



HANDS-ON INSTRUCTIONAL STRATEGIES FOR DEVELOPING VOCAPRENEURSHIP SKILLS AMONGST TVET EDUCATION STUDENTS FOR ECONOMIC SELF-SUSTENANCE IN SOME SELECTED UNIVERSITIES IN NIGERIA

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Abstract

This study ascertained hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka (UNN) and University of Calabar, (UNICAL) Calabar – Nigeria. Three research questions were stated and three null hypotheses postulated and tested at 0.05 level of significance. Related literatures were reviewed. Descriptive survey design was adopted. The population of the study consisted of 199 TVET educators. It was a census study. 15-item structured questionnaire was used for data collection. The instrument's reliability coefficient was 0.82. Z-test was used to test hypotheses. Findings showed significant difference in mean responses of TVET Educators on hands-on experiential learning; mentorship and networking; and reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance. It was recommended that experiential learning; mentorship and networking; and reflective practice and continuous learning should be adopted as hands-on instructional strategies.

Keywords: Instructional strategies, TVET vocapreneurship skills, Experiential learning, Mentorship and networking, Reflective practice and continuous learning

Introduction

In an increasingly competitive job market characterizing the 21st-century economy, empowering students with vocapreneurship skills has become more indispensable, particularly within Technical and Vocational Education and Training (TVET) programmes which are driven by universities in line with their human capital development responsibility. TVET is meant to bridge the gap between academic knowledge and practical skills in the university system. In that regard, TVET is designed to foster employability by equipping students with industry-relevant competencies that would address workforce needs

(Mahendran, 2021). Moreover, it is meant to promote innovation and entrepreneurship among graduates, encouraging them to create jobs rather than just seek paid employment [United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020)]. By incorporating TVET into university curricula, institutions can enhance the quality of education and ensure graduates are prepared for the dynamic labour market [International Labour Organization (ILO), 2019]. Thus, TVET is essential for developing a skilled workforce and driving economic growth. Unfortunately, most TVET roles especially in hands-on training is often overlooked in universities, leading to a disconnect between education and skill-based workforce demands. The absence of practical skills training hampers employability, leaving graduates ill-prepared for the job market (Mahendran, 2021). Furthermore, neglecting TVET stifles innovation and entrepreneurship, crucial for economic growth (ILO, 2019; UNESCO, 2020). Consequences of non-implementation of TVET vocational aspirations include decreased employability, skill mismatches, and reduced economic growth potential.

In this study, innovative strategies like experiential learning, mentorship and networking; and reflective practice and continuous learning are explored as seamless approaches to equipping TVET education students at the University of Nigeria, Nsukka (UNN) and University of Calabar (UNICAL), to facilitate their well-preparedness for entrepreneurial success and economic self-sustenance in the near future. Vocapreneurship is essential in Nigeria's journey to facilitate the desired TVET students' self-economic sustenance for national development (FRN, 2014).

Vocapreneurship is an amalgam of two distinct concepts - vocation and entrepreneurship. Vocapreneurship skills facilitate the conversion of job-specific skills into an entrepreneurial venture for economic gains. Mfam and Anagbogu (2024) asserted that vocapreneurship skills represent practical competencies cultivated within a particular vocation, trade, profession, or discipline, with the entrepreneurial intention of applying these skills for economic benefit. Mfam and Eze (2025) noted that vocapreneurship prepares individuals with essential competencies and mindset needed to successfully launch a venture within a specific trade or area. Essentially, it revolves around leveraging vocational and entrepreneurial abilities for venture formation and management success. Contextually, vocapreneurship is a process where vocational and entrepreneurial skills and knowledge are combined and taught as "single instructional module" to enable students to transform the job-specific training acquired into a practically sustainable business enterprise. Vocapreneurship skill development ought to be core in TVET programmes because of its dual importance – technical and entrepreneurial skills development.

TVET is used holistically to represent educational experiences that involves general education, technologies and related sciences and the acquisition of hands-on skills, attitudes, understanding and knowledge that are specific to occupations in various sectors of economic

and social life (Mfam et al., 2025). TVET education strives to empower individuals with the practical or demonstrable skills and operational knowledge needed to function in various trades, occupations and industries (UNESCO-UNEVOC, 2025). Contextually, TVET education is a programme that emphasizes practical or manipulative instruction that develops basic knowledge and hands-on skills required to fit into a variety of jobs, trades, occupations and industries. FRN (2014) highlighted the framework with which to deliver quality TVET programmes in the Nigerian university system.

Higher Education Committee (2019) posited that university is a higher educational institution offering a range of registered undergraduate and graduate curricula. A university is a tertiary institution of learning where advanced teaching and learning is effectuated, and research aimed at advancing the frontiers of knowledge is conducted in order to solve societal problems (Mfam et al., 2025). Contextually, a university is a higher institution where scholars from divers' disciplines converge for teaching and learning, research and development. University of Nigeria, Nsukka, (UNN) and University of Calabar (UNICAL) through their Faculties of Technical and Vocational Education, offer TVET education programmes.

UNN is a federal university located in Nsukka, Enugu State in South-Eastern Nigeria. Founded by Nnamdi Azikiwe in 1955 and formally opened on 7 October 1960, the institution has three campuses in Enugu State – Nsukka, Enugu, and Ituku-Ozalla. It is the first full-fledged indigenous and first autonomous university in Nigeria, modelled upon the American educational system (University of Nigeria, Nsukka, 2025). It was the first land-grant university in Africa and one of the five most reputed universities in Nigeria. More so, UNICAL is a federal university in Calabar, Cross River State in South-South Nigeria, established in 1975 (University of Calabar, 2025). It is one of Nigeria's second-generation universities and grew out of the University of Nigeria's Calabar campus. In line with the national goals of Nigeria, UNN and UNICAL aim to produce graduates that would be economically self-sustaining or self-sufficient.

Economic self-sustenance or economic self-sufficiency is the ability of a person to independently meet personal economic needs, without relying on external support. O'Boyle (1987) contended that economic self-sustenance is having sufficient resources and skills to support basic needs, such as food, shelter, education, and healthcare. Wisdom Library (2025) asserted that economic self-sufficiency, is an individual's ability to handle personal economic needs independently, without relying on external markets. Contextually, economic self-sustenance is maintaining or being able to maintain oneself by independent means of production or service for good livelihood. The development of vocapreneurship skills amongst TVET education students for economic self-sustenance or self-sufficiency has to be strategic to circumvent the dynamic natural human resistance to change.

To be strategic is to apply strategy. The study of strategy has been a focal point for business leaders and theorists alike (Bukhari, 2019) opined that a strategy is a general plan of action to attain long-term or overall goal(s) under conditions of uncertainty. Alfredson and Cungu (2025) also maintained that a strategy consists of a meticulously developed plan or process, particularly aimed at achieving a desired outcome. In education, instructional strategies are techniques adopted to enhance teaching and learning so as to make information accessible, engaging, and easier to retain. Instructional strategies (IS) are teaching methods educators adopt facilitate students understanding of course material in the teaching-learning process (Persaud, 2024). IS aim to engage students, promote active participation, and enhance the learning experience. Similarly, Kathy (2025) opined that instructional or teaching strategies, are techniques applied by educators or teachers in delivering course material contents in a manner that proactively and fervently engages students while allowing them practice different skill sets. Specifically, hands-on instructional strategies are teaching methods incline to practical demonstration of learning content. Contextually, a hands-on instructional strategy is an actionable guide, plan or practical teaching method for achieving a defined goal or course of action that appeals to the psychomotor domain of learning. Hands-on instructional strategies such as experiential learning, mentorship and networking; and reflective practice and continuous learning can facilitate vocapreneurship skills development in TVET educational paradigm for the economic self-sustenance of learners.

Experiential learning is termed learning-by-doing or learning-through-experience. Association for Experiential Education (2025) stated that it is a pragmatic teaching orientation that informs many methodologies in which educators intentionally engage with learners in direct experience and focused reflection so as to increase knowledge, develop skills, and develop learner's capacity to contribute to their communities. Boston University (2025) asserted that experiential learning is that experience that facilitates deeper understanding, practical skill development, and personalized growth through active engagement in real-world experiences or situations. Contextually, experiential learning is a learning encounter where students discover practical knowledge through learning-by-doing usually facilitated by an experienced instructor that guides the instruction-learning process. Experiential learning can take the form of mentorship and networking.

Mentorship and networking are different but complementary strategies for skill training and development and career progression. Haynes et al. (2008) argued that while mentorship is a focused, one-on-one relationship between a learner and an experienced individual who provides guidance and learning support; networking focuses on building a broad network of contacts and resources with contemporaries in a skill or knowledge area(s). Mentoring is a professional relationship in which a more experienced person called “mentor” provides continuous learning support, direction, guidance, and encouragement to an individual called

“mentee” or protégé (Allen, 2006, Heigaard & Mathisen, 2009, Washington, 2010). Networking on the other hand is construed as an interpersonal relationship that binds professional colleagues for the maintenance and advancement of individuals’ careers (Porter & Woo, 2015). Contextually, mentorship is a guided and directed, person-to-person (teacher and learner) association that enables the experienced teacher (mentor) to provide learning support to the learner while networking is the building of a broad connection of contacts and resources for the driving or pursuit of a common interest. Reflective practice and continuous learning are essential in mentorship and networking.

Reflective practice runs through a cycle of thinking, learning, and applying that learning to enhance professional development. Reflective practice is the ability to appraise one's actions to take a critical stance or attitude towards one's own practice and that of one's peers, engaging in a process of continuous adaptation and learning (Schön, 1983, Leitch & Day, 2000). La Trobe University (2025) contended that reflective practice which is also known as critical reflection – entails intentionally and analytically reflecting or reviewing personal professional experience, and examining self-performance, actions, skills, decisions, behaviour, and emotions. On the other hand, continuous learning involves a growth mindset and curiosity that make individuals to stay ahead of new challenges and opportunities. It is a process of unceasing personal and professional learning, that focuses on expanding knowledge and skills to adapt to changing environments (Markovic, 2025). Hashemi-Pour (2025) posited that continuous learning is the ongoing expansion of knowledge and skill sets for personal development. Contextually, reflective practice is a process of deliberately and critically reviewing personal experiences, actions, and decisions to gain a deeper understanding and improve future performance while, continuous learning is the development of new skills and knowledge while also reinforcing what has been previously learned in an unceasing manner.

In recent years, researchers have become interested in academic and experiential learning approaches in vocational education; women entrepreneurs' knowledge, skills and attitudes and e-mentoring support; experiential learning model on entrepreneurship; and experiential learning and soft skills development in TVET. For instance, de Stavenga Jong et al. (2010) explored “the relationship between academic and experiential learning approaches in vocational education” and found that construction and analysis were correlated positively, and reproduction and initiative negatively; cluster analysis resulted in the identification of three school-based learning orientations and three work-based learning orientations; and the relation between the two types of learning orientations, expressed in Cramér's V , appeared to be weak; Kyrgidou and Petridou (2013) studied “developing women entrepreneurs' knowledge, skills and attitudes through e-mentoring support” and found that E-mentoring can serve as a dynamic, two-fold relationship that can create a significant learning database benefiting both sides; mentees' knowledge and skills were positively influenced, while their

attitudes facing uncertainty, flexibility and innovation were found to be strongly influenced in the short and long run; Naufalin et al. (2016) conducted a study on “experiential learning model on entrepreneurship subject to improve students’ soft skills” and found that experiential learning model could improve students’ soft skills in entrepreneurship; and Judith et al. (2025) studied “the role of experiential learning in developing soft skills among students of technical and vocational education of Taraba State College of Education Zing, Nigeria” and found that experiential learning significantly contributes to the development of soft skills, with internship/industrial training and group projects/simulations being particularly effective.

However, these studies have failed to address experiential learning, mentorship and networking; and reflective practice and continuous learning strategies for developing vocapreneurship skills in TVET educational domain for the economic self-sustenance of learners. The absence of empirical studies directly examining these strategies for vocapreneurship skills development in TVET education is concerning because it leaves a knowledge gap in understanding how these elements can effectively contribute to the economic self-sustenance of learners. Without this evidence, educational institutions would struggle for too long to implement targeted programmes that truly foster the vocapreneurial competencies necessary for success in today’s economy. Neglecting these strategies in developing vocapreneurship skills within the TVET educational paradigm undermines learners' ability to achieve economic self-sustenance and adapt to the demands of the workforce.

The inability of TVET students to achieve economic self-sustenance upon graduation can lead to increased graduate unemployment rates, reliance on government for support and paid jobs, and a lack of financial independence that hinders personal and community development. It is against this background that this study was designed to ascertain the strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Statement of the Problem

Experiential learning, mentorship and networking, alongside reflective practice and continuous learning, play a critical part in developing vocapreneurship skills. These strategies are designed to foster a practical approach of learning that encourages students to engage actively with their knowledge environment. Experiential learning is designed to facilitate learner’s application of theoretical knowledge in hands-on settings, to improve their practical skills and manipulative confidence. Again, mentorship learning approach is designed to provide guidance and insight from experienced professional mentors, who offer personalized instructional support that can significantly impact mentees’ career development. Networking in the instructional process is meant to foster relationships that open doors to opportunities and collaborations, essential for success in the vocapreneurial skills development landscape.

Furthermore, reflective practice is designed to encourage learners to evaluate their experiences critically, promoting continuous personal and professional growth, which is critical in an ever-evolving market.

Unfortunately, these unique functions are often inadequately implemented within traditional university classroom teaching-learning experiences. As universities strive to impart knowledge and foundational skills for productivity, the structured nature of classroom learning can limit opportunities for hands-on application and engagement with practical challenges. Mentorship instructional programmes are scarce or underutilized, and students do not access adequate opportunities to build professional networks. Additionally, reflective practice is often not emphasized in curricula of instruction, leaving students with little incentive or guidance to evaluate and learn from their experiences. Consequently, this missing link result in a skills gap in the graduates, hampering their readiness for the demands of the vocapreneurial world.

The consequences of inadequate experiential learning, mentorship, and networking in university settings can be significant, including reduced employability and a lack of confidence among graduates. Many students exit their programmes lacking the requisite skills and practical knowledge necessary to thrive in vocapreneurship, leading to a workforce that is ill-equipped to meet industry needs. The inability of TVET students to achieve economic self-sustenance upon graduation can lead to increased graduate unemployment rates, reliance on government for support and paid jobs, and a lack of financial independence that hinders personal and community development. Addressing this disparity is crucial for developing effective educational strategies aligned with the evolving demands of the job market, ultimately improving student outcomes and success in their vocapreneurial journeys. It is against this background that this study is designed to ascertain the strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Purpose of the Study

The general purpose of the study was to ascertain the hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka (UNN) and University of Calabar, (UNICAL) Calabar – Nigeria. Specifically, the study sought to ascertain:

1. hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria.
2. hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria.

3. hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria.

Research Questions

The following research questions were stated to guide the study:

1. what are the hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria?
2. what are the hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria?
3. what are the hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL – Nigeria?

Hypotheses

The following null hypotheses were postulated to guide the study and tested at 0.05 level of significance:

1. there is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.
2. there is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.
3. there is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Methodology

This study adopted descriptive survey design and was conducted in University of Nigeria, Nsukka (UNN) and University of Calabar (UNICAL), Calabar. The population for the study was 199 TVET educators in Faculties of Vocational and Technical Education (VTE) of UNN and UNICAL; with UNN having 98 TVET educators and UNICAL, 101. These set of

educators were used as the subjects of the population and units of data collection for this study because of their participation in the teaching of TVET courses. Therefore, they are in a position to provide the necessary opinions on the problem of this study. The study was a census study since the entire population was studied due to its manageability hence; no sample was drawn. Researchers-constructed questionnaire with response options of 4-points consisting of 15 questionnaire items was used for data collection.

The questionnaire was divided into two parts - I and II. Part I was designed to seek information on the Biographical characteristics (Bio-data/Background) of the respondents. The part contained three items numbered a – c. Part II was further sub-divided into three sections (A-C) according to the specific purposes of the study and structured on four response options of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Section A contained five item statements (1-5) designed to elicit data on the experiential learning strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Section B contained five item statements (6-10) designed to gather data on the mentorship and networking strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria. Lastly, Section C contained five item statements (11-15) designed to obtain data on the reflective practice and continuous learning strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

The instrument was face-validated by three experts from Department of Vocational and Entrepreneurship Education and Department of Business Education, Faculty of VTE of UNN. The internal consistency of the instrument for data collection was determined using Cronbach Alpha reliability coefficient and the test yielded a coefficient value of 0.82. Ninety-eight (199) copies of the questionnaire were administered to the respondents by the researcher. Out of the 199 copies administered 193 were retrieved making a return rate of 97%. Data collected for this study were analyzed using z-test statistics and the null hypotheses were tested at 0.05 level of significance.

Results

Research Question One

What are the hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria?

Table 1: Mean responses of TVET educators on hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

N = 193 TVET Educators: [UNN – 96; UNICAL- 97]

S/N	Item Statements	UNN $\bar{X}_1$	SD_1	UNICAL $\bar{X}_2$	SD_2	Grand Mean	Remarks
a.	Classroom industry partnerships collaborative teaching helps in developing vocapreneurship skills in students	3.71	2.42	23.21	2.22	3.46	A
b.	Project-based teaching helps in developing vocapreneurship skills in students	3.84	2.51	3.60	1.21	3.72	A
c.	Simulation-based teaching helps in developing vocapreneurship skills in students	3.95	2.10	2.86	3.30	3.41	A
d.	Internship and work placements help in developing vocapreneurship skills in students	3.62	2.43	3.40	2.53	3.51	A
e.	Start-up Bootcamps help in developing vocapreneurship skills in students	3.41	3.10	3.78	1.20	3.60	A
Total		18.53	12.56	16.85	10.46		

Cluster Mean ($\bar{X}$) = 3.54 (Agreed)

Data presented in table 1 indicates that the means ($\bar{X}$) in respect of item statements 1 – 5 are more than 2.5 being the decision point. Hence, it is concluded that item statements 1 – 5 are hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance. Again, since the cluster mean ($\bar{X}$) of 3.54 is more than 2.5, it is concluded that experiential learning is a hands-on instructional strategy for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Hypothesis One

There is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on experiential learning instructional strategies for developing

vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Table 2: z-Test of statistical difference on hands-on experiential learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

Respondents	$\bar{X}$	SD	N	df	Standard Error	z-Cal	z-Critical	Decision
UNN TVET Educators	18.53	12.56	96	191	0.81	2.01	1.65	Reject Ho ₁
UNICAL TVET Educators	16.85	10.46	97					

In table 2, the z – ratio (z distribution or z-test) indicates that the critical value of z with 197 degree of freedom at 0.05 level of statistical probability is 1.65. Since the calculated value of z is 2.01, being more than the critical value, we reject the null hypothesis (Ho₁). This implies that experiential learning is a hands-on instructional strategy for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Research Question Two

What are the hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria?

Table 3: Mean responses of TVET educators on hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

N = 193 TVET Educators: [UNN – 96; UNICAL- 97]

S/N	Item Statements	UNN		UNICAL		Grand	Remarks
		$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	Mean	
a.	Trainer-Trainee mentorship teaching helps in developing vocapreneurship skills in students	3.51	0.34	3.33	1.55	3.42	
A							
b.	Industry networking events helps in developing vocapreneurship skills	3.91	1.67	3.60	1.21	3.76	
A							
	in students						
c.	Guest lectures & workshops helps in developing vocapreneurship skills	3.76	2.10	3.25	0.32	3.51	
A							
	in students						
d.	Alumni networks help in developing Vocapreneurship skills in students	3.84	0.45	3.42	2.53	3.63	
A							
e.	Mentorship cycles help in developing Vocapreneurship skills in students	3.58	2.11	3.81	1.20	3.70	
A							
Total		18.60	6.67	17.41	6.81		
Cluster Mean ($\bar{X}$) = 3.60 (A)							

Data presented in table 3 indicates that the means ($\bar{X}$) in respect of item statements 6 – 10 are more than 2.5 being the decision point. Hence, it is concluded that item statements 6 – 10 are hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance. Again, since the cluster mean ($\bar{X}$) of 3.60 is more than 2.5, it is concluded that mentorship and networking are hands-on instructional strategy for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Hypothesis Two

There is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on mentorship and networking instructional strategies for developing

vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Table 4: z-Test of statistical difference on hands-on mentorship and networking instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

Respondents Decision	$\bar{X}$	SD	N	df	Standard Error	z-Cal	z-Critical
UNN TVET Educators Ho ₁	18.60	6.67	96	191	0.63	1.88	1.65
UNICAL TVET Educators	17.41	6.81	97				Reject

In table 4, the z – ratio (z distribution or z-test) indicates that the critical value of z with 197 degree of freedom at 0.05 level of statistical probability is 1.65. Since the calculated value of z is 1.88, being more than the critical value, we reject the null hypothesis (Ho₂). This implies that mentorship and networking are hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Research Question Three

What are the hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria?

Table 5: Mean responses of TVET educators on hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

N = 193 TVET Educators: [UNN – 96; UNICAL- 97]

S/N	Item Statements	UNN		UNICAL		Grand	
		$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂	Mean	Remarks
•	Portfolio development helps in developing vocapreneurship skills in students	3.77	0.34	3.67	0.11	3.72	A
•	Action learning projects help in developing vocapreneurship skills in students	3.58	1.67	3.21	1.21	3.40	A
•	Reflective group discussions help in developing vocapreneurship skills in students	3.54	1.01	3.51	0.32	3.53	A
•	Continuous learning plan helps in developing vocapreneurship skills in students	3.46	0.45	3.62	0.34	3.54	A
•	Reflective journaling helps in developing						

Hands-On Instructional Strategies for Developing Vocapreneurship Skills Amongst TVET Education Students For Economic Self-Sustenance in Some Selected Universities in Nigeria

Vocapreneurship skills in students	3.13	0.22	2.67	1.20	2.90
Total	17.48	3.69	16.68	3.18	

Cluster Mean ($\bar{X}$) = 3.42 (A)

Data presented in table 5 indicates that the means ($\bar{X}$) in respect of item statements 11 – 15 are more than 2.5 being the decision point. Hence, it is concluded that item statements 11 – 15 are hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance. Again, since the cluster mean ($\bar{X}$) of 3.42 is more than 2.5, it is concluded that reflective practice and continuous learning are hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Hypothesis Three

There is no significant difference in the mean responses of TVET Educators in UNN and UNICAL on the hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka and University of Calabar, Calabar – Nigeria.

Table 6: z-Test of statistical difference on hands-on reflective practice and continuous learning instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in UNN and UNICAL, Nigeria

Respondents	$\bar{X}$	SD	N	df	Standard Error	z-Cal	z-Critical
UNN TVET Educators	17.48	3.69	96	191	0.45	1.79	1.65
UNICAL TVET Educators	16.68	3.18	97				Reject Ho ₁

In table 6, the z – ratio (z distribution or z-test) indicates that the critical value of z with 197 degree of freedom at 0.05 level of statistical probability is 1.65. Since the calculated value of z is 1.79, being more than the critical value, we reject the null hypothesis (Ho₃). This implies that reflective practice and continuous learning are hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

Discussion of Findings

The three general findings of this study provide supporting evidence firstly that experiential learning is a hands-on instructional strategy for developing vocapreneurship skills amongst TVET education students for economic self-sustenance; secondly that mentorship and networking are hands-on instructional strategies for developing vocapreneurship skills

amongst TVET education students for economic self-sustenance; and lastly that reflective practice and continuous learning are hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

These findings are in congruence with the results of de Stavenga Jong et al. (2010) that construction and analysis were correlated positively, and reproduction and initiative negatively; cluster analysis resulted in the identification of three school-based learning orientations and three work-based learning orientations; and the relation between the two types of learning orientations, expressed in Cramér's V , appeared to be weak. That is, construction and analysis which connects with experiential learning approach are positively related as opposed to reproduction and initiative which connects with academic learning approach are negatively related. This speaks volume of the imperative of experiential learning strategies over non-experiential learning strategies in the development of vocapreneurship skills. The finding also buttresses Tan et al (2024)'s research outcome which suggests that integrating experiential and reflective learning significantly enhances the breadth and depth of entrepreneurial competencies. Again, the finding corroborates Chitamba et al (2025)'s findings that project-based learning, which is an aspect of experiential learning, not only enhances entrepreneurial skills but also nurtures an entrepreneurial mindset, empowering students to tackle complex challenges and pursue innovative solutions.

Furthermore, the findings also agree with Kyrgidou and Petridou (2013) that E-mentoring can serve as a dynamic, two-fold relationship that can create a significant learning database benefiting both sides; mentees' knowledge and skills were positively influenced, while their attitudes facing uncertainty, flexibility and innovation were found to be strongly influenced in the short and long run. This also supports the findings of Alonta and Okenwa (2023) that mentorship strategies include hands-on guidance in projects and personalized one-on-one mentorship experiences tailored to entrepreneurship and that, financial literacy tactics involve workshops on budgeting, aiding in financial decisions, and guiding business plan development, as experiential learning approaches. The finding is also in tune with Glory (2025) that students who participated in mentorship programmes had higher levels of business acumen, entrepreneurial confidence, and a stronger desire to start and run businesses than their counterparts who did not engage in the program; and that mentorship was shown to improve practical business skills, fosters new ideas, and increases access to networks and resources needed for business success.

Finally, the findings agree with Naufalin et al. (2016) that experiential learning model could improve students' soft skills in entrepreneurship; Judith et al. (2025) that experiential learning significantly contributes to the development of soft skills, with internship/industrial training and group projects/simulations being particularly effective; and Roze et al (2025) who showed that two factors - entrepreneurial experience prior to studies and the perceived

usefulness of business development skills acquired through work-integrated learning - significantly increased the likelihood of graduates maintaining an active business one year after graduation.

These findings highlight and echo the essential importance of experiential learning, mentorship, and networking, alongside reflective practice and continuous learning, in cultivating vocapreneurship skills among TVET education students. These hands-on instructional strategies equip students with functional skills by providing practical experiences that bridge theory and real-world application. These instructional strategies allow students to interact actively with their environment, fostering creativity and problem-solving skills essential for entrepreneurship; creating valuable connections, offering guidance and insight from seasoned professionals who can inspire and motivate learners. The strategies also open doors to opportunities and collaborations/partnerships essential for career growth; and encourage students to assess their experiences, promoting a culture of continuous learning and adaptation. Interactively, these strategies not only enhance the students' vocational skills but also empower them with the entrepreneurial mindset needed for economic self-sustenance, ultimately contributing to their success in a competitive landscape. Investing in these approaches can transform eager learners into confident, capable entrepreneurs.

There are at least four potential limitations concerning the results of this study. A first limitation concerns the use of descriptive Survey Design. While the study employs a descriptive survey design, this approach may limit the depth of understanding regarding the causative factors affecting the development of vocapreneurship skills. A second limitation concerns the adoption of census study approach. The choice to conduct a census study, can limit the generalizability of findings to a broader population. The focus is exclusively on TVET educators from two universities in Nigeria, which may not reflect the experiences or opinions of educators in other regions or institutions that offer technical and vocational education. A third concern is on the sole reliance on a researcher-structured instrument for data collection. The reliance on researcher-constructed questionnaires involving self-reported data can introduce bias. Respondents may provide socially desirable answers or may not accurately recall their experiences, especially regarding their perceptions of teaching strategies and their effectiveness. This bias could potentially skew the findings and affect the reliability of the gathered data. A last concern is on the adoption of limited response options. The use of a four-point Likert scale without a neutral option may force respondents to select an opinion they may not fully endorse. This approach limits the ability to capture the full spectrum of respondents' feelings about the statements in the questionnaire. Individuals who feel neutral or ambivalent may be compelled to lean toward either agreement or disagreement, potentially leading to misinterpretation of the data. Practically, the findings imply that the integration of experiential learning opportunities, mentorship programmes, and reflective practices into their curricula to better prepare students for the workforce; it echoes the need to

provide professional development for educators to guide them in implementing mentorship and experiential learning strategies effectively. Other practical implications are facilitation of networking events in academic programmes that connect students with industry professionals, fostering relationships that can lead to job placements and entrepreneurial opportunities; and development of assessment methods by institutions that reflect experiential learning outcomes, focusing on practical demonstrations of skills rather than traditional testing methods.

To further examine the findings of this study, several research avenues could be explored. Longitudinal studies can be conducted to track students over time to assess the long-term impact of experiential learning, mentorship, and networking on their vocational skills and economic self-sufficiency. Comparative research can also be carried out to compare programmes that implement these strategies with those that do not to identify differences in outcomes such as employability rates, income levels, and entrepreneurial success. Interviews or focus groups can be used to gather in-depth insights from students and educators regarding their experiences with these instructional strategies. This could illuminate the nuances of how these practices influence skill development. Surveys can be developed and distributed to a broader population of TVET students and graduates to quantify the effectiveness of mentorship, networking, and reflective practices on their vocational journeys. Exploration can be made on how incorporating technology and online platforms into mentorship and networking can enhance student engagement and learning outcomes. Each of these approaches could provide valuable insights into the effectiveness and scalability of experiential learning, mentorship, and reflective practices in fostering vocapreneurship among students. The present study highlights how experiential learning, mentorship, and reflective practice collectively enhance vocapreneurship skills in TVET students, fostering economic self-sustenance through practical, supportive, and continuous educational experiences.

Conclusion

This study sought to ascertain the hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance in University of Nigeria, Nsukka (UNN) and University of Calabar, (UNICAL) Calabar – Nigeria. Results revealed that experiential learning; mentorship and networking; and reflective practice and continuous learning are hands-on instructional strategies for developing vocapreneurship skills amongst TVET education students for economic self-sustenance. This implies that experiential learning; mentorship and networking, alongside reflective practice and continuous learning, are essential in cultivating vocapreneurship skills among TVET education students. It also implies the need for retraining of TVET educators on the application of these instructional strategies in teaching and learning of TVET programmes. Based on the findings of this study, it is recommended that:

- experiential learning should be adopted as hands-on instructional strategy by TVET educators in developing vocapreneurship skills amongst TVET education students for economic self-sustenance.
- mentorship and networking should be adopted as hands-on instructional strategies by TVET educators in developing vocapreneurship skills amongst TVET education students for economic self-sustenance.
- reflective practice and continuous learning should be adopted as hands-on instructional strategies by TVET educators in developing vocapreneurship skills amongst TVET education students for economic self-sustenance.

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