ENTREPRENEURSHIP EDUCATION: A CATALYST FOR TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) SUSTAINABILITY IN NIGERIA

Akinpelu Ayobami KOLADE, Olarenwaju Patrick OLATUNJI
Moses Oluremi IYUN, Felicia Omowumi ARINLOYE
akinpelu06@yahoo.com, patrickolarenwaju62@gmail.com,

iyunoluremi@gmail.com,alabiwumi777@gmail.com
[1, 2, 3 &4] Department of Business Administration and Management,
Osun State College of Technology, Esa- Oke Osun State Nigeria

08034647211
Corresponding Author: Akinpelu Ayobami KOLADE

Abstract

Entrepreneurship education is a tangible factor and a moving force that enhances the development of any nation's economy. This study examined entrepreneurship education as a catalyst for technical and vocational educational training. To achieve the objective, a descriptive research design was adopted to gather data for the study through the distribution of questionnaires to 544 respondents selected purposefully for the study. Meanwhile, of the 544 questionnaires distributed to the respondents, only 534 copies were returned and used for the study. Both descriptive and inferential statistics of the Friedman Chi-square test were adopted for the study. The result of the Friedman Chi-squared test obtained revealed that entrepreneurship education was indeed a catalyst for technical and vocational educational training (TVET). This inference was based on the fact that the p-value of the Friedman Chi-squared test computed for the test items of 0.0000 was less than the critical value of 5%. The author concluded that entrepreneurship education was indeed a catalyst for TVET. It was recommended that entrepreneurship education form part of the core curriculum of the colleges.
Keywords: *Entrepreneurship, Entrepreneurship Education, Technical Training, Vocational Educational Training*

Introduction

In a country where the technical and vocational education and training (TVET) system is being practiced with great success and achievement, it will always be regarded as the backbone of technology and industrial activity. The system of TVET is solely designed for training vocational education, where entrepreneurship education can also take its stand, which will greatly affect the growth of serious entrepreneurs who are ready to contribute towards the sustainability of an economy that is technically inclined (European Commission, 2013; Ochedikwu, Ukuma & Attah,2013). As a result of this, TVET has not been given serious attention in entrepreneurship education, where those who have undergone technical and vocational training can also become potential entrepreneurs who are self-employed in entrepreneurship development (Basheer, 2016; Cooney, 2016; Omar, Ismail, Abdullah, Kadir, & Jusoh, 2021). One sure way of redeeming the economy is by taking entrepreneurship in technical and vocational education seriously. Meaning, skills, discoveries, and innovations are converted into goods and services for the marketplace. Enormous benefits are derivable from this system of education, including self-employment, employment of labor, poverty eradication and reduction of capital flight, among others (Famous, 2015). Most of the graduates, especially where TVET system institutions are being practiced, later become unemployed and idle because of a lack of training in entrepreneurship education to become self-employed and because reliance has not been sufficiently inculcated. Neglecting entrepreneurship education from the school curriculum has deprived the relegating nation of the contribution the graduates would make to the economy. Osalor (2013) observed that lacking such quality led to waste in terms of both human and natural resources. This is because the youth and graduates from tertiary institutions are not equipped with the skills with which to exploit the natural resources that abound in Nigeria. Therefore, there is a need to study the impact of entrepreneurship education, which can serve as a catalyst for technical and vocational education and training sustainability in Nigeria and bring about skills and competencies.

Literature Review

Concept of Entrepreneurship Education

Entrepreneurship education can be described as a process of learning that requires direction and self-management from students or learners, unlike a traditional way of teaching, which is stereotyped in nature. According to Wikipedia (2023), entrepreneurship education seeks to provide students with the knowledge, skills, and motivation to encourage entrepreneurial success in a variety of settings. Entrepreneurship education is expected to be offered at all levels of schooling, from primary or secondary schools through graduate tertiary education programs. Entrepreneurship education is the willingness and ability of an individual to acquire educational skills to explore and exploit investment opportunities, establish, and manage a successful business enterprise. (Neal 2020; Kissi, Ahadzie, Debrah, & Adjei-Kumi, 2020). Entrepreneurship education has also been described as formal or informal structured learning that inculcates in students or trainees the ability to identify, screen, and seize available opportunities in the environment in addition to skill acquisition (Olanipekun, Brimah & Rabiu, 2015). Entrepreneurship education is the willingness and ability of an individual to seek out investment opportunities in an environment and be able to establish and run an enterprise successfully (Halliru, Yusri, Umar & Abdullahi, 2021; Yeap, Suhaimi & Nasir, 2021). Entrepreneurship education is defined as the process of creating something different with value by devoting the necessary time and effort, assuming the accompanying financial, psychological, and social risk, and receiving the resulting rewards of monetary and personal satisfaction. Entrepreneurship education is described as skills that develop the creation of large or small-scale businesses or enterprises, which has a significant impact on socio-economic development. Creative and innovative ideas that bring about growth and development in various aspects, such as social, governmental, and economic aspects, are required, especially by making education and training instrumental to broadly designing to accommodate entrepreneurial skills (Azim & Kahtani, 2014; Walker & Joyner 1999; Barzelogna, 2021; Frey Osborne, 2013).

The Significance of Entrepreneurship in Technical and Vocational Education in Nigeria

- restatement of proficiency, knowledge, and inventions into goods and services for the business
- motivate scholars with impulses for imagination and creativity.
- involve scholars in participatory sweat in expectation of societal (profitable) changes.
- train and encourage scholars or trainees on how to secure fiscal backing from guarantor associations or individuals.
- reduce capital flight since some goods and services will be produced locally.
- Graduates produce jobs and employ others in some cases.
- Capabilities in pastoral areas can be fluently linked and handed over to for-profit timber.
- promotes sustainable development and raises the standard of living.
- the foundation of the artificial and manufacturing conditioning of a country.
- Promotion and facilitation of imports and enhancement of profitable public growth
- Entrepreneurship reduces the affluence of foreign professionals and promotes foreign reserves. (Famous, 2015)

Overview of Technical and Vocational Education Training (TVET) in Nigeria

The concept of technical and vocational education and training (TVET) in Nigeria is formed through subsections that include: pre-vocational, vocational, technical colleges, colleges of education (technical), polytechnics, and universities. To retain and sustain the reformation in the education sector, the Joint Admission and Matriculation Board (JAMB) accepted the National Technical Certificate (NTC) and National Business Certificate (NBC) as criteria for admission into institutions of advanced literacy. While all specialized colleges needed to chapter with the National Business and Technical Examinations Board (NABTEB) for their examinations (Nwekeaku, 2013)

The study of technologies and related lures, the accession of practical chops, stations, understanding, and knowledge relating to occupations in colorful sectors of profitable and social life, and the inclusion of entrepreneurship into Technical and Vocational Education Training (TVET) differ among countries.(Eze &Okorafor,2015; McCallum, 2019). It's a pity that the mindset of youthful minds and scholars and indeed their parents is greatly eyeless to vocational and specialized education because utmost of them want to become accountants, bankers, economists, business directors, engineers, medical doctors, etc. while there's a great demarcation against technicians and tradesmen in Nigeria (Balogun, Gambari & Falode, 2019), and this has turned the nation into an alternate class citizen in the product of goods and services, which has also favored foreign goods and services, thus jettisoning the made in Nigeria goods (Gambari, Kawu, & Falode,2018).

Most of the time, the little goods that survived were refused to carry the Made in Nigeria emblem and tag because of low patronage from the citizens. In some countries like Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia,

Germany, Hungary, Lithuania, Poland, Romania, Slovenia, Spain, Slovakia, and the United Kingdom, vocational and technical education is commenced at primary academies; however, it is more common at secondary academies and tertiary education positions. (Ochedikwu, Ukuma &Attah,2013)

Theoretical Review

There are various types of theories of entrepreneurship, which include innovation theory, need for achievement theory, status withdrawal theory, neoclassical theory, and alert theory. But this study will dwell on Neo-Classic theory. The neoclassic theory, which was developed by Marshall (1961), underlines three predictors that were ascribed to this theory: level of labor, hard work, and knowledge. The level of labor by any entrepreneur indulging in business activities can be a determinant of the profit earned; therefore, in order to access a huge profit, hard work must be attributed. Also, in the aspect of knowledge and skills, it is important for an entrepreneur to acquire them, which will serve as the basis for the huge success of the business activities. Although there are some limitations to this theory, some factors were not taken into consideration, including political, social, and technological ones. The adoption of this theory will encourage the entrepreneur to be assiduous and hardworking and to acquire good knowledge of entrepreneurship education that will translate to successful business activities that were obtained through the relevant skills and innovation of technical and vocational training.

Empirical Review

In the study by Okwori, Yisa and Mustapha (2021) on the effectiveness of entrepreneurship education in TVET during the period of the COVID-19 epidemic, the population of the study was made up of 20 subjects, consisting of all 15 speakers in the Department of Industrial and Technology Education and 5 speakers in the Department of Education Technology. The mean and standard deviation (SD) were used to dissect the data collected. The study set out that these factors—the tutoring system, lack of career comfort, outdated classes, lack of provocation, and so on—relatively caused the ineffectiveness of entrepreneurship in TVET. These tutoring styles, such as drone or Google Meet in lecture delivery, videotape tape recording instruction, blended literacy, podcasting, etc., can effectively enhance entrepreneurship in TVET in this period of the COVID-19 epidemic. They recommended, among others, that the government should make electronic bias available in every specialized council for tutoring, and there should be training and retraining of specialized preceptors on distance literacy in using the available electronic bias.

Onigbara and Evacuate (2022) discovered that a major problem facing Nigerian youths at the moment is severance and poverty. Whereby, the study reviews the literature on technical and vocational education and Training (TVET) as a means of providing results to the severance and poverty problems in Nigeria by generating employment openings and conducting the right chops. Still, these chances are advanced with TVET skill training because it provides vocational chops, facilitates the transition from academia to work, and leads to an advanced labor request value when compared to general or academic training. The focus of most international associations is to develop people's chops for employment generation and poverty reduction. To boost the performance and capability of Nigerian youths in the world, the study recommends youths' preferences for vocational exertion, respectable backing of TVET programs and modern training outfits for TVET institutions, the commitment of applicable stakeholders to the youth commission, and provocation to boost their interest in technical and vocational exertion.

Methodology

A descriptive research design was adopted to gather data for the study through the distribution of questionnaires to respondents selected purposefully for the study from the population of all 212 TVET institutions in the South West who duly registered with the National Board for Board and Technical Education (NBTE) in Nigeria. (NBTE, 2023). A total of 544 respondents, including final-year students and lecturer/teachers who are involved in the teaching of entrepreneurship, business studies, and commerce, were selected. Meanwhile, of the 544 copies of the questionnaire distributed to the respondents, only 534 copies were returned and used for the study. This gave 98.16% completeness. The close-ended questionnaire provides options for the respondents, who are final-year students and lecturers or teachers who are involved in the teaching of entrepreneurship, business studies, and commerce at tertiary institutions, specialized schools, and technical schools in Southwest Nigeria, to select their answers on a five-point Likert scale where 5=strongly agree, 4 = agree, 3 = undecided, 2 = disagree, and 1 = strongly disagree. The questionnaire was structured into two sections, with part one eliciting information about the respondent's bio-data like age, marital status, qualification, etc., whereas part two reflects the objectives, research questions, and hypotheses of the study. The collected data were analysed using Friedman Chi-squared and Hotelling tests to investigate the objective of the study. The test was carried out at a 5% level of significance.

1. Presentation and Discussion of Result

Table 1 Frequency Distribution of Respondent Demographic Variable

Respondent Demographic Characteristics	Frequency	% Percentage
Age in Years		
Less than 30	120	22.47
30-34	30	5.62
35-39	230	43.07
40-44	84	15.73
45 and Above	70	13.11
Status		
Students	200	37.45
Lecturers/Researchers	334	62.55
If lecturers / Researchers indicate your highest level of Education		
B.Sc./B-ED/B.A/B.TECH	320	59.93
MSC/M.TECH/M.A/MED	60	11.24
PHD	12	2.25
HND	103	19.29
Other	39	7.30

Source: Researcher's Field work, 2023

Table 1 presents the frequency distribution of respondents' demographic variables. Looking at the result in the table, the frequency distribution of respondents by age in years revealed that 22.47% of the respondents were less than 30 years of age, while 5.62%, 43.07%, 15.73%, and 13.11% of the respondents were between 30-34, 35-39, 40-44, and 45 and above years of age, respectively. This implied that a substantial number of the respondents were between 35 and 39 years of age. Therefore, any opinion generated by this category of respondents might influence the outcome of the study significantly.

More so, the distribution of respondents according to status revealed that 37.45% of the respondents were students, while 62.55% of these respondents were lecturers or researchers.

This variable helped bring about the diversity of opinions needed to make the paper meaningful. In addition, the frequency distribution of respondents by the educational status of the researchers and lecturers showed that 59.93% of the respondents had a B.Sc., B.ED., or B.A./B.TECH, while 11.24% of the researchers had an M.Sc., M. Tech., or M.A/M.ED. More so, 2.25%, 19.29%, and 7.30% of the respondents had Ph.D., HND, and other certificates (such as attendance at seminars, conferences, and training), respectively. This indicated that a sufficient number of the respondents had B.SC./B.ED./ B.A/B.TECH. This variable might significantly influence how respondents, particularly the researchers, rated the test items on entrepreneurship education as a catalyst for technical and vocational education.

Table 2 Mean and Standard Deviation Computed for the variable of Entrepreneurship Education as a Catalyst for Technical and Vocational Education

S/N	Variable	N	Mean	STD	Rank	Remark
1	Effective entrepreneurship education offers students access to skills and knowledge needed to start an entrepreneurial venture	**534**	4.10	0.95	9th	A good catalyst for TVET
2	The entrepreneurship education curriculum in the institution is designed to equip students with skills needed to start up their own businesses	**534**	4.04	0.79	6th	A good catalyst for TVET
3	As part of the curriculum offered by the institution, the entrepreneurship programmes include practical	**534**	4.23	0.74	4th	A good

	elements aimed at encouraging the creation of new businesses					catalyst for TVET
4	It is believed that entrepreneurship education can be a platform for addressing unemployment in communities through the creation of new businesses	**534**	3.65	1.06	12th	A good catalyst for TVET
5	Entrepreneurship education helps students to consider self-employment as a valid graduate career option	**534**	3.85	1.01	11th	A good catalyst for TVET
6	The institution provides entrepreneurship education that teaches graduates business skills through internship opportunities at businesses in the local economy	**534**	4.01	0.95	9th	A good catalyst for TVET
7	Skills provided through entrepreneurship education play a crucial role in graduates developing the ability to think in a creative and critical manner	**534**	4.44	0.68	1st	Effective Catalyst for TVET
8	The institution offers support to students in order to start up their own businesses, by assisting them in compiling a business plan, with specialist advice from business mentors and financial assistance	**534**	4.21	0.73	3rd	Effective Catalyst for TVET
9	The institution collaborates with entrepreneurship experts to promote entrepreneurship education	**534**	4.27	0.76	5th	Effective Catalyst for TVET
10	The institution invites entrepreneurs and practitioners from different organizations to share their experience with students	**534**	4.07	0.95	9th	A good catalyst for TVET
11	The institution allows graduates the space to try and fail so they may encounter intelligent failures as part of effective learning	**534**	4.15	0.86	7th	A good catalyst for TVET
12	The institution takes students for visits to industries to gain more knowledge about the subject	**534**	4.29	0.71	2nd	Effective Catalyst for TVET

Source: Researcher's Computation, 2023

** 5 point likert scale of SA= Strongly Agreed =5, Agreed= A=4 Moderately Agreed =MA= 3, Disagreed =D=2 and Strongly Disagreed=SD=1 were used ** Acceptable mean =3.00 ** A test item was a good catalyst for TVET if the mean calculated was greater than or equal to 3.00 or otherwise. ** Rank was done on the basis of the STD ** STD = Standard Deviation

Table 2 presents the result of the mean and standard deviation computed for the respondents' perception of the variable on entrepreneurship education as a catalyst for technical and vocational education training. Looking at the results in the table, a substantial number of the respondents were in support of the fact that entrepreneurship education was indeed a catalyst for technical and vocational education training. This inference was premised on the

fact that the mean values computed for all the test items were far greater than the acceptable mean of 3.00, with standard deviations that showed insignificant dispersion or variation from the mean. For instance, one could assert that effective entrepreneurship education offers students access to the skills and knowledge needed to start an entrepreneurial venture.

This assertion was based on the fact that the mean value computed for the test item of 4.10 was far greater than the acceptable mean of 3.00 with a standard deviation of 0.95 that showed a not-too-serious variation from the mean. The implication of this was that through entrepreneurship education, the skills and knowledge required by learners to be job creators could be enhanced through their technical and vocational education and training. The resultant study showed that entrepreneurship education was an opportunity for students to improve their technical and vocational education training. Also, it was found that the mean value obtained for the test item, which stated that the entrepreneurship education curriculum in the institution was designed to equip students with the skills needed to start up their businesses, of 4.04 was greater than the acceptable mean of 3.00. This implied that a substantial number of the respondents were in support of the test item. Thus, with an entrepreneurship education curriculum fashioned towards inculcating the necessary practical training and exposure needed by the students, their technical and vocational education training might be enhanced. This showed that with an emphasis on entrepreneurship curriculum design towards improving students' skills, their expectations concerning technical and vocational education training (TVET) must have melted. Above all, the result in Table 2 indicated that technical and vocational education training (TVET) needed entrepreneurship education to make it meaningful, applicable, and bring to fruition the desire of the students to be able to leverage the opportunity to be able to make a living from the skills and knowledge gained.

Table 3 Testing the Significant of the Individual Entrepreneurship Education Variables

ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
Effective entrepreneurship education offers students access to skills and knowledge needed to start an entrepreneurial venture	Between Groups	199.454	30	6.648	11.029	.000
	Within Groups	302.625	502	.603		
	Total	502.079	532			
The entrepreneurship education curriculum in the institution is designed to equip students with skills needed to start up their own businesses	Between Groups	152.594	30	5.086	12.013	.000
	Within Groups	212.135	503	.423		
	Total	364.729	533			
As part of the curriculum offered by the institution, the entrepreneurship programmes include practical elements aimed at encouraging the creation of new businesses	Between Groups	112.054	30	3.735	10.103	.000
	Within Groups	185.961	503	.370		
	Total	298.015	533			
It is believed that entrepreneurship education can be a platform for addressing unemployment in communities through the creation of new businesses	Between Groups	320.909	30	10.697	20.637	.000
	Within Groups	260.724	503	.518		
	Total	581.633	533			
Entrepreneurship education helps students to consider self-employment as a valid graduate career option	Between Groups	255.521	30	8.517	15.113	.000
	Within Groups	283.483	503	.564		
	Total	539.004	533			
The institution provides entrepreneurship education that teaches graduates business	Between Groups	205.098	30	6.837	14.912	.000
	Within Groups	228.312	503	.458		

skills through internship opportunities at businesses in the local economy	Total	433.410	533			
Skills provided through entrepreneurship education play a crucial role in graduates developing the ability to think in a creative and critical manner	Between Groups	137.185	30	4.573	14.012	.000
	Within Groups	164.156	503	.326		
	Total	301.341	533			
The institution offers support to students in order to start up their own businesses, by assisting them in compiling a business plan, with specialist advice from business mentors and financial assistance	Between Groups	261.235	30	8.708	13.456	.000
	Within Groups	325.507	503	.647		
	Total	586.742	533			
The institution collaborates with entrepreneurship experts to promote entrepreneurship education	Between Groups	123.226	30	4.108	11.224	.000
	Within Groups	184.086	503	.366		
	Total	307.313	533			
The institution invites entrepreneurs and practitioners from different organizations to share their experience with students	Between Groups	157.187	30	5.240	16.255	.000
	Within Groups	162.132	503	.322		
	Total	319.318	533			
The institution allows graduates the space to try and fail so they may encounter intelligent failures as part of effective learning	Between Groups	250.396	30	8.347	21.467	.000
	Within Groups	195.574	503	.389		
	Total	445.970	533			
The institution takes students for visits to industries to gain more knowledge about the subject	Between Groups	211.390	30	7.046	15.965	.000
	Within Groups	222.003	503	.441		
	Total	433.393	533			

Source: Researcher's Computation, 2023

Table 3 presents the result of the analysis of the variance test, otherwise called the F-test, computed for the variables of entrepreneurship education to determine whether each of the variables catalyzed technical and vocational educational training. Looking at the results in the table, it was found that the p-values of the F-statistics computed for the test items of 0.0000s were less than the critical value of 5%. This implied that entrepreneurship education was a catalyst for technical and vocational education training. This further revealed that through entrepreneurship education, the skills, knowledge, initiative, creativity, and opportunities needed by the students to improve their technical and vocational educational training had been thoroughly impacted through the relevant entrepreneurship training and education acquired and taught to them and was pointed out by Ogunkokoya (2017), who argued that technical and vocational educational training could be difficult to achieve without the relevant entrepreneurship education. This was because entrepreneurship education made the technical skills and vocational educational training acquired by the students relevant and meaningful to the opportunities offered by societal needs. Therefore, with the entrepreneurship educational curriculum exposing the practical aspects of entrepreneurship education to the students, their technical and vocational educational training has been improved. In this way, entrepreneurship education increased the ability of the learners to re-integrate their technical and vocational educational training into practical usefulness through the establishment of meaningful ventures and service businesses that might meet societal needs.

Table 4 Joint Test Statistics of Entrepreneurship Education as a Catalyst for Technical and Vocational Educational Training

H_O: Entrepreneurship Education is not a catalyst for technical and vocational Education and Training

ANOVA with Friedman's Test

		Sum of Squares	Df	Mean Square	Friedman's Chi-Square	Sig
Between Entrepreneurship Education		1797.518	525	3.424		
Within Entrepreneur Edu	Between Items	128.873[a]	11	11.716	222.662	.000
	Residual	3219.961	5775	.558		
	Total	3348.833	5786	.579		
Total		5146.352	6311	.815		

Source: Researcher's Computation, 2023 *** Grand Mean = 4.0162

Kendall's coefficient of concordance W = .025.

Table 5 Hotelling 's T-squared Test

Hotelling's T-Squared	F	df1	df2	Sig
178.821	15.947	11	515	.000

Source: Researcher's Computation, 2023

Table 4 presents the result of the Friedman Test to determine the significance of the overall test items of entrepreneurship education as a catalyst for technical and vocational educational training. Looking critically at the result in the table, it was discovered that the p-value of the Friedman Chi-square statistic of 0.0000 was less than the critical value of 5%, with a significant statistical value of 222.662. This indicated that the joint null hypothesis, which stated that entrepreneurship education was not a catalyst for technical and vocational education and training, was rejected. It was safe to infer that entrepreneurship education was a catalyst for TVET. The implication of this was that entrepreneurship education was needed to provide effective technical and vocational educational training due to its explosive nature in the field of technical education. The import of this was that with entrepreneurship education, the capacity of the learners to be able to initiate ideas through the right innovation, creativity, and knowledge and skills gained through TVET might be enhanced if entrepreneurship education was included as part and parcel of TVET. This was because, with entrepreneurship education, technical and vocational educational training became easy and simple to learn and master due to the ability of the former to initiate ideas that might be useful to meet societal needs. Thus, entrepreneurship education gave leverage to TVET by ensuring that the knowledge and skills acquired in the latter translated into marketable values for the students and prospective entrepreneurs.

Table 5 presents the result of Hotelling's T-squared test to reaffirm the result obtained from the Friedman Chi-squared test. From Table 5, it was found that the p-value of the F-statistics computed for the variables of entrepreneurship education as a catalyst for TVET of 0.000 was less than the critical value of 5%. This indicated that entrepreneurship education was indeed a catalyst for technical and vocational educational training. This further showed that without entrepreneurship education, the knowledge and skills acquired by the students through TVET might not be marketable. Thus, entrepreneurship education exposed technical and vocational educational training students to the value and relevance of their knowledge, training, and practice in TVET. This assertion was relevant to the opinion of McCallum (2019), who opined that with entrepreneurship education, the value and relevance of technical and vocational educational training became used to meet societal needs through considerable return that made the trainees masters of their affairs (UNESCO-UNEVOC 2019). At this junction, there was a need to verify whether the variables of entrepreneurship education catalyzed TVET. In this case, the test items were expected to possess equal variance to be affirmed as part of the catalyst or contributor of technical and vocational educational training (TVET), thus leading to the post-estimation test of Levene statistics, otherwise called the test of homogeneity of variances.

Table 6 Post- Estimation Result Test of Homogeneity of Variances

Variable	**Levene Statistic**	**df1**	**df2**	**Sig.**
Effective entrepreneurship education offers students access to skills and knowledge needed to start an entrepreneurial venture	5.827	28	502	.000

The entrepreneurship education curriculum in the institution is designed to equip students with skills needed to start up their own businesses	2.890	28	501	.000
As part of the curriculum offered by the institution, the entrepreneurship programmes include practical elements aimed at encouraging the creation of new businesses	4.925	28	503	.000
It is believed that entrepreneurship education can be a platform for addressing unemployment in communities through the creation of new businesses	5.105	28	503	.000
Entrepreneurship education helps students to consider self-employment as a valid graduate career option	6.707	28	503	.000
The institution provides entrepreneurship education that teaches graduates business skills through internship opportunities at businesses in the local economy	8.580	28	498	.000
Skills provided through entrepreneurship education play a crucial role in graduates developing the ability to think in a creative and critical manner	5.827	28	503	.000
The institution offers support to students in order to start up their own businesses, by assisting them in compiling a business plan, with specialist advice from business mentors and financial assistance	6.240	28	503	.000
The institution collaborates with entrepreneurship experts to promote entrepreneurship education	8.758	28	503	.000
The institution invites entrepreneurs and practitioners from different organizations to share their experience with students	6.504	28	503	.000
The institution allows graduates the space to try and fail so they may encounter intelligent failures as part of effective learning	7.247	28	503	.000
The institution takes students for visits to industries to gain more knowledge about the subject	4.869	28	503	.000

Source: Researcher's Computation, 2023 ** critical level of significance is 5%

Table 6 presents the result of the homogeneity of variance carried out for the variables of entrepreneurship education. Looking at the results in the table, it was found that the variables of entrepreneurship education were indeed catalysts for technical and vocational educational training (TVET). This inference was premised on the fact that the p-value of the Levene statistics computed for the test items of 0.0000 was far less than the critical value of 5%. This showed that the test items had equal variance, confirming the fact that the variables might enhance the TVET if adequately implemented and could produce the same effect on the TVET.

Conclusion and Recommendations

The study showed that entrepreneurship education was an important variable in enhancing the technical and vocational educational training of students. Thus, it might be concluded that entrepreneurship education was a catalyst for technical and vocational educational training (TVET) showing that without entrepreneurship education, the value, relevance and addition of technical and vocational educational training and knowledge gained and acquired by the students might be inaccessible. Therefore, entrepreneurship education made TVET useful. The following recommendations are made for the study.

This is a need for the National Board for Technical Education to ensure that entrepreneurship education is one of the core curriculums at the technical college. This is necessary to ensure that the students acquire relevant knowledge in value addition to their courses.

The various technical colleges must ensure that entrepreneurship education is taught to all levels of students in the schools.

Government must help the entrepreneurship education growth in the schools by ensuring that adequate funding is available for practical entrepreneurship training.

References

Azim, M.T., Al-Kahtani, A.H.M (2014). Entrepreneurship Education and Training: A Survey of Literature. *Life Science Journal*, 11(1), 127-135

Balogun, S. A., Gambari, A. I., & Falode, O. C. (2019). Three Modes of Podcast Augmented Instruction and Pre-service Physics Teachers' Cognitive Learning Outcomes in Colleges of Education in NorthCentral, Nigeria. *Journal of Information, Science, Technology and Education*, 5(1), 31-41.

Barzelogna, E. (2021). The 4 Models of Corporate Entrepreneurship. https://www.edgepetrol.com/post/the4-models-of-corporate-entrepreneurship.

Basheer, G. F. (2016). The Need for Entrepreneurship Education and TVET in the 21st Century for Sustainable Development. *Bichi Journal of Technology Education (BIJOTE)*, 4(1) 97 – 102

Brimah,. A. Rabiu,. R. & Olanipekun, W. (2015). Entrepreneurial and Vocational Education Revolution: A for Sustainable Development. *Kuwait Chapter of Arabian Journal of Business and Management Review*. 4(12) 32-40

Cooney, T. (2016) "The Need for Countries to Adopt an Entrepreneurship Education Strategy" Entrepreneurship Education Strategy. Retrieved from www.ee.hub.eu/352-national-policyframework/37-the-need-for-countries-to-Adopt-an-entrepreneurship-education-strategyon 10/07/2023

European Commission, (2013) Entrepreneurship Education: A Guide for Educators, Entrepreneurship and social Economy Unit, Directorate-General for Enterprise and Industry, European Commission, B-1049 Brussels, Entr-entrepreneurship@ec.europa.eu

Eze, T. I., Okorafor, O A. (2012). 'Trends in Technical Vocational Education and Training for Improving the Nigerian Workforce.' *Ebonyi Vocational and Technology Education Journal.* 1(1), 107-115.

Famous, E. A. (2015). Entrepreneurship into Technical, Vocational Education and Training (TVET) In Nigeria. *International Journal of Innovative Science, Engineering & Technology*, 2(9), 463- 470

Federal Republic of Nigeria (2013). National Policy on Education Lagos: Nigerian Educational Research and Development Council (NERDC)

Gambari, A. I., Kawu, H., & Falode, O. C. (2018). Impact of Virtual Laboratory on the achievement of Secondary School Chemistry Students in Homogeneous and Heterogeneous Collaborative Environments. *Contemporary Educational Technology*, 9(3), 246-263.

Kissi, E., Ahadzie, D. K., Debrah, C., & Adjei-Kumi, T. (2020). Underlying Strategies for Improving Entrepreneurial Skills Development of Technical and Vocational Students in Developing Countries: using Ghana as a case study. Education+ Training. 62(5), 599-614

Maigida, J. F., Saba, T. M., & Namkere, J. U. (2013). Entrepreneurial Skills in Technical Vocational Education and Training as a Strategic Approach for Achieving Youth Empowerment in Nigeria. *International Journal of Humanities and Social Science*, 3(5), 303-310.

McCallum, E. (2019). Entrepreneurial Learning in TVET Discussion Paper UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training

National Board for Technical Education (2011) The development of National vocational qualifications framework (NVQF) for Nigeria: A Report of the national steering committee. Kaduna: NBTE Press.

National Board for Technical Education (NBTE): Retrieved 21 July 2023 from nbte.gov.ng

Neal, T. (2020). World youth skills day, UNESCO-UNEVOC TVET Forum

Nwekeaku C. (2013) Entrepreneurship Education and Challenges to Nigerian Universities, *Journal of Education and Practice* I4(3), 54- 66

Ochedikwu, J., Ukuma S., & Attah, M.(2013). Globalizing Vocational and Technical Education Curriculum for Sustainable Development in Nigeria. *Journal of Educational and Social Research MCSER* Publishing, Rome-Italy 3(8), 64- 73

Ogunkokoya, O, A. (2017). Entrepreneurship and Sustainable Development Among Selected Entrepreneurs/Small Scale Businesses in Ijebu-Ode Local Government Area, Ogun State, Nigeria https://ssrn.com/abstract=3675634 or http://dx.doi.org/10.2139/ssrn.3675634 Retrieved on June 19th 2023

Okwori, R,. Yisa, S. N., & Mustapha, M. (2021). Effectiveness of entrepreneurship education in tertiary technical vocational education and training in the era of COVID-19 pandemic. *Proceedings of the 34th Annual National Conference of Technology Education Practitioners Association of Nigeria* (pp142-148).

Onigbara, V., & Evavoawe, F. (2022). Technical and Vocational Education and Training: A Panacea for Unemployment and Poverty Reduction Among Nigerian Youths, *International Journal of Women in Technical Education and Employment* (IJOWITED), 3(1), 138-146

Omar, M. K., Ismail, K., Abdullah, A., Kadir, S. A., & Jusoh, R. (2021). Embedding entrepreneurial knowledge in vocational college curriculum: A case study of the competency of TVET instructors. Pertanika *Journal of Social Sciences & Humanities*, 29

Osalor, P. (2013). "Vocation and Technical Education – A key to Improving Nigeria's Development". Retrieved from www.selfgrowth.com. Retrieved on June 19th 2023

UNESCO-UNEVOC (2019). Entrepreneurial learning in technical and vocational education and training (TVET) Discussion paper

Yeap, C., Suhaimi, N., & Nasir, M. (2021). Issues, Challenges, and Suggestions for empowering Technical Vocational Education and Training Education during the COVID-19 Pandemic in Malaysia. Creative Education, 12, 1818-1839. https://doi.org/10.4236/ce.2021.128138