REVITALIZING INTEGRATED SCIENCE EDUCATION AS ENTREPRENEURIAL SKILL DEVELOPMENT PANACEA FOR SUSTAINABLE SECURITY AND ECONOMIC DEVELOPMENT IN NIGERIA

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Abstract
The realization of sustainable security and economic development by the Nigeria government has remained a major challenge. Despite the various policies and programmes put by all levels of both past and present governments of Nigeria towards the arrest of the challenge, the ugly situations have continued to torment the Nigeria nation. This paper, therefore, aims at examining the place of integrated science Education and programme in entrepreneurial skills development, entrepreneurship as well as who is an entrepreneur. It also highlights Integrated Science Education and sustainable security, economic development challenges and causes of economic recession in Nigeria, plus some recommendations.

Keywords: Integrated Science Education, Entrepreneurial Skill Development, Sustainable Security and Economic Development

Introduction
The place of integrated science Education in addressing the challenge of entrepreneurial skills acquisition and development in Nigeria needs not to be overemphasized. Besides, integrated science education is reasonably vital in nation building when considering the important role(s) it plays in the different facets of the economy in terms of food production, manufacturing of chemical as well as non-chemical products, agricultural activities, etc. Education according to Tinam in Ukpai and Okoro (2010), is one of the instruments by which individuals are equipped to participate in the socio-economic and political life of a community and to make their contributions for promotion of social change.

The security and economic development in Nigeria today beg for attention and should be centered on the concept of sustainability which is strategic to safeguarding continued existence, safety, economic, social and environmental activities for both present and future generations. Sustainable development refers to development that affords well-being of the present generation and reserves exactly same level, measure or extent of welfare/well-being to future generations. In like manner, sustainable security implies security enjoyed by the present generation with exactly same measure of security be-quitted, left or reserved for on-coming or future generations to enjoy as well.

According to Longman Active Study Dictionary (2010), Economic means relating to trade, industry and the economy (management of money). This study, therefore, aims at proffering strategies to attaining sustainable security and economic development in Nigeria through the knowledge acquired from integrated science education vis-à-vis entrepreneurial skill development.

Integrated Science Education Programme
The philosophy of Integrated Science Education programme as contained in the (students’ handbook, 2017/2018 and 2018/2019) of School of Sciences, Alvan Ikoku Federal College of Education Owerri, was based on the fundamental assumptions that the student of
Integrated Science Education Programme is entitled to acquire profound theoretical and practical knowledge to equip him/her to face the challenges to national development, and meet the ups and downs of the global world. The Programme in Integrated Science Education provides a sound academic and professional content that are targeted at preparing qualified, dedicated and reliable Integrated Science teachers, who are knowledgeable in areas of Basic Science Education and Skillful in entrepreneurial activities, instructional designs and classroom management.

### Integrated Science

NCCE (2012), describe Integrated Science as that science which has not been disintegrated. Integrated science emphasizes those concepts which are common to all of science, the process of science and the skills associated with them. It also emphasizes inquiry into the nature of the environment. The great concepts of science such as energy, field and particle theories, conservation, balance and cycles in nature are not also left out as it is the relevance of science to everyday life.

The scientific method of inquiry can be learnt by everyone, and has cognitive and practical aspects. The cognitive aspects include the ability to formulate questions, to identify variables and design experiments, to interpret results, recognize patterns, generate hypothesis, draw conclusions and develop theoretical models. The practical skills required include general skills such as ability to observe and to measure, and more specialized skills in the handling and use of laboratory apparatus, living materials and chemicals.

Integrated science, like any other discipline, has many scholars, each seeing it from his or her perspective. To this end there is no one universal definition of integrated science. Bajah(1983) in 51st STAN Conference s2010, states it as approaches in which the concepts and principles of science are presented so as to express the fundamental unity of scientific thought and to avoid premature or undue stress on the distribution between the various scientific fields.

Arbon(1972) in 51st STAN Conference (2010), defined integrated science as a course of study which is devised and presented in such a way that students gain the concept of the fundamental unity of science, the commonality of approach to problems of scientific nature, and are helped to gain an understanding of the roles and functions of science in everyday life and the world in which they live.

### An Entrepreneur

Akanbi (2007) defines an entrepreneur as a person who attempts to make money with his or her initiative by taking risks and ultimately becoming robust business owner.

### Entrepreneurship

The concept of entrepreneurship has been explained by many authors in various ways. According to Hisrich and Peters (2002) in almost all the definitions of entrepreneurship, the common behaviours talked about includes: initiative thinking of organizing and reorganizing of economic mechanisms to turn resources into practical account as well as the acceptance of risks or failures. Price (2004) sees entrepreneurship as neither a science nor an art but a practice. Esomonu in 51st STAN Conference (2010) sees it as a clear manifestation of
effective manipulation of performance. Bechard and Toulouse in 51st STAN Conference (2010) define entrepreneurship as a collection of formalized teaching that informs trainers and educates anyone interested in participating in socio-economic development through a project to promote entrepreneurship awareness, business creation or small development.

**Entrepreneurial Skills Development**

According to Ezenwanne (2005), entrepreneurial skills are skills and competencies that will enable an individual seek and run an enterprise successfully. Also, he states that entrepreneurial skills are skills that are acquired through training that emphasize development of appropriate knowledge that enable an individual to maximize the resources around him or her within the limits of his/her capability.

Okaka in 51st STAN Conference (2010), observed that entrepreneurial success depends on possession of certain qualities in addition to the skills and knowledge concerning the technical aspects of owning a business. Such skills could be acquired through organized training and development. Rau, Wright and Murkherjee as cited in Ogundele (2006) stressed that the focus of economic development is entrepreneurial skills acquisition. They noted entrepreneurial skills as: development of entrepreneurial spirit, characteristics and personality, development of technological and professional competencies needed for productive work employment, development of enterprise-building and small business development capabilities to initiate and start one’s own business or self employment and development of managerial capability to run the business and other self employment activities successfully.

Ikeme (2007) noted that the idea of entrepreneurship development was necessitated by:
- High rate of graduate unemployment in Nigeria
- Lack of entrepreneurial spirit among school leavers in Nigeria
- High rate of poverty in Nigeria

**Integrated Science Education and Sustainable Security in Nigeria**

Integrated science education has great potentials in providing sustainable security to the Nigerian nation. Through Integrated Science Education, Knowledge for exploiting the environment as well as human activities such as soap making, fertilizer manufacture, domestic and industrial water treatments, chemicals manufacture, textiles making, and so on, could be acquired with consequences such as more food production, more employment creation, more economic emancipation, more engagement of the human mind, etc, all of these breed sustainable security since unemployment, insufficiency of food, ideal or less engaged human minds, etc, lead to insecurity, kidnapping, banditry, rapping of women, and other vices as being experienced in Nigeria today.

**Economic Development Challenges in Nigeria**

Allayi (2007) in 51st STAN Conference 2010 stated that the Federal Government of Nigeria established the National Economic Empowerment and Development Strategy (NEEDS) in 2005 as a response to the economic development challenges of Nigeria. The goal of NEEDS is to mobilize the resources of Nigeria to make a fundamental break with the failures of the past and bequeath a united and prosperous nation to generation to come.
NEEDS also recognizes education as the vital transformational tool and formidable instrument for socio-economic empowerment. Targets for achieving this goal among others includes: Ensure that 50% of tertiary education graduates acquire skills and knowledge to be self-employed, and wealth creators. By fashioning out small business management and entrepreneurship development courses to equip existing and would be entrepreneurs with necessary technical and managerial skills vis-a-vis revamping economic crisis and breeding sustainable economic development

Causes of Unsustainable Economic Development in Nigeria

From the Nigeria’s 2009 economic stimulus plan in Elechi (2010), the causes of economic depression in Nigeria, which in turn breed unsustainable economic development include:

- Over dependency of Nigeria on crude oil as a major source of income as against diversification into agriculture, solid minerals, etc. exploits, is a very big challenge stopping sustainable economic development attainment in Nigeria.
- Mismanagement of resources through misplaced priorities and corruption also have a share.
- Growing gap between the elites and non-elites which has given room for the rich becoming richer and the poor becoming poorer syndrome cannot be wished away.
- The changing dynamics of overpopulation is also affecting the Nigerian economy and by extension restricting her economic development from becoming sustainable.
- Over-borrowing of money from various foreign quarters by Nigerian government without channeling such money into asset creation ventures is adversely tormenting Nigeria economic development sustainability. One of the multiplier effects of such misplaced priorities is unending financial indebtedness for Nigeria.

Conclusion

Nigeria at the moment is faced with significant unsustainable security and economic development challenges that cannot be wished away. These challenges linked to security situation in Nigeria today include activities such as Kidnapping, Banditory, Arm-robbery, Rapping, Cyber crime, etc., whereas insufficiency of food production, poor healthcare, unemployment and underemployment, high rate of resources mismanagement, high cost of governance, non-functionality to full capacity of refineries, corruption, etc., are all anti-economic development in Nigeria.

Therefore, the highlights presented in this paper under the subheadings of Integrated Sciences Education, entrepreneurship and its skill development, causes of unsustainable economic development, economic development challenges plus integrated science and security, are all channels through which Nigeria could bequeath security and economic development to her on-coming generations, otherwise called sustainable security and economic development.
Recommendations

Going by the discussions presented in this paper in line with the paper title, the recommendations made are:

1. The government of Nigeria at all levels of governance, should redirect more of her resources into the diversification wealth creation economy so that her attainment of sustainable security and economic development is possible.

2. Discouragement of importation of refined petroleum products example petrol in Nigeria while putting all Nigerian refineries into full capacity utilization.

3. Well equipped integrated science laboratories for more entrepreneurial skill development should be top-most in the Nigeria agenda.

4. The war against corruption should be total; otherwise the realization of sustainable security and economic development in Nigeria would not be soon.

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