Strategies for Enhancing Entrepreneurial Skills Acquisition among Industrial Technical Education Students in Public Universities in Enugu State, Nigeria

¹Obe, Pauline I; ¹Olawele, Olaitan, ³Onah, Eunice N; ³Onah, Ogechukwu &⁴Obe, Simon E.

¹Department of Industrial Technical Education, ²Department of Education Mathematics, ³Department of Agricultural Education &⁴Department of Electrical Engineering, University of Nigeria Nsukka, Enugu State. *Corresponding Author: olawele.olaitan@unn.edu.ng*

Abstract

This study evolved strategies for enhancing entrepreneurial skills acquisition among industrial technical education (ITE) students in public universities of Enugu State. Specifically, it determined enhancement strategies related to teachers; students; school; facility; and industry. Descriptive survey research design was used. Population was made up of 138 respondents comprising 35 ITE lecturers, 33 instructors and 70 students. Questionnaire was used for data collection. Data were analyzed using mean and standard deviation. Finding include 10 teacher-related strategies such as enhancement of teachers' qualification and skill (\overline{X} = 2.77) and others. Other findings are eight studentrelated strategies, including students' guidance ($\overline{X} = 2.91$) and others; nine schoolrelated strategies, such as curriculum review ($\overline{X} = 2.84$) among others; seven facility-related strategies, such as, organization of workshop ($\overline{X} = 2.91$) and others. 11 industrial-related strategies, such as, avoidance of cultural factors among workers (\overline{X} = 2.82). Based on the findings the study made four recommendations for enhancement of entrepreneurial skills acquisition among industrial technical education students in public universities in Enugu state.

Keywords: Strategies, Entrepreneurial, Skill, Acquisition, Industrial, Technical, Education, Students.

Introduction

Industrial technical education (ITE) is designed to increase the opportunities for productive youth empowerment and socio-economic development in a working (UNESCO, environment 2015). ITE programmes in universities offer training building/woodwork in technology, electrical/electronic technology and metal work/ auto mechanic technology. Objectives of ITE program in universities include training of teachers who can occupy teaching and leadership positions

in secondary schools, technical colleges, colleges of education, universities and training program in industrial establishments, training of entrepreneurs in the mechanical trades and graduates who can be self-employed in their various trades (Federal Republic of Nigeria, 2013). Industrial technical education being an aspect of Technical vocational education and training (TVET) plays important roles in the development of their students and the future of any society (European Commission, 2011). The program is in the

JHER Vol. 31, No. 2, December 2024

fulfillment of the need for professionally qualified technical teachers who can technical knowledge impart and vocational skills to their students and thereby contribute to the economic development of Nigeria (Obe et al., 2021). ITE also offers entrepreneur skills which in turn provide for human and societal needs (Rugavyah, 2013, Jimoh et al., (2020). Supporting this, Chimere et al., (2019) also indicated that the absence of technological knowledge and skills could lead to the inability of human to function well in the society.

Skill is the ability to perform a given task usually gained through training or experience. Skill acquisition can be seen as a process of learning how to do things. It involves the development of new skills and practicing technique of doing things through training and experience for selfreliance and sustenance (Florence & Ekpungu, 2015). It thus involves the act of getting new knowledge or ability required for executing task (Ogundele, 2013). The acquisition of skill is central to production of skilful work force for employment in any fields of human endeavors (Magnus 2015). Rowell (2020) defined entrepreneur skill acquisition as a systematic training given to individuals to equip them with life skills that will enable them make a meaningful impact in their life and contribute positively to the society. Macpherson (2019)noted that entrepreneur skill acquisition through ITE program is a specialized and all-round training program designed by education authorities to change the students on graduation from job-seekers to wealth creators. These include the management, technical, communication, marketing and ICT skills (Rowell, 2020). Technical skills involves the ability to understand the activities specific in planning,

troubleshooting, servicing of equipment, detecting faults, soldering making and interpreting drawings and symbols. Management skill includes the ability to coordinate all resources of an organization through planning, organizing, directing, and controlling to achieve organizational Marketing skills involve objectives. identifying relevant markets accurately, establishing linkages with other businesses, capturing and retaining customer attention, identifying and using market opportunities and understanding business law. Communication skills involve the ability to shear ideas both verbally and writing to share ideas with customers and partners. ICT skills involve the ability to operate digitally. These skills are offered in ITE programs in public and private universities in Nigeria. Public university is the university that is owned and managed by the state or federal Government while the private universities by private are owned bodies or individuals. The extents to which the ITE students are requiring entrepreneur skill remain questionable. It is therefore necessary to involve ways or strategies for enhancing the acquisition of skill by the students.

These strategies are described as the careful plans or methods that should be followed to achieve reliable а entrepreneurship. These strategies could be related to teachers, students, school, facility and industrial strategies, that is what each group should do. The teacher related strategies involve the services that should be provided by or to the teachers such as innovation in teaching strategies. Students related strategies involve the services that should be given to or performed by students such as access to training equipment. The school related strategies include the services that should be provided by or to the school such as strategic planning. The facility related strategies involve the activities that should be done to provide and manage facility such as organization of workshop. The industrial related strategies include the services that should be provided by or to the industries such as partnership with the schools.

Olakunri (2006), Ngor & Tambari (2017) Shiria (2020) and (UNESCO, 2015) noted that insufficient entrepreneur skill acquisition is been attributed to lack of upto-date facilities and workforce skills. Thus, entrepreneur skill acquisition in ITE programs can be through the related strategies. Adding to these strategies, (Manabete & Bobbi (2014) UNESCO-UNEVOC (2019) and Oluwafei & Jinadu, Enhancement of entrepreneur skill acquisition in ITE is therefore necessary and could be achieved through various strategies as mentioned above to ensure that the skills acquired by ITE students are relevant in this fast-growing world of This study was done in public work. universities in Enugu state which comprises of university of Nigeria Nsukka (UNN) and Enugu state university of science and technology (ESUT).

Purpose of the study

The general purpose of the study was to evolve strategies for enhancing entrepreneur skill acquisition among industrial technical education (ITE) students in public universities in Enugu state. Specifically, the study determined those enhancement strategies that are related to:

- (1) teachers
- (2) students
- (3) school
- (4) facility and
- (5) industries.

Methodology

Design of the study: The study made use of descriptive survey research design.

Area of the study: The study was carried out in the public universities in Enugu State, Nigeria. There are two public universities in Enugu state which comprises of university of Nigeria Nsukka (UNN) and Enugu state university of science and technology (ESUT).

Population for the study: The population made up of 138 individuals including 17 male and seven female ITE lecturers with 40 students from UNN (ITE Departmental office of UNN 8/8/ 2022), and eight male and three female ITE lecturers with 30 students from ESUT (ITE Departmental office ESUT 11/8/ 2022. The instructors comprises of 14 male and six female from UNN and eight male and five female from ESUT. All the lecturers possessed MSc and Ph.D and the instructors had at least first degree certificates and/or Higher National Diploma, in related ITE fields. There was no sampling since the population is of manageable size.

Instrument for data collection: A 45-items questionnaire that has 4 points rating of strongly agree (4), agree (3), disagree (2) and strongly disagree (1) was used for data collection. It was developed through literature reviewed and based on the objectives of the study. The instrument was validated by three experts from ITE UNN. Cronbach Alpha method was used to test the reliability and an overall reliability coefficient of 0.85 was obtained. Data collection methods: 138 copies of the instrument were distributed by the researchers and one research assistant and 130 copies were retrieved back giving a 94 percentage rate.

Data analysis techniques: Data generated were analyzed using mean and standard deviation. Any mean value that is greater

than or equal to 2.50 was accepted while mean values less than 2.50 were rejected. Find

T .•	1.	
Hin	dinge	
1 1 11	unigs	
	0	

Table 1: N	Aean Responses	and Standard	Deviation of	on the	Teachers Related	Strategies		
for Enhancing Entrepreneur Skill Acquisition in ITE								

S/	Teacher-related Strategies	$\overline{\mathbf{X}}_{1}$	SD ₁	$\overline{\mathbf{X}}_2$	SD_2	$\overline{\mathbf{X}}_3$	SD_3	$\overline{\mathbf{X}}_{\mathbf{g}}$	R
Ν									
1	Enhancement of qualifications and skills	2.82	1.15	2.92	1.12	2.58	0.97	2.77	А
2	Conferences and workshop attendance	2.88	1.92	3.00	1.14	2.91	0.98	2.93	А
3	Innovations in the teaching strategies	2.99	1.00	3.05	0.95	2.90	0.97	2.98	А
4	Utilization of Improved techniques of instructional delivery activities	2.89	1.05	2.73	1.08	3.13	0.99	2.92	А
5	Improvement of communication skills	3.08	0.98	2.89	0.99	2.99	1.02	2.99	А
6	Enhanced instructional planning skills	3.03	0.95	3.08	0.99	2.89	0.94	3.00	А
7	Acquisition time management of skills	3.02	0.97	2.96	1.04	2.86	0.95	2.95	А
8	Improved job security for teachers	2.90	0.94	2.98	0.99	2.78	1.08	2.89	А
9	Improved job satisfaction for teachers	2.78	1.08	3.13	1.02	3.03	0.97	2.98	А
10	Increased salary for teacher	3.11	0.96	3.00	0.94	2.99	1.09	3.03	А

 $\overline{X_1}$ = lecturers mean score, $\overline{X_2}$ = Instructors mean score, $\overline{X_3}$ = Students mean score, $\overline{X_g}$ = Grand mean SD₁= standard deviation of lecturers, SD₂= Standard deviation of Instructors, SD₃ = Standard deviation of students, A = Agree, R = Remarks.

Table 1 shows that all the 10 items suggested as the teacher-related strategies for enhancement of entrepreneur skill acquisition of ITE students in universities have their grand mean (\overline{X}_g) values all above 2.50. This shows that the ITE lecturers, instructors and students

accepted the suggested items as the teacher related strategies that should be adopt for enhancement of entrepreneur skill acquisition in ITE programs of universities. More so, the standard deviation of the 10 items ranges from 0.94 to 1.92 showing that the respondents were not far from each other in their responses.

 Table 2: Mean and Standard Deviation on the Students Related Strategies for Enhancement of Entrepreneur Skill Acquisition in ITE

S/N	Students-related Strategies	$\overline{\mathbf{X}}_{1}$	SD_1	$\overline{\mathbf{X}}_2$	SD_2	$\overline{\mathbf{X}}_{3}$	SD_3	$\overline{\mathbf{X}}_{\mathbf{g}}$	R
1	Student guidance	2.80	1.10	2.98	1.12	2.96	1.09	2.91	А
2	Students access to training equipment	2.88	1.02	3.00	1.14	2.98	1.13	2.95	А
3	Funding students	2.99	1.90	2.98	0.95	3.13	0.91	3.03	A
4	Security of student	2.89	1.05	3.08	1.08	2.91	1.05	2.96	А
5	Students' avoidance of group influence	3.08	1.00	3.03	0.99	3.02	1.00	3.04	А

JHER Vol. 31, No. 2, December 2024

6 7	Students' management of time	3.03 3.00	0.95 1.08	3.11	0.99 1.04	3.10 3.07	0.98 0.95	3.08 3.02	A A
8	in their study	2 00	1.00	3.03	0.00	2.02	0.95	2.02	Δ

 \overline{X}_1 = lecturers mean score, \overline{X}_2 = Instructors mean score, \overline{X}_3 = Students mean score, \overline{X}_8 = Grand mean SD₁= standard deviation of lecturers, SD₂= Standard deviation of Instructors, SD₃ = Standard deviation of students, A = Agree, R = Remarks.

Table 2 indicate that all the eight items are student-related strategies for enhancement of entrepreneur skill acquisition of ITE students in universities have their grand mean (\overline{X}_g) values all above 2.50. This shows that the ITE lecturers, instructors and students accepted the suggested items as the student related strategies for enhancement of entrepreneur skill acquisition in universities. More so, the standard deviation of the eight items ranges from 0.95 to 1.91 which shows that the respondents were not far from each other in their responses.

 Table 3: Mean and Standard Deviation on the School Related Strategies for Enhancing Entrepreneur Skill Acquisition in ITE.

S/	School-related Strategies	$\overline{\mathbf{X}}_1$	SD_1	$\overline{\mathbf{X}}_2$	SD_2	$\overline{\mathbf{X}}_3$	SD_3	$\overline{\mathbf{X}}_{\mathrm{g}}$	R
Ν									
1	Review of curriculum	2.80	1.10	2.88	1.12	2.86	1.00	2.84	Α
2	Enhance planning of relevant school activities	2.88	1.04	3.05	1.14	3.08	1.05	3.00	А
3	Disciplinary actions for students	2.99	0.98	2.69	0.95	3.11	1.10	2.93	А
4	Embrace innovations	2.89	1.05	3.08	1.08	2.75	1.00	2.90	А
5	Practice institution and industrial partnership	3.08	1.10	3.03	0.99	3.15	1.10	3.08	А
6	Manage available resource effectively- for instance, money and time	3.03	1.02	3.02	0.99	2.92	1.04	2.99	А
7	Security of life and facilities in school	3.07	1.90	3.08	1.04	3.00	0.98	3.05	А
8	Encourage team working spirit.	2.90	0.95	3.03	0.99	3.05	1.01	2.99	А
9	Promote creativity in instructional delivery	2.78	1.08	3.15	1.02	2.73	1.09	2.88	А

 \overline{X}_1 = lecturers mean score, \overline{X}_2 = Instructors mean score, \overline{X}_3 = Students mean score, \overline{X}_g = Grand mean; SD₁ = standard deviation of lecturers; SD₂= Standard deviation of Instructors, SD₃ = Standard deviation of students, A = Agree, R = Remarks.

Table 3 indicates that all the nine items are school-related strategies for enhancement of entrepreneur skill acquisition of ITE students in universities have their grand mean (\overline{X}_g) values all above 2.50. This shows that the ITE lecturers, instructors and students accepted the suggested items

as the school related strategies for enhancement of ITE student entrepreneur skill acquisition in universities. More so, the standard deviation of the nine items ranges from 0.95 to 1.10 which shows that the respondents were not far from each other in their responses.

S/	Facility related strategies	$\overline{\mathbf{X}}_1$	SD_1	$\overline{\mathbf{X}}_2$	SD_2	$\overline{\mathbf{X}}_3$	SD_3	$\overline{\mathbf{X}}_{\mathbf{g}}$	R
Ν								Ū	
1	Organization of workshop	2.80	0.95	2.88	1.12	3.05	1.01	2.91	А
2	Power supply	2.88	1.08	3.05	1.14	2.73	1.09	2.97	А
3	Innovative facilities supply	2.99	0.99	3.10	0.95	2.99	1.18	3.02	А
4	Security of the facilities	2.89	1.00	2.69	1.08	3.06	1.00	2.88	А
5	Maintenance of workshop	3.08	1.22	3.03	0.99	2.88	1.07	2.99	А
6	Management workers	3.03	0.98	2.99	0.99	3.05	1.05	3.02	А
7	Safety practices	3.02	1.06	2.87	1.04	2.69	1.00	2.86	А

 Table 4: Mean and Standard Deviation of the Facility Related Strategies for Enhancing

 Entrepreneur Skill Acquisition.

 \overline{X}_1 = lecturers mean score, \overline{X}_2 = Instructors mean score, \overline{X}_3 = Students mean score, \overline{X}_g = Grand mean; SD₁= standard deviation of lecturers; SD₂= Standard deviation of Instructors, SD₃ = Standard deviation of students, A = Agree, R = Remarks.

Table 4 shows that all the seven items suggested as the facility-related strategies for enhancement of entrepreneur skill acquisition of ITE students in universities have their grand mean (\overline{X}_g) values all above 2.50. This shows that the ITE lecturers, instructors and students

accepted the suggested items as the facility related strategies for enhancement of ITE student entrepreneur skill acquisition in universities. More so, the standard deviation of the seven items ranges from 0.95 to 1.14 which shows that the respondents were not far from each other in their responses.

 Table 5a Mean and Standard Deviation of the Industrial Related Strategies for Enhancement of Entrepreneur Skill Acquisition

	of Endepreneur Skill Hequisit	1011							
S/N	Industry related strategies	$\overline{\mathbf{X}}_1$	SD_1	$\overline{\mathbf{X}}_2$	SD_2	$\overline{\mathbf{X}}_3$	SD_3	$\overline{\mathbf{X}}_{g}$	R
1	Avoidance of cultural factors	2.80	0.99	2.69	1.12	2.98	1.00	2.82	А
	among workers								
2	Enhanced school-industrial	2.88	1.00	3.03	1.14	3.06	0.99	2.99	А
	relationship								
3	Consider industrial training	2.99	1.09	2.99	0.95	2.78	1.00	2.92	А
4	Organization and management of	2.89	0.99	2.89	1.08	3.10	1.09	2.96	А
	students as responsibility for								
	industrial workers.								
5	Focus on productivity	3.08	0.98	2.87	0.99	2.69	1.12	2.88	А
6	Good relationship among	3.03	1.00	3.11	0.99	3.03	1.09	3.05	А
	workers								
7	Environmental security.	3.02	1.02	3.06	1.04	2.99	0.99	3.02	А
8	Innovation and creativity in	2.90	1.03	2.78	0.99	2.87	0.98	2.85	А
	industry.								
9	Team working spirit in the	2.78	0.99	3.10	1.02	2.89	1.00	3.01	А
	industry								
10	Ensuring job satisfaction for staff.	3.11	1.00	3.06	0.94	2.87	1.02	3.01	А
11	Determination to achieve stated	2.78	1.09	2.77	1.01	3.11	1.03	2.88	А
	objectives								

 \overline{X}_1 = lecturers mean score, \overline{X}_2 = Instructors mean score, \overline{X}_3 = Students mean score, \overline{X}_g = Grand mean; SD₁= standard deviation of lecturers; SD₂= Standard deviation of Instructors, SD₃ = Standard deviation of students, A = Agree, R = Remarks.

JHER Vol. 31, No. 2, December 2024

Table 5 5 indicates that all the 11 items the industrial-related suggested as strategies for enhancement of entrepreneur skill acquisition of ITE students in universities have their grand mean (\overline{X}_{g}) values all above 2.50. This shows that the ITE lecturers, instructors and students accepted the suggested items as the industry related factors for the enhancement of ITE student entrepreneur skill acquisition in universities. The standard deviation of the 11 items ranges from 0.95 to 1.14 showing that the respondents were not far from each other in their responses.

Discussions

The finding of the study in Table 1 reveals that the 10 teacher-related strategies for the enhancement of entrepreneur skill acquisition of ITE students in universities. The non hypotheses 1 in table 1b was uphold showing that there is no difference in the responses of the respondents on the teacher related factors for enhancement of entrepreneur skill acquisition of ITE students in universities. This finding implies that the teacher related factors are necessary to be considered for enhancement of ITE student entrepreneur skill acquisition in public universities in Enugu state. This is in line with objectives of ITE program in universities as stated by UNESCO (2015) includes training of teachers who can occupy teaching and leadership positions in secondary schools, technical colleges, colleges of education, universities and training program in industrial establishments, training of entrepreneurs in the mechanical trades and graduates who can be self-employed in their various trades. Jinadu (2016) also recommended that the ITE teachers should adapt to changes by making themselves available for re-training on the

innovation skills and equipment, there is therefore need to look into teacher related factors for enhancement entrepreneur skill acquisition of ITE students in universities.

The finding of the study in Table 2 reveals that the eight student-related factors for enhancement entrepreneur of skill acquisition of ITE students in universities. This finding is in line with the study of Ngor & Tambari (2017) who maintained that intensifying ITE entrepreneur skill acquisition creates more jobs, eradicate poverty and sustain employment of workers. Manabete & Bobboi, (2018) also narrated some of the challenges for entrepreneur enhancement of skill acquisition to include poor accessibility to of equipment, lack intensive and qualitative training of students among others. The study of Macpherson (2019) also maintained that entrepreneur skill acquisition is designed by education authorities to change the students on graduation from jobseekers to wealth creators. Supporting this, Obe, Mmadu & Ona (2021) noted that entrepreneur skill acquisition brings about functional education which leads to selfemployment, student creativity, youth development, innovation and others. There is need therefore to look into student factors as a way of enhancing entrepreneur skill acquisition for proper development of ITE students.

The finding of the study in Table 3 reveals that the nine school-related factors for the enhancement of entrepreneur skill acquisition of ITE students in universities were all accepted. This finding is in line with the study of Ngor &Tambari (2017) who observed that curriculum reviews and introduction of new technologies in ITE instructional delivery, evolvement of new skills among others will help in

entrepreneur skill enhancement of acquisition. Ezeani, (2014) in his study entrepreneur skill indicated that acquisition integrated the is into curriculum of industrial technical education in universities of Nigeria to solve the unemployment and poverty problems of students after graduation. It is therefore necessary that these factors should be used for enhancement of entrepreneur skill acquisition for ITE students in public universities.

The finding of the study in Table 4 reveals that the seven facility-related factors for enhancement of entrepreneur skill acquisition of ITE students in universities were all accepted by the respondents. This finding implies that the facility related factors should be considered for enhancement of ITE student's entrepreneur skill acquisition in public universities in Enugu state. This finding is in line with the study of Shiria (2020) who stated that lack of proper skill acquisition of ITE students is been attributed to lack of up-to-date facility. The study of Manabete & Bobboi, (2018) also enumerated some of the hindrances of enhancement of entrepreneur skill acquisition to include lack of functional facilities and others. It is therefore necessary to look into facility related factors for enhancement of entrepreneur skill acquisition of ITE students in universities.

The finding of the study in Table 5 reveals that the 11 industrial relatedfactors for enhancement of entrepreneur skill acquisition of ITE students in universities were all accepted by the respondents. The implication of this finding is that industrial related factor is one of the factors that facilitate enhancement of entrepreneur skill acquisition of ITE students which needed

to be looked into. This finding is in line with the study of Olakunri, (2006) that put forward that development of industry is a continuous and progressive increase and expansion of the volume of goods and services provided in a given economy with improvement in the social, political and economic life of present as well as future generation. Olakunri adding to that stated that ITE is a sure way for achieving through the national development inculcating in their students, teachers, school and their related industries the innovation and stamina needed in making the economy more productive and competitive. Ezenwafor (2015) in his study suggested some of the strategies that may help enhancement of entrepreneur skill acquisition in ITE to include institutionindustry partnership, inculcation of new net work equipment, retraining of lecturers and provision of adequate funding among others. There is need therefore to bring into consideration the industrial related factors for enhancement of entrepreneur skill acquisition of ITE students in universities.

Conclusion

The aim of enhancement of entrepreneur skill acquisition into the curriculum of ITE was to universities solve in the unemployment problems of ITE student after graduation. This purpose has not been achieved due to the technological advancement which has brought about drastic changes in ITE workplace and business environment in Nigeria. In view of this; the study considered the necessary related strategies thus teacher, student, school, facility and industrial that should be looked into for enhancement of entrepreneur skill acquisition of ITE students in universities. There is need therefore to embrace the suggested strategies for enhancement of entrepreneur skill acquisition of ITE students in universities as a way out.

Recommendations

Based on the findings, the following recommendations were made:

- 1. Stake-holders (Teachers, student) should provide the innovative equipment and facilities for easy acquisition of entrepreneur skills in industrial technical education in Nigerian.
- 2. School should reform their curriculum to include new technologies.
- 3. Industries should maintain institution-industry partnership as it concerns entrepreneur skill acquisition of ITE students in universities.
- 4. Teachers should maintain regular workshops and conferences for upgrading of skills to new technologies.

References

- Chimere, O., Iheonu, N.E.&Urama (2019) Addressing Poverty Challenges in Nigeria. AfriHeritage Policy Brief No. 21, July 2019
- Clare Scoott (2020) 7 ways to proactively develop your entrepreneurial skills.*Huit international business school.* https://www.hult.edu/blog. 11/4/2022.
- European Commission. 2011. Europe 2020 Flagship Initiative Innovation Union. Luxembourg, Publications Office of the European Union.
- Ezeani, N. S. (2014). The teacher and skills acquisition at business education: From the perspective of accounting skills. *Arabian Journal of Business and Management Review*, 2(4), 1-12.
- Ezenwafor, J. I. (2015). Rating of strategies for transforming technical vocational education and training for the 21st century by tertiary institution lecturers in south east Nigeria. *International Journal of*

Educational Policy Research and Review, 2(7), 88-97. Retrieved from http://www.journal issues.org/IJEPRR/

- Federal Republic of Nigeria (2013) National Policy on Education Lagos. NERDC Press; 2013
- Florence, U. & Ekpungu, A. O. (2015) Entrepreneurship Skills Acquisition and the Benefits amongst the Undergraduate Students in Nigeria. European Journal of Social Sciences Education and Research 5(1) DOI:10.26417/ejser.v4i1.p9-14.
- Hamida, N.A., Taiba, H., & Embonga, F. (2017). The effect of the digital economy on students' entrepreneurial characteristics and entrepreneurship as career choices: A comparative study.4th International Conference on Electronic Commerce (ICEC), 154.
- Jimoh, B., Omeje, H. O., Ariyo, O. A., Nwaodo, S. I., Obe, P. I., Olusesan, J. O., Ojo, A. O. (2020) Innovations into industrialtechnology programmes of Nigerian universities for quality assurance. *Indonesian Journal of Electrical Engineering* and Computer Science, 20(3)1315-1324.
- Macpherson Chukwudi (2019) Entrepreneurship Education: Managing Challenges Of Transformation In Tertiary Institutions In The 21st Century Nigeria.2019, Delta Business Education Journal. Retrieved from https://awka.academia.edu. 22/4/2022.
- Magnus P. U., (2015)Techniques for Improving Practical Skill Acquisition In Vocational Business Education (Vbe) For Sustainable Development In Nigeria, *European Journal of Research and Reflection in Educational Sciences.* 3(1)
- Manabete S. S & Bobboi, O. (2018) Technical and Vocational Educationand Training for Job Creationin Nigeria. International Journal of Businessand Administrative Studies volume 4 issue 1 pp. 21-30 doi: https://dx.doi.org/10.20469/ijbas.4.1000 3-1
- Management and Training Corporation (MTC). (2010). Principles and strategies of a successful TVET program(Tech. Rep.). Centreville, UT: MTC Institute.

- Ngor & Tambari (2017) Enhancing Technical Vocational Education and Training (TVET) as a Tool for National Development in Nigeria: Issues, Challenges and Strategies JESBS, 21(4)
- Nworgu, B. G. (2015). *Educational research: Basic issues & methodology (3rd ed.)*. Nsukka, Nigeria: University Trust Publishers.
- Obe, P.I, Maureen, A. & Onah, E. N. (2021) Innovation In Technical Vocational Education And Training (TVET) Instructional Delivery: Problems And Prospects. *IGWEBUIKE: An African Journal of Arts and Humanities*. Vol. 7. No. 4
- Obe, P. I., Onah, E. N. Onah Ogechukwu& Obe, E. S. (2022) Strategies for Enhancing Utilization of Computer Numeric Control (CNC) Machines for Implementation of Industrial Technical Education Programme in Universities. *Journal of Home Economics Research VOL 29 (2), DECEMBER 2022, pp.96-106*
- Ogbuanya, T. C. & Okoye, P. I. (2015). Repositioning Technology and Vocational Education and Training (Tvet) For Poverty Reduction In Nigeria. *International Journal of African Society Cultures and Traditions* Vol.2, No.3, pp.1-12, July 2015
- Ogundele, A. G., (2013)The Place of Technical Education towards Skill Acquisition to National Development. *Journal of Research* & Method in Education (IOSR-JRME) 3(5) 73-76.

- Olakunri, O. (2006) Revamping technical vocational education. Daily Champion. 2006;17:34
- Oluwafemi A J & Jinadu Y O (2016) Revitalizing Entrepreneurship In Tvet: Impact On Graduate Unemployment And Prospects For National Economic Development. Retrieved from htt://www. Academic.edu/ 33606311.
- Ruqayyah, R. (2013). Manpower and competency issues with graduates of Nigerian institutions. Retrieved online on December 4, 2014 from <u>http://</u><u>www.punchng.org</u>
- Rowell Ubogu (2020) Entrepreneurship Education: Challenges and Strategies towards Promoting Entrepreneurship in Higher Education in Nigeria Academic Journal of Interdisciplinary Studies. www.richtmann.org. Vol 9 No 5.
- Shiria Kassam (2020) Technical Education and Training: Meta-Analysis Approach in Nigeria International Journal of Academic Research on Business and Social Sciences. Vol 10 No 2. Retrieved from https://www.researchgate.net
- UNESCO. 2015. Qindao Declaration International Conference on ICT and Post-2015 Education. Paris, UNESCO Publishing.
- UNESCO-UNEVOC (2019) Trends mapping studies UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.