Morocco
4	Canada	14	Russia
5	China	15	Saudi Arabia
6	France	16	South Africa
17	Germany	17	Turkey
18	India	18	United Kingdom
9	Indonesia	19	United States
10	Italy	20	European Union

(Source: Wasagu 2009)

Meanwhile according to Wasagu (2009) similar dismal performance by Nigeria is observed in the ranking of countries by Human Development Index (HDI), where Nigeria ranks 32<sup>nd</sup> in Africa and 160<sup>th</sup> in the world. Human Development Index is a comparative measure of life expectancy, literacy, education, and standard of living for countries worldwide.

A country's economic competitiveness shows how well she is positioned to squeeze efficiency out of her business and attract companies and investments from around the world. Components of the resulting global competitiveness index range from the quality of a nation's roads to the independence of her judiciary; from the incidence of tuberculosis to how easy it is to hire an engineer. Parts of the index are culled from official data while others are drawn from a survey of 11,000 international business executives. (Al pan, 2008 cited in Wasagu 2009). On this index, Nigeria is not yet in the top 50 countries that are globally competitive, indicating that Nigeria has a long way to go to achieve vision 20:2020. But to Adewoye (2010) there is every need for elites to believe that Nigeria can be catapulted within a given short period of time, by sustaining GDP growth from 3.5% (2009) to 7% (2015) and 13.5% (2020). Poverty level reduced from 70% to 30% in 2020 (using \$2/day), Unemployment level of youths from 45% (2012) to 10% (2020).

In all nations of the world particularly in Nigeria, unemployed youths are idle and have turned to be the blind followers and cadets of political parties thereby contributing significantly to dramatic rise in social unrest and crimes (Dereo Partner (n.d.)). In a country where youth unemployment is at high level, social justice, equity among citizens as well as economic development of the nation is tilted, consequently the attainment of vision 20:2020 is a mirage, hence, the need to empower our youths who are the skeleton of the nation and as an engine room of the economy, through entrepreneurial skill in science (Nwogu, 2009). According to Commonwealth plan of action for youth empowerment 2007-2015, youth empowerment means creating and

supporting the enabling conditions under which young people can act on their own behalf, and on their own terms rather than at the direction of others (Rayhanul Islam 2012).

Entrepreneurship education become inevitable for as societies grow, no government of any nation can employ all her citizens nor serve all of them with three square meals but rather it can only direct and point to them where the job and food are respectively (Baruah (n.d)). To teach a child how to catch a fish is better than giving him/her fish to eat (Kubo 2010).

### **What is Entrepreneurship?**

Entrepreneurship is the act and art of being an entrepreneur or one who undertakes innovations or introduces new things in an effort to transform innovation into economic goods. Entrepreneur originates from French word "entrepredre" which means "to undertake" in a business context, it means to start business (Entrepreneurship; Wikipedia, the free encyclopedia). Quick MBA (2010) defines entrepreneur as a person of very high aptitude who pioneers change, possessing characteristics found in only a very small fraction of the population or anyone who wants to work for himself or herself. To Baruah (n.d.) entrepreneurship is a risk-taking factor which is responsible for the end result in form of profit or loss. Entrepreneurship reduces unemployment and poverty and it is a pathway to prosperity.

### **Entrepreneurship opportunities in biology:**

Entrepreneurship opportunities in biology include:

- Bee keeping or Apiculture
- Aquaculture
- Floriculture
- Horticulture and Gardening
- Poultry
- Livestock breeding and fattening

Source: Nwagbo & Onyegebu 2009

These activities can be integrated into the biology curriculum under relevant themes as follows:

**Bee keeping or Apiculture:** This is the act of preparing artificial hive to attract honey bees to colonize. Honey can then be extracted from the colonies for consumption and for sale. Honey when consumed can reduce respiratory allergies and asthma because of its pollen content-This can be treated under social insects.

**Aquaculture** - This includes fish farming, prawn farming, crab culture etc. Teachers should encourage their students to practice these activities in and out of school. Students could be taught to rear fish in aquariums, ponds etc, which can be sold in the local market or exported, depending on scale of production. Fish farming could be a lucrative vocation and can be practiced in all parts of Nigeria. This can be integrated under vertebrates study.

**Floriculture** - Growing of flowers for ornamental values such as landscaping.

Students could be encouraged to grow flowers in pots or empty containers. As institutions and individuals take more interest in landscaping their premises, this can provide good income for Nigeria's teeming youths. This vocation can be practiced under relevance of biology to agriculture.

**Horticulture and Gardening-** Growing fruits and vegetables for home consumption and for local markets. Small backyard garden in schools and homes can improve school income and nutritional contents of families respectively, thereby reducing incidence of deficiency diseases among children. This can be practiced under relevance of biology to agriculture.

**Poultry** - This involves rearing birds for human consumption and for sale. The by-products e.g. fecal droppings can be used as fertilizer in the family garden while eggs are sold to make money. This could be studied under reproduction in vertebrates (birds).

### **Strategies for Developing Entrepreneurial Skills among Youths in Schools**

Many authors have suggested ways of inculcating entrepreneurship skills in students at the primary, secondary and tertiary levels. Davis (1983) in Elechi (2009) suggested that educators should:

- Give simple explanations of market system to students in the early years of education and provide more in-depth discussions as the students move to higher levels.
- Analyze the market system, develop positive attitude towards it and begin to express values of the market system to society
- Introduce extra-curricular activities, which have a small business orientation like business fraternities, cooperative education programmes and students' chapters of professional associations.
- Use small business owners in educating youths in entrepreneurial skills

### **Problems of Entrepreneurship Education in Nigeria**

EI (2012) listed the following as the problems that hinder entrepreneurship education in Nigerian schools:

1. Poor knowledge-based economy and low spirit of competition
2. Lack of entrepreneurship teachers, materials and equipment
3. Unavailability of fund
4. Poor societal attitude to technical and vocational education
5. Inadequate facilities and equipment for teaching and learning

### **Conclusion**

The paper concludes that all stakeholders' hands must be on deck to make sure youths are empowered (trained) physically and morally so that they can be engaged in meaningful ventures that can uplift Nigeria to join the league of the developed world. It highlighted some of the areas in biology education where entrepreneurial skills could be developed in Nigerian school youth for personal and national economic development.

## Recommendations

The paper recommends that:

- i. Government should make available to the schools, all equipment required for teaching of entrepreneurship skills in sciences.
- ii. School authorities should employ local resource persons to teach entrepreneurship related topics together with regular subject teachers.
- iii. Entrepreneurship clubs should be established in schools for enlightenment and in communities for implementation.

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