Promoting The Development of Technoprenuership Competencies Among Business Education Students Through Effective Curriculum Implementation

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Abstract
This study focused on promoting the development of technopreneurship competencies among Business Education students through effective curriculum implementation. Two research questions guided the study, and two null hypotheses were tested at the 0.05 level of significance. A descriptive survey research design was adopted. The population consisted of 58 business educators from three higher institutions in Imo State. A validated questionnaire with reliability coefficient of 0.86 was used for data collection. Mean and standard deviation were used to analyse research questions, while the t-test was used to test the null hypotheses. The findings of the study revealed the identified technopreneurship competencies.

Keywords: Development, technopreneurship competencies, business education curriculum, implementation.

Introduction
It is generally acknowledged that we live in a digital age where the internet and social media have gradually revolutionized the way we interact. This revolution has also extended to the business world especially since after the Covid-19 pandemic. This situation has brought about new class of entrepreneurs known as technopreneurs. According to Adiele (2020) technopreneurs can be seen as entrepreneur who make use of technology in carrying out business activities, while technopreneurship is a combination of technological advancement and entrepreneurial skills. According to Igwe (2020), technopreneurship is entrepreneurship in a technology-intensive context. Obasi (2020) defined technopreneurship as a process of merging technology prowess and entrepreneurial talents and skills. It is a type of technology-related entrepreneurship which may often be a one-person an and group of personal's business. In the view of Azuka (2021), technopreneurship is a process of acquiring knowledge, skills venture creation through technology.

According to Smith (2018), technology sector has become one of the most important sectors in several nations worldwide. A sector that create high investment and plenty of

economic benefits increasing the business activities as well as making positive impact on the individuals in the society. Akukwe (2019), stated that technoprenuership successfully leverages high-end technology and advancement that bring about positive turnaround in the business world. The author further stated that technoprenuership, being part of the development of entrepreneurship, promotes entrepreneurial activities using technology-based innovations that help the entrepreneurs to successfully do business in the present technological era, where most entrepreneurial activities are digitally carried out.

Enthrepreneurship is the practice of starting new organization to generate innovation in response to identified business potential. According to Okoro (2019) entrepreneurship cuts across the ability to recognize and evaluate business opportunities, assemble the necessary response to take advantage of them and appropriate action to ensure success. Ozara (2019) noted that entrerenruship provides students in the institution with the knowledge competencies and motivation to encourage and stimulate success in the various entrepreneurial ventures available to be self-reliant.

Today, entreprenruship has gone beyond what is the conventional thing to digital. Uwaoma (2019) opined that there is need to teach the students technopreneurship and not just entrepreneurship because presently most of the entrepreneurial activities take place virtually using the internet. Onoh (2019) submitted that technological skills should be taught in various discipline including business education to enable the students acquire technological skills required to be a successful entrepreneur in the technological business world.

Business education is an educational programme offered in tertiary institutions which prepare students for careers in business by inculcating skills, knowledge and competencies that are useful in the business world and the society at large. According to Ile (2017) education that equips the students with skills necessary to perform particular function in the office and also provide him or her with the understanding and knowledge needed for conducting personal affairs and for use in the business world. Correspondingly, Iwuoha (2017), noted that business education is a field of study that provides its recipients with the skills for self-reliance. Business education provides professional training in method of business making techniques in other to attract clients and also make profit. Business education as a field of study seek to provide knowledge experience and skills at different levels. From secondary school, college of education and to the university. Ile (2015), opined that the students of business education at the tertiary level are taught various business courses including entrepreneurship with the aim of helping the students acquire skills and competencies to be self-reliant. In addition, Okoro (2019), opined that the goals of business education at the tertiary school level of education includes to empower students to be competent in different areas as it relates to desirable skills, knowledge and value to perform specific functions, to help students appreciate the world around them and contribute maximally to the social and economic development of the nation.

Uwem (2018), observed that the contributions of business education to national development include the provision of technical vocational and industrial skills necessary for entrepreneurial venture in a technological era.Technology has brought a lot of changes to different sectors of economy including education, Ibeziem (2019) affirmed that the business educators have always accepted that change is a necessity and therefore the curriculum should be reviewed in other to adapt to the changes in the mode of carrying out business activities as brought about by technology.

Curriculum refers to a set of organized, sequenced content or course of instruction needed by a learner who is expected to demonstrate some objective or behavioural change following instruction and guided experience in content provided by the school (Onyemenkeya 2005 in Iwuoha 2021). The curriculum of business education comprises of courses in business and in general business education content to be taught to the students.

Teaching and learning have gone beyond the conventional method to the use of digital methods.

Innovation and creativity are necessities for any functional education programme like business education which is skill-based. The method of instructional delivery should be technologically inclined, where scientific knowledge will be inculcated in teaching. This is in agreement with Njoku(2019), who opined that teaching and learning have gone beyond the traditional method, students are now taught both the technology and how to use the technology using technology.

Competency can be seen as the ability to carry out responsibility as required. Competency can also be referred to as the acquired knowledge, skills and procedures that enable someone to meet established performance criteria as required. Nliam(2021) stated that the technoprenuership competencies mean the skills required to carry out entrepreneurial activities using the internet. Uba (2021) identified the technopreneurship competencies to include social media skills, internet skills, use of smart phone skills, tech-savvy, brainstorm skills, innovative skills, Ijemba (2021), opined that the following technology competencies are required for technopreneurship business; word processing competencies, internet skills, tech-savvy skills, good communication skills. In the study of Obi (2020), technopreneurship competencies are required for success in today's business world.

Statement of the Problem

A recent development in which graduates from the higher institutions in Nigeria including business in Nigeria go into business and do not meet the demands of the clients and therefore experience failure. This could be as a result of lack of the competencies, to do business in an era of technology. Uzobuaku (2019), opined that so many entrepreneurs now carry out their business activities online especially since after the covid-19 pandemic and great number do not succeed because they lack the 21st century skills needed for today's business world. This is indicating that the curriculum of business education programme need to be updated to include the skills needed to do business in an era of technology paramount. The need to equip business education students with the require skill to enable them become successful entrepreneurs in a technological era.

Research Questions

The following research questions were raised for the study.

1. What are the technopreneurship competencies needs of business education students?
2. What are the strategies for promoting the development and implementing technopreneurship competencies in business education curriculum?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant different in the mean ratings of male and female business education teachers on the technopreneurship needs of business education students.
2. These is no significant difference in the mean ratings of male and female businesses education teachers on the strategies for development and implementing technopreneurship in business education curriculum.

Method

Descriptive survey research was adopted for the study. The population of the study comprised 58 business education teachers in Imo State. There was no sampling since the population size is manageable. The instrument for data collection was a researcher-designed questionnaire titled Promoting the development of technopreneurship competencies among

business education students through effective curriculum implementation (PDECBESCI). The questionnaire was made of two sections; section A and section B. Section A is made up of the demographic profile of the respondents, while section B contains 21 items that were used to ensure the research questions. All copies of the questionnaire distributed by the researchers were returned and used for data analysis. The instrument was constructed based on a four-point rating scale of strongly agree (SD), agree (A), disagree 9D), strongly disagree (SD). The questionnaire developed for the study was subjected to face validation by three experts in business education. Cronbach Alpha was used to ascertain the internal consistency of the instrument. This yielded coefficient index of 0.78 which was deemed reliable for the study. Data collected in the study were analyzed using descriptive statistics of mean to answer the research questions and standard deviation to describe the homogeneity or otherwise of the respondent's views. Mean ratings of 2.50 and above is regarded as agree and mean ratings less than 2.50 is regarded as disagree. Independent t-test was used to test the null hypotheses at 0.05 level of significance.

Results

Research Question One: What are the technopreneurship competency need of business education students?

Table 1: Mean and standard deviation of respondents on the technopreneurship competencies needs of business education students.

S/N	Technopreneurship Competencies	Mean	SD	Remark
1	Word processing competency	2.70	0.83	Agree
2	Tec-savy skills	2.56	0.71	Agree
3	E-banking skills	3.20	0.81	Agree
4	Innovative skills	2.91	0.76	Agree
5	Brainstomy skills	2.84	0.89	Agree
6	Social media software packages	3.52	0.95	Agree
7	Internet competencies	3.21	0.62	Agree
8	Smart phone/mobile device skills	3.89	0.74	Agree
9	Good communication skill	2.52	0.81	Agree
10	Electronic fund transfer	2.80	0.87	Agree
11	Business analytical ability	3.30	0.78	Agree
12	Product management skill	2.53	0.81	Agree

Mean of means = 2.98

Item 1 to item 12 are technopreneurship competencies needed by business education students. The mean ranges from 2.52 to 3.89 which is agree.

Research Question Two: What are the strategies for developing and implementing technopreneurship competencies in business education curriculum?

Table 2: Mean and standard deviation of respondents on strategies for developing and implementing of technopreneurship competencies in business education curriculum.

S/N	Strategies for Implementing Technopreneurship on Business Education Curriculum	Mean	SD	Remark
13	Update of business education curriculum based on the market need.	2.7	0.70	Agree
14	Employ lecturers who are qualified and competent in business education curriculum.	2.65	0.81	Agree
15	Provision of modern facilities in business education.	2.55	0.76	Agree
16	Review of business education course structure.	3.61	0.86	Agree
17	Collaboration with technology service providers.	2.93	0.63	Agree
18	Training business educators to have the needed competencies.	2.71	0.52	Agree

19	Create technoprenuership hub online.	2.85	9.75	Agree
20	Create mentorship group.	2.56	0.50	Agree
21	Organize workshops for business educators from time to time.	2.83	0.81	Agree
Mean of means	**=**	**2.82**		

In table 2, all the items used from 13 ----- have there mean ranges from 2.65 to ----- which shows that the items were accepted as strategies for promoting the implementation of technopreneurship competencies in business education.

Test of Hypotheses

1. There is no significant difference in the mean responses of male and female business education teachers on the technopreneurship competencies need of business education students.

Table 3: T-test result of mean ratings of male and female business education teachers on technopreneurship competency need of business education students.

Variables	N	$\overline{X}$	SD	Df	t-cal	t-crit	Decision
Male	22	2.76	0.89				
				132	1.74	1.96	NS
Female	36	2.65	0.92				

The calculated t-test of 1.74 is less than t-crit of 1.96 at 0.05 level of significance. Degree of freedom is 132. The hypothesis which states that there is no significant difference in the mean ratings of male and female business education teachers on the technopreneurship competency need of business students in Imo State is retained.

2. There is no significant different in the mean ratings of male and female business education teachers on the strategies for promoting effective implementation of technopreneurship competencies in business education curriculum.

Table 4: t-test result of mean ratings of male and female business education teachers on the strategies for promoting the effective implementation of technopreneurship competencies in business education curriculum in Imo State.

Variables	N	$\overline{X}$	SD	Df	t-cal	t-crit	Decision
Male	22	2.86	0.84				
				132	1.76	1.96	NS
Female	36	2.73	0.93				

The calculated t-test of 1.76 is less than t-crit at 1.96 at 0.05 level of significance. The hypothesis which states that there is no significance in the mean ratings of male and female business education teachers on the strategies for implementing technopreneurship competencies in the business education curriculum, is retained.

Discussion of Findings

The findings of the study revealed that the twenty-five technopreneurship competencies are needed by business education students on successful entrepreneurship venture using the technology. The data presented in table 1 simply revealed that respondents agreed with all twenty-five competency are important and very much needed and should be included in the curriculum. This is in agreement with Ozor (2019), who stated that entrepreneurship business is mostly carried out using the internet and therefore the skills of

become an effective entrepreneur in a technological era should be taught to students in tertiary institutions. Uwaoma (2019), added that the curriculum of business education programme should be change from time to time to accord the recent competencies required for successful business in the present internet world. The study also revealed that the skills of mentoring is highly required for competency in technopreneurship.

Conclusion

Based on the findings of the study, it was concluded that 21st century taught to business skills be business education students to enable them acquire the competencies. For the present business using the internet so as to meet the demands of the clients in the business world. There is, therefore the need to improve the curriculum of business education to accommodate the technopreneurship.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made;

1. Business education teachers should explore with business education students to the various current skills required to carry out business activities virtually.
2. Curriculum planners should integrate the technopreneurship competencies in the business education curriculum at the tertiary education level to enable the students to acquire the technopreneurship competencies required for successful entrepreneurial activities.
3. Regular workshops and seminars should be organised for business education teachers to upgrade their skills and knowledge for better transfer on the students.

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