Original Research Article

A Survey of Entrepreneurship Education and Its Effect on Students' Engagement(Involvement)in Investment (Business) in School and after School

Abstract

This study was undertaken to assess the extent to which the introduction of entrepreneurship education (EEd) has helped in building entrepreneurs in school and after school following the introduction of the course into Nigerian educational system more than a decade ago. The assessment was measured based on students' engagement in entrepreneurial activities while in school and their investment in different sectors of the economy after school. Therefore, the entrepreneurs were selected using purposive sampling technique. The research covered graduates from Federal Polytechnic Offa in Kwara State from 2010 - 2021. Questionnaire was used to collect data and Z-test about proportion and binary logistic regression model was used in analyzing the data.The result of the analysis revealed that, the proportions of those students who are engage in business activities did not significantly change between graduates that is participating in business activities after graduation and those that participated in business activities while in school. This implies that the continuation of entrepreneurship education (EEd)in higher learning bring the same value in terms of graduates participating in business while in school and those participating in business after graduation. A similar finding in changing mindset to do business while in school also revealed that proportions of graduated students that are participating in business activities after graduation and graduated students that participated in business activities while in school, that entrepreneurship education (EEd)in school has influenced in changing their mindset to do business are significantly the same.Also, discovered is that academic performance in EEd does not significantly determine a student engagement in business activities while in school. Based on the findings, the stakeholders are advised to review the course content of EEd in tertiary institution for more participation and encourage those with a small-scale business venture.

Keywords: Business activities, Entrepreneurship education, graduates, mindset,

Introduction

It is no more a strange thing to see students, especially of higher institutions, in Nigeria getting involved in one business or the other. This trend breaks the barrier that business was seen to be exclusively meant for after school or for those who could not further their education or who could not have paid job. There may be many causes for the current trend but one should not rule out the introduction of Entrepreneurship Education (EEd) in the curriculum of higher institution through the establishment of Entrepreneurship Development Centre (EDC) in various schools. The increase in graduate unemployment in Nigeria led to the introduction of entrepreneurship education(EEd). The purpose of introduction of entrepreneurship education (EEd)into tertiary institutions in Nigeria was to bring about graduates change of attitude of waiting for white collar job after school to being involved in business activities, even while in school, to reduce unemployment.

Entrepreneurship education (EEd)is described by Wibowo (2011) as an attempt to internalize entrepreneurial spirit and mental wellbeing through educational institutions and other institutions such as training institutions. Lo Choi Tung (2011) view entrepreneurship education (EEd)as the process of transmitting entrepreneurial knowledge and skills to students to help them exploit a business opportunity.

The entrepreneurship education (EEd)is to encourage students to be involved in business enterprise while in school and when they are out of school by making sure every students have adequate managerial and trade skills. The main objective of introducing Entrepreneurship Education (EEd)into the Nigerian Educational Curriculum is to equip learners (students) with adequate or relevant entrepreneurial abilities (Akpan, 2021).

Entrepreneurial education (EEd)is a factor that plays an essential role in determining knowledge and entrepreneurial mindset that leads to the entrepreneurial preparation or entrepreneurship involvement of students (Ari, Bagus, Rr Ponco&Heri, 2020).Therefore, the ability of the educational system to provide entrepreneurship training for individuals depends on the availability of the requisite capacity in terms of personnel and other facilities for knowledge, skills and building of mindset to be transferred appropriately (Eze, 2012).

According to Njoroge and Gathungu (2013)eentrepreneurship training may be reporting an increase in sales and profits, and may seem to be registering growth, but what stand against it is lack of training on financial, strategic management and marketing. This limitation should be overcome by entrepreneurship education(EEd)which comprises of training on managerial and trade skills. The proper training of the trainers will lead to transfer of knowledge hence, skill acquisition and utilization.

The success in terms of involvement of students in entrepreneurship activities cannot be overemphasized. There are many of them who are engaged in business activities while in school and out of school that can possibly be linked to knowledge acquired through entrepreneurship education(EEd).

Therefore, this paper is to determine the level of involvement by assessing the impact of entrepreneurship education (EEd)on students while in school having in mind the rate of involvement, their mindset to venture into business and the relationship between performance in EEd and involvement(engagement) in entrepreneurship (business enterprise). Also, to establish the impact of EEd on their decisions to invest in various sectors of the economy after graduation.

Literature Review

Entrepreneurship education (EEd)is gaining massive interest day by day among policy makers, business professionals and academics in such a way that it is regarded as the 21ststrategy for economic growth and development of any nation (Fems, Opigo& Agada, 2020; Izedonmi& Okafor, 2010; Koe, Sa'ari, Majid & Ismail, 2012).

The place of tertiary education on raising entrepreneurs through entrepreneurship education (EEd)to yield employment opportunities through the entrepreneurship development is also taking a centre stage in which there are several types of entrepreneurs that are products of tertiary education fastened in economic growth with employment opportunities created through the entrepreneurship development through expanding of businesses and poverty reduction (Grema, &Yohanna, 2013). This will lead to achieving one of the goals of economic development founded by successive governments in developing economies which have been the reduction of unemployment by entrepreneurial development (Bello, 2010).

Even though entrepreneurship education (EEd)has been a success based on some studies in imparting entrepreneurship skills in managing small scale business, the successes notwithstanding, the entrepreneurship education (EEd)is yet to be up-help appropriately because of the provision of the adopted curriculum, hence curriculum planners should consider revisiting the curriculum and ensuring that entrepreneurship education (EEd)is introduced as a core module for students in all programmes and at all levels. Another area to consider is partnership with other institutions of learning such as Technical and Vocational Education Training (TVET) colleges and business organizations should be promoted to enhance work integrated learning (Bongani, 2019).

The subject matter "Entrepreneurship Education"(EEd)since it was reported as an important role in providing new enterprises, has attracted much interest among scholars (Bae, Qian, Miao &Fiet, 2014; Turner &Gianiodis, 2018). According to Rakib (2015) entrepreneurship education (EEd)from the level of knowledge, attitudes, and skills of entrepreneurship either partially or simultaneously influenced the entrepreneurial intention for economic education students at the Faculty of Economics in State University of Makassar. An empirical study on impact of entrepreneurship education (EEd)on job intentions of polytechnic students in Nigeria is therefore necessary and when this was carried out by Adewoyin and Famule (2020), it was discovered that more than enough evidence has suggested that EEd has positive impact on job intentions of students in Nigerian Polytechnics and Colleges of Technology.

Osakede, Lawanson and Sobowale (2017) carried out a study to determine if there is any significant effect of student's involvement in entrepreneurial activities on academic performance of such students. They used multinomial logistic regression in which entrepreneurial activities was one of the factors and was found not to significantly affect the academic performance of the students.

Methodology

Research Instrument/Validation

Self-made research questionnaire was used to gather the necessary information for this study. The questionnaire was structured logically and questions were asked to address the research questions. This research instrument was validated by experts and a reliability test was carried

out during pre-test before the final administration of the instruments to the respondent. The reliability test using split-half reliability test gave a strong coefficient of 0.85.

Sampling Technique

The sample for this study is made up of purposive sampling technique, selected graduates from Federal Polytechnic Offa the that are engaged in business activities within Offa and its environments.questionnaire was administered to 240 graduates and out of which 219 returned their duly filled questionnaires.

Methods of Analysis of Data

The data collected through administration of questionnaire was analyzed using both descriptive and inferential statistics. Hence, the data with percentages was presented in pie charts in which each sector of a circle represents a category of the data with frequencies and percentages. While Z-test about different in proportions and binary logistic regression was used to test some hypotheses.

The above analyses were done with the use of Statistical Packages for Social Sciences (SPSS).

Hypotheses

The following hypotheses are to be tested in other to ascertain the impact of introducing EEd as a course in tertiary institutions in Nigeria.

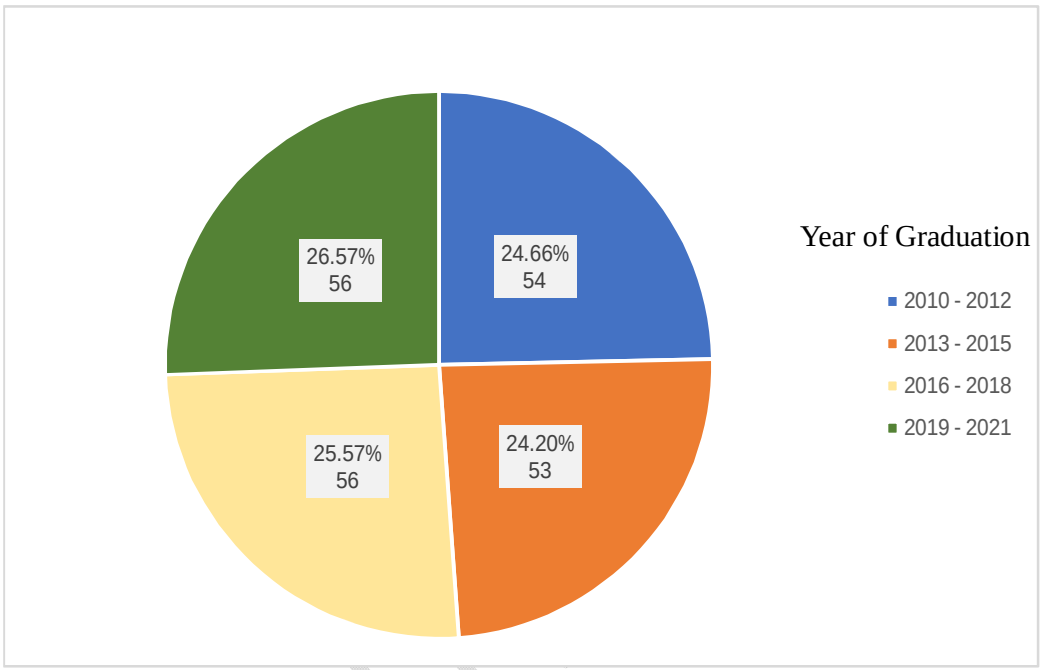
H_{01}: There is no difference between the proportion of graduates and undergraduates' students' participation in business venture while in school as a result of entrepreneurship education.

H_{02}: There is no difference between the proportion of graduates and undergraduate students changing mindset to business venture while in school as a result of entrepreneurship education.

H_{03}: The introduction of entrepreneurship course OREEddoes not determine their participation in entrepreneurship/business activities while in school.

Descriptive Analysis

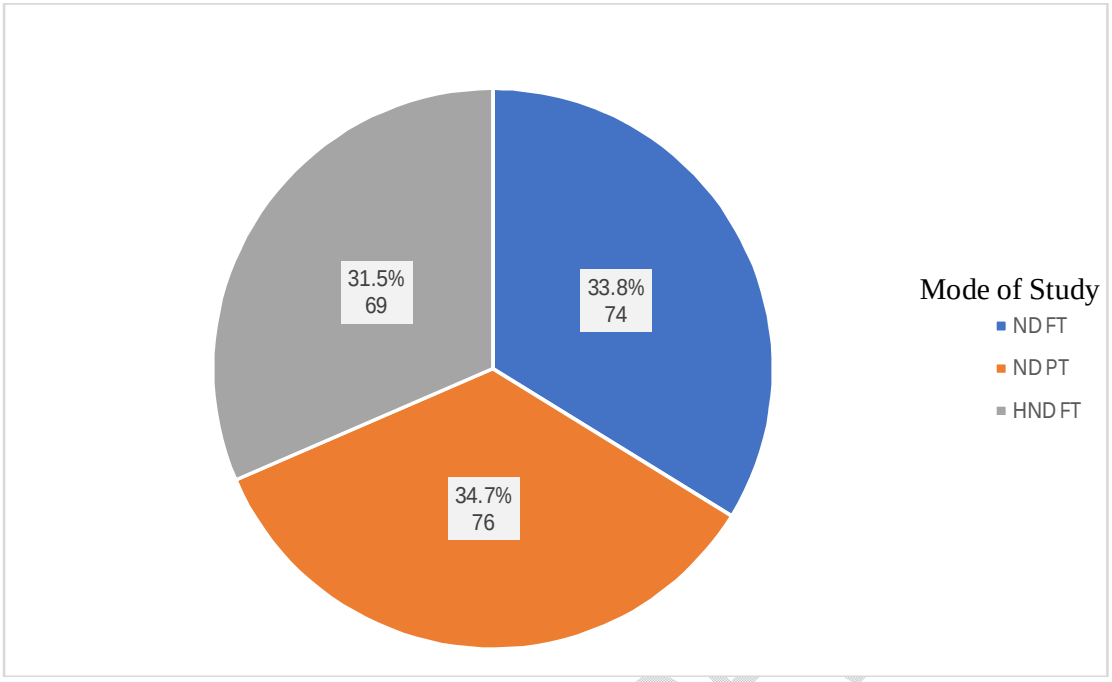
This section takes care of presentation of data collected through the administration of questionnaire to graduates from The Federal Polytechnic Offa.



Source: Field Survey (2022)

Figure 1: Pie chart showing respondents by year of graduation

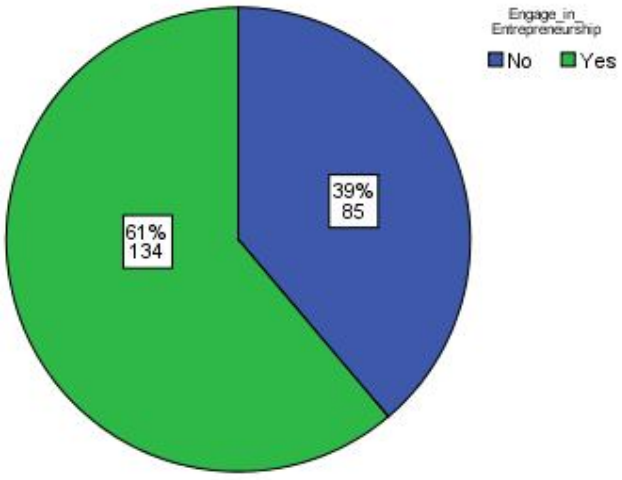
The breakdown of respondents/graduates based on year of graduation is shown in figure 1. The respondents from 2010 – 2012 are 54 students representing approximately 25% of the total respondents, 2013 – 2015 are 53 students or approximately 24% of the total respondents of 219, 2016 -2018 and 2019 - 2021 are 56 with approximately 26% each.



Source: Field Survey (2022)

Figure 2: Pie chart showing respondents (graduates) by mode of study

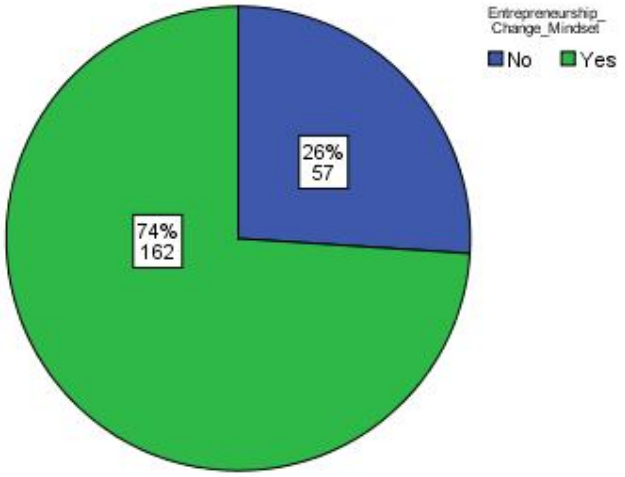
The polytechnic producesgraduates from three mode of study; ND Part-Time (PT) and ND Full-Time (FT) and HND Full-Time (FT). The respondents are made up of 74 graduatesat ND FT level, 76 graduatesat ND PT level and 69 graduatesat HNDFT level with approximately 34%, 35% and 32% respectively.



Source: Field Survey (2022)

Figure 3: Pie chart showing respondents by Engagement in Entrepreneurship

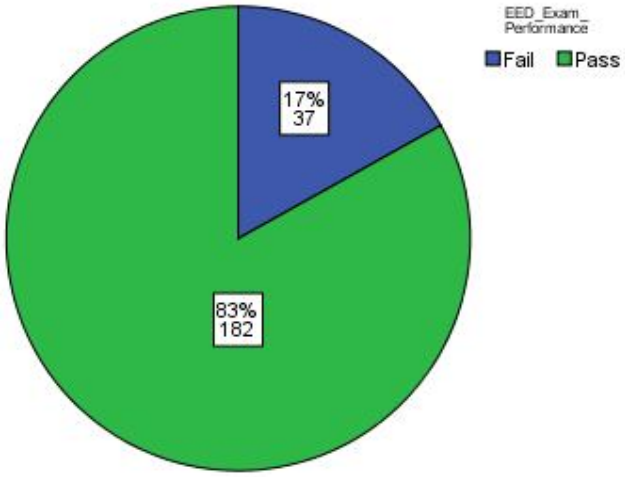
The number of graduates that are engaged in entrepreneurial activities while in school, out of 219 respondents is 134 while 85 students do not get involved in any business activities while in school. Therefore, the rate of involvement of students in business activities while in school is 61 percent in The Federal Polytechnic Offa.



Source: Field Survey (2022)

Figure 4: Pie chart showing respondents changing their mindset because of EEd.

The chart in figure 2 shows that those graduates that change their mindset towards entrepreneurship, out of 219 are 162 representing 74%. While those that are indifferent are 57 representing 26%.



Source: Field Survey (2022)

Figure 5: Pie chart showing respondents performance in EEd.

The success rate as indicated by percentage pass is 83% showing that 182 graduates passedEEd examinations out of 219. Only 37 graduates failed representing 17% while in school.

Test of Hypotheses

1. H_{01}: There is no difference between the proportion ofgraduates participating in business venture andgraduates' participation in business venture while in school as a result of entrepreneurship education.

Vs

H_{11}: The proportion of graduates' participation in business venture while in school as a result of entrepreneurship education is more than that of graduates participating in business venture after graduation.

Table 1: Z-test about proportion of students' engagement in entrepreneurship

Pearson Chi-Square Test	df	Z-test	p-value (2-sided)	p-value (1-sided)
0.283	1	0.53	0.595	0.30

The p-value of 0.3 in table 1 above is an indication that H_{01} should be accepted at 5% level of significant. Leading to the fact that there is no significant different between the proportion of graduates' participation in business venture after graduation and graduates' participation in business venture while in school as a result of more entrepreneurship education. The indifferent between program of study (HND and ND) is contrary to the work of Adewoyin and Famule (2020) where the program of study of the students significantly related to employment after graduation.

2. H_{02}: There is no difference between the proportion graduates changing mindset to business venture after graduation and graduates changing mindset to business venture while in school as a result of entrepreneurship education.

Vs

H_{12}: The proportion of graduates changing mindset to business venture while in school as a result of entrepreneurship education is more than that of graduates changing mindset to business venture after graduation.

Table 2: Z-test of proportion about students changing mindset to do business because of entrepreneurship education

Pearson Chi-Square Test	df	Z-test	p-value (2-sided)	p-value (1-sided)
0.00	1	0.00	0.989	0.49

Based on the p-value of 0.49 when carrying out Z-test of proportion about students changing mindset to do business because of entrepreneurship education between graduates while in school and after graduation in table 2, H_{02} is rejected at 5% level of significant. Meaning that, the proportion of graduates changing their mindset of venturing into business as a result of entrepreneurship education (EEd)while in school is significantly the same in proportion as those after graduation.

3. H_{03}: The performance of students in entrepreneurship course does not determine their participation in entrepreneurship/business activities while in school.

Vs

H_{13}: The performance of students in entrepreneurship course is a determinant factor to their participation in entrepreneurship/business activities while in school.

Table 3: Logistic regression of students' involvement in business on students' performance

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	EEd_Exam_Performance(1)	-.221	.365	.367	1	.545	.801
	Constant	.493	.153	10.424	1	.001	1.638

The Hosmer and Lemeshow goodness of fit test of the logistic regression used in table 3 gives a p-value of 0.00 indicating the fitness of the model. Therefore, the model is fit for use to take a vital decision based on hypothesis 3. The p-value of 0.545 in table 3 means that the performance of students in EEd examination does not determine the engagement of such

student in business venture or entrepreneurial activities while in school. This is in confirmation of the research work of Osakede et al (2017) which students' involvement in entrepreneurial activities does not significantly affects students' general academic performance.

Discussions

The proportions of those students who are engage in business activities did not significantly change between graduates that is participating in business activities after graduation and those that participated in business activities while in school. This implies that the continuation of entrepreneurship education (EEd)in higher learning bring the same value in terms of graduates participating in business while in school and those participating in business after graduation. A similar finding in changing mindset to do business while in school also revealed that proportions of graduated students that are participating in business activities after graduation andgraduated students that participated in business activities while in school, that entrepreneurship education (EEd)in school has influenced in changing their mindset to do business are significantly the same.

The performance of students of science and technology students in (EEd)examinations do not in any where determine the students' involvement(engagement)in business activities while in school. The fact that a student passes or fails (EEd)examinations does not make a student to be entrepreneur or not to be entrepreneur.

Conclusion

The positive effect of entrepreneurship education (EEd)since it was introduced over a decade ago can be established in the sense that more students even in non-business studies programs are participating actively in entrepreneurship. A higher proportion of them are involved in small scale business right from inception at ND level coupled with the fact that a higher proportion of students also have been influenced by entrepreneurship education (EEd)to change their mindset to being entrepreneur and self-employed. Through this, rate of unemployment will be reduced in our society.

Recommendations

The following areas discovered in this study to further improve on entrepreneurship education(EEd) in polytechnic and other institutions are

- A review of the EEd course content, both theory and practical, in HND to be much more different from that of ND.
- Students should be made to go through field experience in entrepreneurship outside the school, something similar to Students Industrial Work Experience Scheme (SIWES) at HND level.
- Students who are involved in a formal small scale business organization should be encouraged to register with Cooperate Affairs Commission (CAC) and such students can be awarded marks on practical depending on the standard of the small-scale business organization.

References:

Adewoyin V. A. &Famule F. D. (2020). Impact of Entrepreneurship Education on Job Intentions of

Polytechnic Students in Nigeria.International Journal of Research and Innovation in Social

Science (IJRISS) |Volume IV, Issue VIII, **p. 88.** www.rsisinternational.org Page 88.

Afolabi, A. (2015). The effect of entrepreneurship on economy growth and development in Nigeria. International Journal of Development and Economic Sustainability, 3(2), pp. 49- 65.

Akpan, E. I., Effiong, S. A. &Ele, A. A., (2012). Entrepreneurship Education Policy: An Intervention

Strategy for Economic Development in Nigeria. Business & Entrepreneurship Journal,

1(1), pp. 101-110.

Akpan, O. E. (2021). Entrepreneurship Studies Education in Tertiary Institutions in Nigeria: Theories and Practices. International Journal of Vocational and Technical Education Researchvol.7, No.1 Pp.35-42.

Ari, AgusWibowo, BagusShandyNarmaditya, Rr PoncoDewiKaryaningsih&HeriYanto (2020) Does entrepreneurial education matter for Indonesian students' entrepreneurial preparation: The mediating role of entrepreneurial mindset and knowledge, Cogent Education, 7:1.

Bae, T. J., Qian, S., Miao, C., &Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta–analytic review. *Entrepreneurship Theory and Practice*, *38*(2), **pp**.217–254. https://doi.org/10.1111%2Fetap.12095

Bello, G. B. (2010). Assessment of Government Initiatives on Entrepreneurship Development and Poverty Alleviation in Nigeria. Journal of Finance and Accounting Research (JOFAR), Nassarawa State University, Nigeria. Vol. 2, No. 2, June, 2010.

Bongani, T. G. (2019). Impact Of Entrepreneurship Education On Business Organisations. Journal Of Entrepreneurship Education Volume 22, Issue 2.

Eze, J. F. (2012). Capacity Building For Entrepreneurship Education: The Challenge For The Developing Nations. American Journal Of Business Education, Volume 5, Number 4.

Fems, Kurotimi M.; Koroye, Braye H.; Opigo, Helenand Agada, Franklin A. (2020) An Exploration of the effectiveness of Entrepreneurship Education in Nigeria Tertiary Institutions and its impacts on Students' Entrepreneurial Career Intentions at Federal Polytechnic Ekowe. Open Science Journal 5(4).

Grema, M. A. &Yohanna, A. T. (2013). Impact of Polytechnic Education onEnterpreneurship Development in Nigeria GremaMainaBukar. Academic Journal of Interdisciplinary

Studies MCSER Publishing, Vol 2 No 7, **pp**. 113 – 123.

Igwe, K.N., Uzuegbu, C.P., Issa, A. O., Aliyu, M.B. & Adebayo, O.A. (2015).

Entrepreneurship education in library and information science: The structure and mode of delivery in federal polytechnic Offa, Nigeria. In Udo Nwokocha& Michael G. Ochogwu (Eds.), *Contemporary issues in library and information science education in Nigeria* **pp**.52-68.

Nelson, R. E. & Johnson, S. D. (1997). Entrepreneurship Education as a Strategic Approach to

Economic Growth in Kenya. Journal of Industrial Teacher Education, 35(1), pp. 7-21.

Njoroge, C. W., &Gathungu, J. M. (2013). The Effect OfNtrepreneurialEducation And Training On

Development Of Small And Medium Size Enterprises In Githunguri District-Kenya.

International Journal Of Education And Research Vol. 1 No. 8.

Osakede, U.A., Lawanson, A.O. &Sobowale, D.A. (2017). Entrepreneurial interest and academicperformance in Nigeria: evidence from undergraduate students in the University of Ibadan.*J InnovEntrep***6,** 19. https://doi.org/10.1186/s13731-017-00797

Rakib, M. (2015). Entrepreneurship Education Analysis and its Effect on Entrepreneural Intentions (AStudy on Economics Education Students at Faculty of Economics in State University of Makassar) International Conference on Statistics, Mathematics, Teaching and Research, **pp**. 804-816.

Sule, S. (2015). Entrepreneurship Education as Strategy for Sustainable Development in

Nigeria. Proceedings of the Fourth International Conference on Global Business, Economics, Finance and Social Sciences Conference in Kolkata-India. 18-20.

Tung, L.C. (2011). The Impact of Entrepreneurship Education on Entrepreneurial Intention of Engineering Students. Cityu University of Hong Kong.

Turner, T., &Gianiodis, P. (2018). Entrepreneurship unleashed: Understanding

entrepreneurial education outside of the business school. *Journal of Small Business Management*, *56*(1), **pp**.131–149. https://doi. org/10.1111/jsbm.12365

Wibowo, Agus. (2011). Pendidikan Kewirausahaan (Konsep dan Strategis), Yogyakarta: PustakaPelajar.