



IJCS PUBLICATION (IJCSPUB.ORG)

# INTERNATIONAL JOURNAL OF CURRENT SCIENCE (IJCSPUB)

An International Open Access, Peer-reviewed, Refereed Journal

## Entrepreneurship Education Needed by Woodwork Technology Education Students in Tertiary Institutions in Anambra State

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### Abstract

The paper determined the entrepreneurial skills needed by woodwork technology education students to be self-reliant after graduation. The population of the study was 105, made up of 40 respondents in FCE (T) Umunze and 65 respondents in Nnamdi Azikiwe University, Akwa. The entire population constituted the sample for the study because of the manageable size. Three research questions were raised and two hypotheses were formulated that guided the study and tested at 0.05 level of significance. A fifty three (53) items instrument captioned entrepreneurship skills needed by wood work technology education students for self-reliance (ESNWTESSR), questionnaire was developed by the researchers and used for data collection. The questionnaire was validated by three specialists and a pilot test of the instrument was carried out. A reliability co-efficient of 0.87 was obtained using cronbach alpha reliability method. Data collected were analyzed using mean, standard deviation and z-test statistic. Findings revealed among others that woodwork technology education students needed eighteen (18) entrepreneurship skills and most essentially needed 16 out of the 18 skills identified by this study for self-reliance after graduation. There is no significance difference between urban and rural (Unizik and Umunze) respondents in their mean responses on the type of entrepreneurial skills needed by wood work technology education students for self-reliance. Based on the findings, it was recommended among others that the current entrepreneurship curriculum be reviewed and updated to include the identified courses, of study in this research survey.

**Key words:** Entrepreneurship skills, Education, woodwork technology education, self-reliance.

## Introduction

The twenty first century citizens, regardless of their occupations, must be well equipped to navigate oceans of fast changes and developments globally, (Nwachukwu, Obi and Ugwoegulem, 2019). It is the responsibility of education to equip individuals to meet current and future challenges and expectations. This is a huge responsibility that must be fulfilled. Badawi (2017) opines that education is the main vehicle used by societies to develop their new generations and educational reforms should be oriented to provide students with a knowledge mindset. In view of this, two main forms of education are particularly important namely, Technical and Vocational Education and Training (TVET) and Entrepreneurship Education (EPE). The type of education and knowledge one acquires, determines the outputs, in terms of resourcefulness, initiative, innovativeness and performance (Nwachukwu, Anene and Okoye, 2017). One of the objectives of the National Policy on Education, (Federal Republic of Nigeria, 2013), is to train individuals who will be equipped with the necessary skills, knowledge and attitude to be self-reliant and contribute to the development of the society.

It is worthy of note that the global economy has become private sector driven and economic prosperity and stability in economic activities require the possession of entrepreneurship education to function effectively (Nwachukwu, Anene and Okoye, 2017). Therefore, the need for unemployment reduction among our graduates, poverty eradication and wealth creation in the society supports the inclusion of entrepreneurship education in Technical and Vocational Education and Training (TVET) programmes in tertiary institutions in the country (Obi and Nwachukwu, 2018). It also calls for making every graduate an entrepreneur, since paid employment is no longer available (Obi and Nwachukwu, 2018). Our undergraduates in tertiary institutions need exposure in practical entrepreneurial skills in order to become proficient in their chosen careers or occupations for them to be useful to themselves and Nigeria economy (Nwachukwu, Anene and Okoye, 2017). Nigeria as presently perceived has the typical features of a developing economy. These include low enrollment in schools, low literacy rate, high poverty rate, subsistence farming, high unemployment rate, low gross domestic productions (GDP), high consumptive rate and much dependence on foreign goods, high corruption rate and indiscipline among others (Eze, 2019).

A close look at the general economic performance shows an economy undermined by deplorable infrastructure, corruption, insecurity, increased unemployment and mismanagement of public finances (FRN, 2017). This situation has further widened the gap between the rich and the poor in our society (Nwachukwu, Obi and Ugwoegulem, 2019). In order to proffer solutions to those problems, the federal government has articulated certain economic measures through economic empowerment programmes aimed to restore economic growth, some of which include youth entrepreneurship training programmes, granting of loans to small-scale business enterprises; Sure-P and trade-money intimidation measures for the less privilege in our society (Nwachukwu, Anene and Okoye, 2017).

Entrepreneurship education is initiatives to use education to enhance individuals' entrepreneurial mindsets and raise awareness of entrepreneurship as a viable alternative to paid employment. Special entrepreneurship education should be tailored to job seekers, to unemployed people and to scientists, engineers and researchers to encourage them to commercialize their intellectual property (Badawi, 2017). Entrepreneurship education is the process of developing in students entrepreneurial spirit through the development and application of relevant entrepreneurial based educational curriculum (Nwachukwu, Obi and Ugwuegbulem, 2018). It seeks to provide students with relevant knowledge, skills and motivation to encourage entrepreneurial success in variety of settings. It is not based on a course of study, instead, students are immersed in real life learning experiences where they have opportunities to take risks, manage the results and learn from the outcome. Entrepreneurship education is not only teaching the recipients how to run a business but also encouraging creative and innovative thinking, promoting self-worth and accountability. The objectives of entrepreneurship education should be targeted towards achieving certain aims which may include among others:

- To produce graduates, who will provide jobs, create wealth and help in the upliftment of the country's economy
- To open and expand new markets and explore new products/sources of materials.
- To provide graduates with enough training that will make them to be creative and innovative in identifying new business and opportunities in the environment.
- To provide graduates who will be adaptive, innovative, creative, self-directed and self-motivated to turn uncertainties into realities.
- To provide small and medium sized enterprises with opportunities to recruit qualified graduates who will receive training in the skills relevant to the management of business ventures (Nwachukwu et al, 2019). This type of education would no doubt entrench in students the capabilities to develop entrepreneurial mindset towards business formation and ownership.

According to Cooper and Artz in Anyaeneh and Ochuba (2019), the higher the confidence of entrepreneurs in their ability to develop and grow their new ventures, the greater their satisfaction, regardless of the actual performance of firms. Therefore, entrepreneurship education will no doubt boast the morals of woodwork technology education students in entrepreneurial capabilities. Nwachukwu and Obi (2018) state that in order to alleviate youth unemployment, there is need for reorientation of our entrepreneurship education and training curriculum to accommodate more but relevant courses. For instance, a furniture manufacturer who is competent in his profession (woodwork technology) can become an entrepreneur if equipped with entrepreneurial skills such as production costing, business planning, feasibility report writing and risk management to mention a few. The benefits that can accrue from these topics may be knowledge of how to prepare cutting list of different sizes of a particular furniture, knowledge of the costs involved in acquiring them and also knowledge of feasibility report will enable him know if a particular project will be viable or not. The scholars went further to say that the financial management would equip the entrepreneur with the necessary knowledge on how to manage the

resources such as finance, materials, machines and employees, while risk management will enable the entrepreneur to understand the different types of risk in business and the necessary remedies for such risks. Other courses which could be added are creative thinking or business logic, ideas generation and marketing skills to mention a few.

There is need to have a system that will encourage the development of entrepreneurial mindset among students, promote creativity and innovation which invariably will spur a system that is geared towards economic recovery, self-reliance and empowerment. Economic growth and development are beneficial to society when it creates opportunities and provide supports to the vulnerable in the society.

One of the challenges for educators and policy makers working in TVET is to assess the extent to which their programmes are preparing students for the whole spectrum of working life, including paid employment, work in cooperatives, self-employment, setting up business, family work, social work and voluntary work (Badawi, 2017). A combination of entrepreneurial skills and occupation-specific skills should act as a major tool in mitigating unemployment and opening opportunities for self-employment and small medium enterprises development. Therefore, entrepreneurship education is highly needed alongside TVET to address this challenge. The development of TVET skills is vital to economic development in that the skills needed for industrial development, productivity and profitability as well as for wealth creation is supplied through TVET and entrepreneurship skills training (Ajibola and Jumoke, 2012) in Nwachukwu, et al (2019).

According to World Bank review (2008), Nigeria Universities, Polytechnics and Colleges of Education produce more than 100,000 graduates yearly, but less than 10% of them are employed. A reasonable percentage of this number is not gainfully employed because they are not found employable. Most graduates have difficulty in translating their business ideas to reality because of lack of necessary information and skills needed to achieve their target. However, the introduction of entrepreneurship education by the supervisory agencies-National University Commission (NUC), National Commission for Colleges of Education (NCCE), National Board for Technical Education (NBTE) into the curriculum for tertiary education to help ameliorate the problem of graduate unemployment has not solved the problem (Eze, 2019). Despite the efforts of these supervisory agencies to curb this problem, the problem of graduates' unemployment particularly among graduates of technical vocational education and training (TVET) persist. It is on this premises that this study sought to determine the entrepreneurship skills needed by students of woodwork technology education in tertiary institutions in Anambra State.

### **Objectives of the Study**

Specifically, the study strive to:

1. Ascertain the type of entrepreneurship skills needed by students of woodwork technology education
2. Find out the effects of lack of acquisition of entrepreneurship skills among students of woodwork technology education

3. Find out the most essential entrepreneurship skills needed by woodwork technology education students for self-reliance after graduation

### Research Questions

The following research questions guided the study

1. What are the types of entrepreneurship skills needed by woodwork technology education students
2. What are the effects of lack of acquisition of entrepreneurship skills by woodwork technology education students.
3. What are the most essential entrepreneurship skills needed by woodwork technology education students to be self-reliant after graduation?

### Hypothesis

1. There is no significant difference in the mean responses of the respondents of F.C.E. (T) Umunze and that of NnamdiAzikiwe University on the types of entrepreneurship skills needed by the wood work technology education students for self-reliance.
2. Urban and Rural Respondents (Unizik and F.C.E(T), Umunze) do not differ significantly in their mean responses on the most essential entrepreneurial skills needed by woodwork technology education students to be self-reliant.

### Review of Related Literature

#### Concept of Entrepreneurship Education

Entrepreneurship Education is certainly a vehicle towards reviving entrepreneurship culture, the initiatives to use the power of education to enhance individuals entrepreneurial mindset and raise awareness of entrepreneurship as a viable alternative to paid employment, gave rise to educational programmes that can be grouped together under the heading of entrepreneurship education and training (Badawi, 2017). Entrepreneurship education according to Adenipeku (2004) is an integrated and structural learning opportunities on how individuals can become successful entrepreneurs or business men and women if they choose to do so. It can also be seen as learning directed towards developing in young people those skills, competencies, understanding and attributes which equip them to be innovative and able to identify, create, initiate and successfully manage personal, community business and work opportunities, including, working for themselves. The concept of entrepreneurship covers a wide range. At one extreme, an entrepreneur is a person of very high aptitude, possessing characteristics found in only a very small fraction of the people who pioneers changes. At the other, individuals who want to work for themselves can be considered as entrepreneurs (Badawi, 2017). Consequently, there is an urgent need for education and training in order to develop and acquire these entrepreneurship competences.

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In essence, what is needed is an entrepreneurship education that must be inclusive and will stimulate the creative abilities and productive energies of the youth for promoting efficient utilization of industrial technology, enterprise development and equitable distribution of the nation's income (Nwachukwu et al. 2019). Therefore the use of entrepreneurship education to inculcate entrepreneurial competencies in TVET and woodwork technology education students would no doubt ensure that our graduates secure their future through employment generation and self-sustenance

### **Benefits of Entrepreneurship Skills to Woodwork Technology Education**

According to Udu (2016), skill acquisition is very important among our youths, because it helps in developing intrinsic potentials in individuals. Skill is the ability to do something expertly and well. It is an organized sequence of actions, proficiency executed and usually displays a flexible but systematic temporal patterning (Okorie, 2000). The development of skill is an important function of educational institutions. To this effect, the Federal Republic of Nigeria (2004), opines that there are roles of which technical-vocational education and training can play in individuals in satisfying the manpower needs of the nation.

In support of the above roles, the introduction of entrepreneurship education in our tertiary institutions was initiated by UNESCO (1998) in Article 7 of the Declaration of Conference on higher education which gave a clear indication of the way forward to tackle graduates' unemployment in Nigeria. The organization recommended developing and integrating entrepreneurial skills and initiatives into technical vocational education and training curriculum to facilitate employability of graduates who will be increasingly be called upon to be not job seekers but job creators. Competencies of individuals' entrepreneurial skills in vocational technical education and training are designed to lead the beneficiaries to self-employment, economic self-sufficiency and employment generation. Some studies (Akanwa and Agu, 2005, and Badawi, 2017), have identified certain characteristics which would be or potential entrepreneur must possess. They include self-confidence, risk-taking, multi-skilled, innovativeness, commitment, result-oriented, visionary, leadership ability, originality, eternal optimism, resourcefulness and so on.

Entrepreneurs are people who have creative ideas, desires and determination to set up new small ventures, the seeds from which big enterprises can blossom (Kenton and Erwin, 2000).

Obi (2014), identified some entrepreneurial skills to be imparted to young entrepreneurs which among others include; possessing analytical and planning skills, working well in dynamic rapidly changing environment, working under pressure and short time frames; work effectively across multiple organizations; board and various cultural backgrounds, be willing to learn and grasp new ideas, be a good manager of resources, understand market dynamics, keeping good records of stocks sales and expenditures, possess good communication skill, be people oriented, be goal oriented; have a linguistic mind, good negotiating skills, understand and speak the language of others professionals especially accountants, economists and other social scientists, be a team player, convincing speakers and attentive

mind, have adequate computer skills, understands economic and financial aspects of engineering and technology and be able to design sound business plan.

Obi and Nwachukwu (2018) opine that poverty and unemployment world over are at their peak now. These have triggered protests, economic crisis, wars and austerity measures in countries like Greece, Italy, France, Venezuela, China, Chile, Egypt, Libya, Yemeh and Syria to mention but a few. Nigeria and other countries are fast to embark on reform programmes in education and economy hence the Nigeria economic recovery and growth plan 2017-2020 (FRN, 2017) was designed to avert the impending danger. Entrepreneurship education and TVET programmes have been critical components of courses offered in tertiary institutions in Nigeria. It is widely believed that these components are panacea to poverty eradication, curbing youth restiveness and graduate unemployment.

According to Osuala (2010), the major vocational technical areas are: agriculture, business education, Health occupation, trade and industrial education and technical education. These are skillful courses that need adequate orientation on entrepreneurial education to improve economic and human resources development in Nigeria. On the other hand, Haruna and Aliyu (2008) opine that Technology and vocational education include trade and careers such as building construction, woodwork, electrical and electronics engineering, home economics, hospitality, auto/mechanical engineering, medical and health, furniture, cabinetwork, garment and designing, business and commercial, construction and manufacturing, agriculture, art and craft and all aspect of education that are occupation based and skill oriented.

In woodwork technology education, students are trained to acquire professional skills in the following options; furniture/cabinet making, carpentry/joinery works and marketing of timber products and allied skills (Nwachukwu, 2021). It is expected that upon graduation, the would- be entrepreneur would venture into furniture/cabinet manufacture, contract of roofing buildings or venture into timber products marketing outfits as the case maybe. In order to muster courage to invest in any business, the would be entrepreneur has to undergo certain training to qualify as an entrepreneur, hence Nwachukwu, Anene and Okoye see entrepreneur as a person who is willing and able to convert new ideas or inventions into successful innovation. An entrepreneur is a person who organizes and manages a business undertakings and assumes the risks for the sake of profit (Nwachukwu, Anene and Okoye, 2017). He is a person who takes the risk of starting and managing a business.

### **Theoretical Framework**

The meaning and activities of entrepreneurship can be seen with regards to two schools of thought. The first school of thought believes that entrepreneurship is risk taking, while the second school of thought sees it as an opportunity. The first school that believes in entrepreneurship as risk taking argues that since life itself is a risk, one must be optimistic to survive by venturing into risk taking inspite of all odds,

The second school of thought is of the view that since risk is a dangerous chance, starting a business should rather, be seen as an opportunity (Akanwa and Agu, 2005). The Max Weber theory, the protestant ethics and the spirit of capitalism were of the view that in spite of innovations; beliefs are motivational forces of entrepreneurs. One's religious beliefs create either positive or negative attitude towards production and wealth accumulation (Akanwa and Agu, 2005). In order to achieve success in business the entrepreneur must forecast with certain degree of accuracy.

## METHODOLOGY

The descriptive survey design was adopted for this study which by its nature is aimed at collecting pertinent data on individuals, events etc and describing them in a systematic manner, the characteristics and features on the facts concerning a given population (Nworgu 2001). Sani (2015) (citing in Igwe, Kereen, Wahad, Stephen, Daniel and Nwachukwu 2019) states that in a descriptive survey study, views and facts are collected through questionnaire, analyzed and used for answering research questions. This design was deemed appropriate as the present study sought answers on how woodwork technology education students through the entrepreneurship courses they undertake could improve and be enabled to be self-reliant after graduation.

This study was done in two senatorial zones out of the three senatorial zones in Anambra State, viz; Anambra North, Anambra Central and Anambra South.

Anambra Central and Anambra South were chosen for this study because of the two tertiary institutions that offer technical education (NAU, Akwa and FCE (T), Umunze, hence have higher concentration of the target population for the study. The target population of the study was 105, and comprises of forty (40) and sixty five (65) students of FCE (T) Umunze and Azikiwe University Awka respectively. The entire population constituted the sample for the study because of the manageable size. Data was collected using a fifty three (53) item questionnaire developed by the researchers and known as entrepreneurship skills needed by woodwork technology education students for self-reliance (ESNWTESSR). The ESNWTESSR was made up of two parts, Part A contained personal data while Part B contained research questions 1, 2 and 3 which focuses on types of entrepreneurship skills needed by woodwork technology education students, effects of lack of acquisition of entrepreneurship skills by woodwork technology education students while question three was on the most essential entrepreneurship skills needed by woodwork technology education students for self-reliance after graduation. All the three research questions were structured using 4 point rating scales of Strong Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Also Highly Needed (HN), Moderately Needed (MN), Fairly Needed (FN) and Not Needed (NN). These ratings were weighted 4, 3, 2 and 1, beginning from highest to the lowest respectively. The instrument was content and face validated by three experts in entrepreneurship/management courses at the centre for entrepreneurship studies Nnamdi Azikiwe University Akwa and FCE (T) Umunze, Department of Woodwork technology education and their comments, and suggestions were considered in preparing the final draft of the instrument.



The instrument was pilot tested at AlvanIkoku Federal College of Education, Owerri on 20 respondents. CronbachAlpha coefficient was used to determine the internal consistency of the instrument and 0.87 was obtained as the overall reliability - coefficient of the instrument. The instrument was later administered to the respondents by the researchers and a 100% return rate was recorded from both institutions. Mean and standard deviation were used to answer the research questions. Mean score of 3.50 and above were considered agreed and needed, while Mean scores of 3.49 and below were considered disagreed and not needed by respondents in accordance with the research questions. Furthermore, Z-test was used to test the hypotheses. Decision was made by comparing the z-calculated value with that of z-critical at 0.05 level of significance. Hypotheses was rejected if z-cal is found to be greater than z-critical value otherwise it is accepted.

**Results**

**Research question one:** What are the types of entrepreneurship skills needed by woodwork technology education students?

**Table 1a:** Mean responses and standard deviation on the types of entrepreneurship skills needed by Woodwork Technology Education students

IndiAzikiweUniversity, Akwa  
65

Item	$\bar{x}$	SD	Rmrks.
Managerial skill	3.65	0.10	Needed
Marketing skill	3.55	0.16	Needed
Accounting skill	3.87	0.56	Needed
Communication skill	3.58	0.20	Needed
Interpersonal skill	3.55	0.27	Needed
Human Relations skill	3.56	0.33	Needed
Risk management skill	3.85	0.17	Needed
Feasibility Report writing skill	3.93	0.27	Needed
Business forecasting skill	3.85	0.55	Needed
Business proposal writing skill	3.85	0.17	Needed
Inventory skill	3.95	0.21	Needed
Stock/sales skills	3.45	0.22	Not needed
Expenditure/Record Keeping skill	3.52	0.78	Needed
Production costing skill	3.0	1.18	Not needed
Financial management skill	3.75	0.88	Needed
Business laws skill	3.85	1.71	Needed
Investment management and analysis skill	3.65	0.44	Needed
Computer operation skill	3.75	0.40	Needed
Mean of means	=3.69	1.36	

**Table 1b:** Mean responses and standard deviation on the types of Entrepreneurship skills needed by Woodwork Technology Education students.

(Federal College of Education (Technical) Umunze  
N<sub>2</sub> = 40

S/N	Item	$\bar{x}$	SD	Remrks.
1	Managerial skill	3.93	0.14	Needed
2	Marketing skill	3.88	0.23	Needed
3	Accounting skill	3.87	0.23	Needed
4	Communication skill	3.88	0.23	Needed
5	Interpersonal skill	3.93	0.14	Needed
6	Human Relations skill	3.88	0.23	Needed
7	Risk management skill	3.83	0.23	Needed
8	Feasibility Report writing skill	3.85	0.23	Needed
9	Business forecasting skill	3.83	0.23	Needed
10	Business proposal writing skill	3.75	0.49	Needed
11	Inventory skill	3.63	0.71	Needed
12	Stock/sales skills	3.13	1.69	Not Needed
13	Expenditure/Record Keeping skill	3.30	1.68	Not Needed
14	Production costing skill	2.88	1.92	Not needed
15	Financial management skill	3.63	1.30	Needed
16	Business laws skill	3.50	0.23	Needed
17	Investment management and analysis skill	3.55	1.92	Needed
18	Computer operation skills	3.88	0.25	Needed
	Mean of means	-		5.22 3.97

From the data in table 1 above, it was observed that students of the two institutions agreed to the entrepreneurship skills of items 1,2,3,4,5,6,7,8,9,10,11,15,16,17 and 18 while, Unizik students disagreed with items 12 and 14. FCE (T) students disagreed with items 12, 13 and 14. This implies that the above skills agreed upon should be acquired by students of woodwork technology education to boost their entrepreneurship competencies. When these skills are acquired by students, it will make them enterprising individuals and enable them to be self-employed.

### Research Question Two: What are the effects of lack of acquisition of entrepreneurship skills by students of woodwork technology education?

Table 2a: Mean responses and Standard Deviation on effects of lack of acquisition of entrepreneurial skills by students of woodwork Technology Education

NnamdiAzikiwe University, Awka

N<sub>2</sub> = 65

Item	$\bar{x}$	SD	Remrks
High unemployment rate	3.56	0.61	Agree
Increased societal crime rate	3.55	0.66	Agree
High Poverty rate	3.58	0.55	Agree
Hinders economic development	3.55	0.41	Agree
Increased dependence on foreign goods	3.55	0.48	Agree
High consumptive rate	3.32	0.56	Disagree
Increase in mortality rate	3.10	0.58	Disagree
Increased youth restiveness	3.55	0.60	Agree
High insecurity	3.63	0.61	Agree
Low Gross Domestic Product (GDP)	3.65	0.51	Agree
Increased level of corruption	3.67	0.50	Agree
Increased level of indiscipline	2.95	0.49	Disagree
Low literacy rate	2.85	0.24	Disagree
Low school enrollment	2.83	0.41	Disagree
Low life expectancy	2.81	0.29	Disagree
Low wealth creation	2.83	0.57	Agree
Low Economic Activities	3.85	0.58	Agree
Mean of means	=	3.65	1.36

Table 2b: Mean responses and Standard Deviation on effects of lack of acquisition of entrepreneurial skills by students of woodwork Technology education, F, C.E (T) Umunze

N<sub>1</sub> = 40

S/N	Item	$\bar{x}$	SD	Remrks
1	High unemployment rate	3.91	0.57	Agree
2	Increased societal crime rate	3.77	0.57	Agree
3	High Poverty rate	3.68	0.52	Agree
4	Hinders economic development	3.87	0.51	Agree
5	Increased dependence on foreign goods	3.81	0.51	Agree
6	High consumptive rate	3.15	0.39	Disagree
7	Increase in mortality rate	3.25	0.34	Disagree
8	Increased youth restiveness	3.68	0.52	Agree
9	High insecurity	3.57	0.57	Agree
10	Low Gross Domestic Product (GDP)	3.56	0.30	Agree
11	Increased level of corruption	3.25	0.50	Disagree
12	Increased level of indiscipline	3.30	0.31	Disagree
13	Low literacy rate	3.03	0.50	Disagree
14	Low school enrollment	3.25	0.39	Disagree
15	Low life expectancy	2.91	0.34	Disagree
16	Low wealth creation	3.55	0.34	Agree
17	Low Economic Activities	3.85	0.47	Agree
Mean of means		=	3.88	2.7

Research Question Two: Data in table 2 shows the mean on the effects of lack of acquisition of entrepreneurial skills. The table shows items 1,2,3,4,5,8,9,10,11,16 and 17 as agreed upon by the two institutions (FCE (T) Umunze and (Unizik) respondents as the effects while items 6, 7, 11, 12,13,14,15 were disagreed as not been the effects of lack of acquisition of entrepreneurial skills by students. This implies that the negative consequences of lack of acquisition of entrepreneurship skills could lead to economic and societal problems.

### Research Question Three: What are the most essential entrepreneurship skills needed by students of woodwork technology for self-reliance?

Table 3a: Mean Responses and Standard Deviation on the most essential entrepreneurship skills needed by Woodwork Tech. Education Students for self-reliance (NnamdiAzikiwe University, Awka)

n = 65

Item	$\bar{x}$	SD	Remarks.
Managerial skill	3.92	0.38	Highly Needed
Marketing skill	3.96	0.39	HN
Accounting skill	3.93	0.39	HN
Communication skill	3.87	0.37	HN
Interpersonal skill	3.86	0.37	HN
Human Relations skill	3.84	0.38	HN
Risk management skill	3.92	0.36	HN
Feasibility Report writing skill	3.83	0.11	HN
Business forecasting skill	3.81	0.36	HN
Business proposal writing skill	3.87	0.36	HN
Inventory skill	3.16	0.16	Not Needed
Stock/sales skills	2.98	0.14	NN
Expenditure/Record Keeping skill	3.20	0.18	NN
Production costing skill	3.21	0.18	NN
Financial management skill	3.40	0.25	NN
Business laws skill	3.27	0.21	NN
Investment management and analysis skill	3.40	0.25	NN
Computer operation skill	3.36	0.24	NN
Mean of means	= 3.60	2.98	

Table 3b: Mean Responses and Standard Deviation on the most essential entrepreneurship skills needed by Woodwork Tech. Education Students for self-reliance (FCE (T) Umunze).

N<sub>1</sub> = 40

S/n	Item	$\bar{x}$	SD	Remarks.
1	Managerial skill	3.95	0.80	Highly Needed
2	Marketing skill	3.90	0.78	HN
3	Accounting skill	3.97	0.78	HN
4	Communication skill	3.87	0.77	HN
5	Interpersonal skill	3.85	0.79	HN
6	Human Relations skill	3.95	0.73	HN
7	Risk management skill	3.92	0.74	HN
8	Feasibility Report writing skill	3.32	0.77	Not Needed
9	Business forecasting skill	3.87	0.74	HN
10	Business proposal writing skill	3.87	0.77	HN
11	Inventory skill	3.10	0.26	NN
12	Stock/sales skills	3.05	0.18	NN
13	Expenditure/Record Keeping skill	3.15	0.32	NN
14	Production costing skill	3.15	0.32	NN
15	Financial management skill	3.27	0.43	NN
16	Business laws skill	3.20	0.37	NN
17	Investment management and analysis skill	3.3	0.45	NN
18	Computer operation skill	3.27	0.43	
Mean of means		= 3.60	1.71	

Research Question Three: From the data in table 3 above, it was observed that students of the two institutions agreed on the most essential entrepreneurship skills needed. This is shown from items 1,2,3,4,5,6,7,8,9 and 10, while items 11,12,13,14,15,16,17 and 18 may be regarded as Not Needed at present. This implies that the most essential entrepreneurial skills should be included in the curriculum of TVET programmes in tertiary institutions to enable student to be self-reliant and distinct in business ventures.

#### Hypothesis 1:

There is no significant difference in the mean ratings of the respondents of FCE (T) Umunze and NnamdiAzikiwe University on the types of entrepreneurship skills needed by woodwork technology education students for self-reliance.

This null hypothesis was tested using z-test at 0.05 level of significance. The results are indicated in table 4.

**Table 4:** the Z-test result of the difference in the mean ratings of students on the type of entrepreneurship skills needed by woodwork technology education students for self-reliance.

Institutions	N	$\bar{x}$	SD	df	Std Error	Z-cal	Z-critical	Decision
FCE(T) Umunze	40	5.22	3.9	103	0.6507	0.650	1.96	Accept
NnamdiAzikiwe (Unizik) University	65	3.69	1.3					

Hypothesis 1: In table 4, since z-cal (0.650) is less than z-critical (1.96) at 103 degree of freedom and 0.05 level of significance and this suggests that there is no significant difference in the mean ratings of respondents of FCE (T) Umunze and Unizik on the type of entrepreneurship skills needed by woodwork technology education for self-reliance. This means that the null hypothesis is accepted.

### Hypothesis 2:

Urban and Rural respondents (Unizik and FCE (T) Umunze) do not differ significantly in their mean ratings on the most essential entrepreneurial skills needed by woodwork technology education student for self-reliance.

The null hypothesis was tested using z-test at 0.05 level of significance. The results are indicated in table 5.

**Table 5:** the z-test result of the difference in the mean ratings of respondents on the most essential entrepreneurial skills needed for self-reliance.

Institutions	N	$\bar{x}$	SD	df	Std Error	Z-cal	Z-critical	Decision
FCE(T) Umunze	40	3.68	3.52	103	1.79	0.179	1.98	Accept
NnamdiAzikiwe (Unizik) University	65	3.60	2.98					

Hypothesis 2: Also in table 5, since z-cal (0.179) is less than z-crit (1.98) at 103 degree of freedom and 0.05 level of significance and this suggests that there is no significance difference in the mean ratings of respondents of FCE(T) Umunze and Unizik on the most essential entrepreneurship skills needed for self-reliance. This means that the null hypothesis is accepted.

### Discussion of Findings

In research question one, it was revealed that wood work technology education students should acquire entrepreneurship skills of items 1,2,3,4,5,6,7,8,9,10,11,15,16,17 and 18, thus these skills will equip them with all the necessary competencies of an entrepreneur to be self-employed. From the definition of entrepreneurship education as learning directed towards developing in young people those

skills, competencies, understanding and attributes which equip them to be innovative and able to identify, create, initiate and successfully manage personal, community business and work opportunities, including working for themselves (Adenipekun, 2004). The findings is also in agreement with that of Uchechara (2009) who reported that the skills will help the students to be self-reliant after graduation and enable them maximize the resources around them within the limit of their capacity.

The findings in research question two, identified that high unemployment rate, increased societal crime rate, high poverty rate, lack of economic development, increased dependence on foreign goods, increased youth restiveness, high insecurity, low gross domestic product (GDP), increased level of corruption, low wealth creation and low economic activities are the effects of lack of acquisition of entrepreneurial skills for self-reliance and employment creation. This result was in agreement with the study of Inyiagu (2015) who identified increased in societal crime rate as causing menace due to students inability to acquire a better entrepreneurial skills through relevant courses of study.

The findings of research question 3 showed the most essential entrepreneurship skills needed by woodwork technology education students to be self-reliant after graduation as follows: managerial skill, marketing skill, accounting skill, communication skill, inter-personal skill, human relations skill, risk management skill, feasibility report writing skill and others. The study further showed that there was no statistically significant difference between the views of respondents of FCE(T) Umunze and Unizik on the types of entrepreneurship skills needed by woodwork technology education students.

The second null hypothesis also showed that urban (Unizik's students) and rural (FCE(T) Umunze students) do not differ significantly in their views on the most essential entrepreneurial skills needed by wood work technology education students for self-reliance after graduation. This showed that both institutions in collaboration agreed to the identified entrepreneurship skills as necessary for acquisition by students of the two institutions. In view of the above findings, the centre for entrepreneurship studies in both institutions and other tertiary institutions should update their curriculum to include the identified entrepreneurship skills in this study.

## Conclusion

It is pertinent to state that entrepreneurship education is certainly a vehicle through which entrepreneurial skills should be acquired in order to adapt to numerous business challenges. From the findings of the study, it is crystal clear that certain skills are required in order to be proficient in any professional fields of human endeavour. The identified skills should be integrated in the curriculum as skills needed for entrepreneurs to acquire. These entrepreneurship skills should be made compulsory for students to register while undergoing through their professional areas of specialization.

## Recommendations

Based on the findings of the study, the following recommendations were made;

1. Entrepreneurship curriculum should be updated and made compulsory for students of technical vocational education and training.
2. The identified entrepreneurship skills in this study should be accepted as the most essential skills needed by TVET students since woodwork technology education is one of the options offered in TVET programmes.
3. Students of woodwork technology education should be enlightened more on the need to offer these entrepreneurship skills.
4. Centres for entrepreneurship studies in our tertiary institutions should update their curriculum with the identified skills in this study as mandatory for TVET students to offer.

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