

Perception of Technical Education Students on Acquisition of Entrepreneurial Skills for Sustainable Employment in Building Construction Industries in South South Nigeria

By

Abusomwan Sunday Bello (Ph.D)

Department of Vocational and Technical Education,
Faculty of Education, University of Benin,
Benin City, Edo State, Nigeria

Tel: +2348036701752

E-mail: sunday.abusomwan@uniben.edu

and

Osaigbovo Louis Odaro (Ph.D)

Department of Vocational and Technical Education,
Faculty of Education, University of Benin,
Benin City, Edo State, Nigeria

Tel: +2348035252958

E-mail: louis.osaigbovo@uniben.edu

Abstract

The study investigated the level of technical education students' perception of acquisition of entrepreneurial skills for sustainable employment in the six Education Zones in Edo and Delta States against the background of prevailing high rate of unemployment in Nigeria. A survey design was adopted for the study. The sample comprised 312 SSS3 technical college students drawn from six Education Zones of both states. A purposive sampling technique was used in selecting the sample. Two research questions and one null hypothesis guided the study. The instrument for data collection was a paper and pencil test which contains 50 multiple choice test items developed by the researchers. The instrument was validated and tested for reliability using Kuder Richardson formula 21 and was found to be 0.82. Data were analyzed using mean, standard deviation and independent t-test. The findings reveal amongst others that technical college students have low level of acquisition of entrepreneurial skills implicit in secondary school building technology curriculum. Based on the findings, the following recommendations were made amongst others that students should be encouraged to have interest in entrepreneurial skills acquisition education through enlightenment on career prospects and knowledge of opportunities in building technology education.

Keywords: *Entrepreneurial skills, building technology, acquisition, perception, technical education, student*

Introduction

Education is a right of everybody in a country. It unlocks the development of personal and national potentials of citizens of a country and the world at large. In line with this submission, education is the light without which the world will be in darkness. It is the foundation for recent technological breakthrough and also the basis for modernity which has made all nations of the world to accord it immense priority even though the level of priority varies from one country to another. Currently, emphasis is shifting away from the general education that encourages mere acquisition of certificates to skill-based education which centres more on what one can do and the ability to apply requisite skills in real work environment which is one of the primary aims and objectives of technical vocational, education and training (TVET) in Nigeria.

Uko and Onuka (2016) identified technical vocational education and training (TVET) as education for work. TVET is defined in the national policy on education as educational process involving, the study of general education, technologies and related sciences for acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social inclusion life (Federal Republic of Nigeria, 2014). This means that TVET aims to promote the economic and social inclusion of youth or young people of diverse ethnic, religious, educational and socio-economic background with technical and vocational skills. It prepares and empowers people especially the youths with relevant and useful skills to gainful employment (Umunadi, 2013). Build small enterprises, become self-employed with which they can earn a living and be productive members who contribute meaningfully to the society.

In Nigeria, TVET programmes in technical colleges are designed to provide competent craftsmen for the nation's industrial economic and technological development. Federal Republic of Nigeria (2013) opined that TVET is that form of education which is obtained in the technical colleges. It is equivalent to the senior secondary education but designed to prepare individuals to acquire practical skills, basic scientific knowledge, attitudes required as craftsmen and technicians at sub-professional level. The goals of TVET programmes as pointed out by the Federal Republic of Nigeria (2013) in her national policy on education are:

- to provide trained manpower in applied science, technology and commerce particularly at sub-professional levels.
- to provide technical knowledge and vocational skills necessary for agriculture, industrial, commercial and economic levels;

- to provide people who can apply scientific knowledge to the improvement and solutions of environmental problems for the convenience of man;
- to give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant and
- to enable men and women to have an intelligent understanding of the increasing complexity of technology.

However, for effective implementation of technical education programmes, the Federal Government of Nigeria established the National Board for Technical Education (NBTE). The NBTE oversees issues regarding the accreditation of TVE programmes for technical colleges, monotronics, polytechnics and other vocational institutions for skill acquisition and easy entry into the world of work.

It is common fact that about 80% of graduates in Nigeria find it difficult to get employed after graduation. This is mainly due to the curricula of the educational institutions with emphasis on training for white-collar jobs. Nigeria like other developing countries is faced with a myriad of problems ranging from youth and graduate unemployment, due to lack of capacity and required skills to move the economy forward. The high level of unemployment in Nigeria has contributed to the high rate of insecurity and poverty (Simkovic 2012). Amogbenle and Iwamadi (2015) are of the view that 64 million of the Nigeria youths are unemployed while 16 million are underemployed bringing the total of youth's population to 80 million youth population (National Population Commission, 2013). When this percentage is deducted from the total population of Nigeria then it is invariably true that repositioning entrepreneurship education in our schools would salvage this gap as it were against the white collar job pursuit.

Entrepreneurship education refers to many things to variation of people as applicable to their values and observations of what it means to them. Entrepreneurship education as the identification of the general characteristics of entrepreneurs and how potential entrepreneurs can be trained in management techniques needed for effective performance of persons for long time service of an organization after the acquisition of occupational skills.

Currently, the demands in the world of work are constantly and rapidly undergoing changes. This has made many workplaces adopt new dimensions and magnitudes of job skills for their prospective employees. Today's workplaces, including personal business organizations require a well-trained technical expertise which is, entrepreneurial skills for the fast changing global economy (Essia, 2012). Thus, there is a need for well trained students. It is vividly identified in numerous parts of the literature that entrepreneurial competencies are

fast becoming the critical issues for ascertaining who to engage and who to retain in many job places all over the world (Adeyemo, 2019).

Entrepreneurial skills acquisition has become a powerful tool for not only creating jobs for graduates but also for job placement and improving economic power in the labor market in the Nigeria economy as a whole. With the advent of the fourth industrial revolution, a variety of competencies such as creativity, innovation, and agility are required for employment and self-reliance. The Federal Republic of Nigeria recognized the immense role of the development of entrepreneurial skills at the basic school level when it noted that basic education should provide science and technological skills for economic development (FRN, 2014). Therefore, the qualities of instructional delivery are to be enhanced toward inculcating the right type of value and attitudes in the students. In addition, the acquisition of appropriate skills and the development of mental, physical, and social abilities/competencies which are necessary for the individual to live in and contribute to the development of the society.

It is also suggested by the World Economic Forum (2011) that governments should improve their entrepreneurial ecosystem by bringing entrepreneurship skills acquisition to the classroom so that every student in the basic, secondary, and tertiary level of education should learn entrepreneurial principles, welcome new ideas, and give support to all types of entrepreneurs. The initiative taken by the Nigerian government to encourage entrepreneurial skills acquisition activity includes the infusion of entrepreneurship education into the basic education curriculum and developing up to 34 trade subjects in the post-basic education curriculum, of which senior secondary school students must learn at least one of them before graduation. To this effect, all institutions in the country are required to incorporate entrepreneurship programmes into their curriculum and provide young people the opportunity to acquire an entrepreneurial orientation and skills. This infusion of entrepreneurial studies into basic science education is meant to provide the young science and technical students the mind-set for creating and sustaining innovations. Such an infusion might also produce the necessary hub for job creation, poverty reduction, and possibly launch Nigeria into the production market (Onwuachu & Okoye, 2012).

Entrepreneurial skills are business skills, which an individual acquires personally to function effectively in business as an entrepreneur, be self-reliant and to be gainfully employed (Umunadi, 2014). The skills consist of effective utilization of ideas, information, and facts that help a learner develop competencies, services, or become productive employees of organizations. Entrepreneurship has to do with a system of ideas and values that are not

ordinarily treated as part of the curriculum, it is the process of using private initiative to transform a business concept into a new venture or to grow and diversify an existing enterprise with high growth potential (Ugwoke and Abidde, 2014). Therefore, entrepreneurship could be seen as the act of identifying, initiating, organizing, and bringing an idea to reality, be it a new product, service, process, strategy, or market. It is all about employability and self-employment, which is very important for improving an individual's quality of life and national development. Consequently, entrepreneurship education leads to the acquisition of entrepreneurial skills for efficient and effective living; it gives the youths more opportunities to exercise creative freedom, higher self-esteem, and a greater sense of control over their own lives (Mkpa, 2014).

Various types of skills are required for the students to be successful entrepreneurs and for sustainable employment. Igbo and Hisrich in Umunadi (2014) identified many categories of competencies or skills needed for success in entrepreneurship such as managerial, accounting and financial competencies, marketing and sales skills, and general business skills. The inclusion of these skills into the basic science education program will reduce the rate of dependence on governments for job, instill in the students the right mindset, the ability to be creative, and innovative, and be able to create jobs out of their chosen career. Innovative skills in science and technology education singularly can not only produce individuals with useable skills but also with the necessary initiative and impetus for utilizing them at the functional level enough to create wealth. It is on this premise this study is embarked upon to examine the perception of the level of entrepreneurial skills acquired by technical education students for sustainable employment in the building technology industries in the Nigeria labour market.

More recently, authors have moved towards a more complex understanding of graduate employability and proposed a number of inter-related attributes, skills and competencies that help individuals to both secure and perform well in employment. Rothwell and Arnold (2017) proposed an approach for understanding employability that was based on interrelated components which included wider contextual factors. These include the following: student's academic performance and engagement in his/her studies; student's confidence in his/ her skills and abilities; student's ambition; student's perception of the strength of the institution's brand; reputation of the student's university within his/her field of study; status and credibility of the student's field of study; student's awareness of opportunities in the external labour market; student's perception of the state of the external labour market and external labour market's demand for people in the student's subject field.

Statement of the Problem

Building technology plays a critical role in national development. Technical education is expected to equip technical students with relevant skills that will enable them to be self-reliant and to be gainfully employed in the building technology industries on graduation from school. Unfortunately, most technical students who studied building technology at the secondary school level seem to fail to acquire relevant practical skills that will enable them to become entrepreneurs, create wealth, and to be employed in building technology industries. This development may negate one of the objectives of secondary school education in Nigeria which is to prepare the youths for useful living (FRN, 2014).

Prior and even after the review of National Policy on Education (NPE) in 2004, unemployment, poverty level, violence, dropout rate, crowded list of secondary school leavers have seem to be on the increase. Despite the fact that there are entrepreneurial skills implicit in the building technology curriculum, it would seem that the students are not sufficiently exposed to the requisite entrepreneurial skills that would enable them to become employed or be entrepreneurs. The question then is: what levels of entrepreneurial skills are implicit in the building technology curriculum which students acquired at the point of graduation?

Methodology

The research design adopted for the study was descriptive survey. According to Leary (2010) a survey design uses questionnaire to collect information about people's attitude, beliefs, feelings, opinions and lifestyles. The design was considered suitable for the study because it focuses on the collection of data from technical college students from the sampled schools used for the study. The population of the study was all the senior secondary school (SSS, 3) students. The sample consisted of 312 students drawn from the 18 out of the 32 public technical colleges in South-South educational zones, however, two schools each were carefully selected by stratified sampling technique, furthermore, coeducational schools were purposively selected to ensure that male and female students were sampled.

The instrument used for data collection was a paper and pencil test with 50 multiple choice test items that can achieve accurate measures of students' level of acquisition of entrepreneurial skills through technical education, titled "Entrepreneurial Skills Acquisition Test (ESAT)". The instrument was validated by two experts in the Department of Vocational and Technical Education, University of Benin, Benin City. Their suggestions and corrections were thereafter incorporated in the final draft of the instrument. In order to test the consistency of the instrument Kuder-Richardson Formular 21 (KR-21) was used to determine its reliability

coefficient which yielded 0.82 meaning the instrument was consistent and reliable over time. The instrument was administered on the respondents with the help of two research assistants and was retrieved on the spot thereby ensuring 100% return. Research questions were answered using mean and standard deviation. The null hypothesis was tested at 0.05 level of significance using independent t-test.

Results

Research Question 1: What are the mean perceptions of technical education students on entrepreneurial skills acquisition for sustainable employment in building construction industries.

Table 1: Level of Entrepreneurial Skills Acquisition of Technical College Students

Students	N	Mean (X)	Standard Deviation (SD)
Male	204	6.9951	1.5584
Female	108	6.9815	1.5406
Total	312	6.9904	1.5498

The results in Table 1 show that the students scored 6.99 of the total score. This result indicates low performance thus; indicating low level of entrepreneurial skills acquisition of the respondents since 6.99 is below the criterion mean of 25.0 and above.

Research Question 2: What are the mean entrepreneurial skills acquisitions between male and female technical education students as measured by ESAT?

Testing of Research Hypothesis

H0₁: There is no significant difference between the mean entrepreneurial skills possessed by male and female technical college students as measured by ESAT.

Table 2: t-test Comparison of Difference in Mean Scores between Male and Female Technical College Students in ESAT

Subject	N	X	SD	α	df	t	sig.
Male	204	7.00	1.56	0.05	310	0.074	0.941
Female	108	6.98	1.54				

The result of data analysis; $t(310) = .074, P = .941$ show that the difference between the means of male and female technical college students in ESAT is not significant at 0.05 level. This is an indication that gender has no influence on acquisition of entrepreneurial skills by technical college students.

Discussion

The finding of Table 1 reveals that the sampled students have low level of entrepreneurial skill to allow for self-employment or for gainful employment in the building technology industries. This apparently explains the increasing rate of unemployment and its attendant social vices amongst the youths in the country. The result indicated that technical secondary school education curriculum is not being adequately implemented. The finding is supported by Ajibola (2012) who described the Nigerian technical secondary education system as laudable but seems to suffer from poor implementation. Commenting on poor implementation, Igwe (2017) noted that the secondary school curriculum only prepares secondary school leavers to seek admission to the university as the only option available. The process of curriculum development in science should recognize that not only must children understand the ideas and concepts of science (know - what) and the ways of thinking and doing which characterize science (know-how), but also, will appreciate their application to solving problems in their lives. This result is in line with the findings of Anyakoha (2017) that training for entrepreneurship skill development is not currently being well articulated by Nigerian universities. Okebukola (2015) confirmed that most university graduates are deficient in entrepreneurship skills. Lack of entrepreneurship skills while in the school has serious effects on individual students as most of them come out of school half-baked, not having the necessary exposure and experiences in the areas of skills, attitude and knowledge required for the challenge of the labor market, self-reliance and economic improvement. Standards in education imply functionality which is expected to serve the needs of the education stakeholders by taking cognizance of the survival of individuals in the global society

From the finding in Table 2, no significant difference was found between the mean scores of male and female students. This is indicated in their level of acquisition that there is no gender variability in the learning of entrepreneurial skills implicit in secondary school building construction among curriculum technical students. This finding is not in agreement with the findings of Onunkwo (2015) which reported significant gender difference in favour of males. The researchers in their different studies reported that their findings were basically due to gender stereotyping in which they found science to be male dominated. In this study, the result of the findings presented a different picture in which both males and females shared in the low performance on the entrepreneurial skills acquisition test. Therefore, gender has no influence on the acquisition of entrepreneurial skills implicit in the secondary school building construction curriculum.

Conclusion

The study revealed that although there is reasonable provision of entrepreneurial skills in the present secondary school building technology education curriculum, the secondary school students in Edo and Delta states have not learnt sufficient entrepreneurial skills to allow for self-reliance and employment in the building technology industries. The Nigerian secondary educational system is expected to rise to the challenge of equipping the youth with the necessary entrepreneurial knowledge, skills, values and attitude for them to live as competent members of the society and contribute to nation building. It has been said that any nation is as good its education. Therefore, in the context that the students have not performed well, justifies that urgent need for curriculum implementation and monitoring to make our technical secondary education more functional.

Recommendations

From the findings of this study, the following recommendations were made:

- i. Students should be encouraged to have interest in building technology education through enlightenment on career prospects and opportunities in building technology industries. There is need to change the mind-set of youths to see self-employment as an option, and be prepared psychologically and emotionally to study the subject. This will awaken their desire, and motivate them into identifying career opportunities available to them after school. To this end, entrepreneurship education shall be the fulcrum of science teaching-learning process.
- ii. Schools and their owners should be made to be aware that students will acquire entrepreneurial skills, only when they are exposed to regular workshop practice, with adequate equipment and instructional materials. These measures will concretize teaching and learning and make learning to be permanent in the students.
- iii. Schools and their managers should also establish productive links with industries to aid the curriculum reform process (competency based, interactive and problem based curriculum) in order to provide students with generic skills for future employers to build on.

References

- Adeyemo, S. A. (2019). Understanding and acquisition of entrepreneurial skills: A pedagogical re-orientation for classroom teacher in science education, *Journal of Turkish Science Education*, 6(3), 57-65.
- Ajibola, M.A. (2018). Innovations and curriculum implementation for basic education in Nigeria: Policy priorities and challenges of practice and implementation. *Research*

- Journal of International Studies*, 8, 51-58.
- Amogbenle, A.C & Iwamadi, K.C (2015). Youth empowerment entrepreneurship development programme as an interaction mechanism. *African Journal of Business Management*, 4(6) 831 – 833.
- Anyakoha, E.U. (2017). *Entrepreneurship and vocational education: A contemporary challenge and the way forward*. In N. Esomonu (Ed.). Entrepreneurship Practices in Education. (pp. 26-43), Umunze: Federal College of Education (Technical).
- Essia, U. (2012). Entrepreneurial Culturing of Formal Education Programmes in Nigeria. *Journal of Sustainable Society*, 1(2), 52-62.
- Federal Government of Nigeria (FRN). (2014). *Nigeria National Policy on Science and Technology (2nd Edition) Lagos*: Federal Ministry of Science and Technology.
- Federal Government of Nigeria (FRN). (2013). *National Policy on Education*. Lagos: NERDC Press.
- Igwe, R.O. (2017). Transforming the secondary school curriculum for effective social development in Nigeria. *International Journal of Educational Studies*, 7(1), 149-156
- Mkpa, A.M. (2014). Education for global competitiveness in job creation: Inclusion of entrepreneurship in Nigeria higher education: Challenges and prospects. *International Journal of Educational Research*, 13(1), 1-13.
- NUC. (2012). Nigerian Universities academic Benchmark and requirements. Department of Academic Planning, National Universities Commission, Abuja, Nigeria.
- Onwuachu, W.C. & Okoye, P.O. (2012). Relevance of basic science curriculum for entrepreneurship skill acquisition. *Knowledge Review*, 26(4), 6-13.
- Okebukola, P. (2015). Quality assurance in Teacher education. *A publication of the committee of Deans of Education in Nigerian Universities*.
- Simkovic, M. (2012). Risk based students' loan. Available at social science research network. (SSRN) Accessed on July 2012.
- Ugwoke, S.C & Abidde, E. (2014). Entrepreneurial skill development in basic education for wealth creation. *International Journal of Educational Research*, 13(1), 65-80
- Umunadi, E.K.& Uwameiye, R. (2015). Technical education graduate skill development as perceived by employers in institution and industries in Delta State. *Studies in Education*, 15(1) 90-97.