PEDAGOGICAL STRATEGIES FOR EFFECTIVE ONLINE ENTREPRENEURIAL EDUCATION AS PERCEIVED BY BUSINESS EDUCATORS

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Abstract:

This study was designed to determine the best pedagogical strategies for online entrepreneurial education. This was considered important as the rate of unemployment among graduates is on the increase, notwithstanding the efforts of tertiary institutions in Nigeria to teach all students entrepreneurship. There are also graduates who were not exposed to entrepreneurship in addition to people who had no privilege of studying in any tertiary institution full time. Given the favourable developments in science and technology, online education has become popular. In order to carry out the study, four research questions were asked relating to strategies for preparing students for online entrepreneurial education; creating conducive online learning environment; strategies for monitoring student's progress and student assessment and data evaluation. Four hypotheses were formulated and tested at 0.05 level of significance. The population consisted of fifty business teacher educators drawn from selected universities and colleges of education in Enugu and Ebonyi States of Nigeria. Data which were collected using a 52-item structured questionnaire were analyzed using mean, standard deviation and t-test statistic. It was found, among others, that the 52 strategies were all accepted as effective strategies for online entrepreneurship education. There were no statistically significant differences in the mean responses of business teacher educators in the universities and those in the colleges of education on 47 of the strategies for online entrepreneurship education. It was concluded that the strategies are both relevant and appropriate for effective online entrepreneurship education. It was recommended that tertiary institutions and departments of business teacher education who offer online entrepreneurship education could apply the identified strategies.

Keywords: pedagogical strategies, online entrepreneurial education

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1. Introduction

In every teacher education programme, three major areas of emphasis, the subject matter to be taught, the student or pupil to be taught and how to teach, are usually considered. The three areas are vital and interrelated. Of particular interest in this study is the how "of teaching" (methodology or pedagogy). Learning, in the education sector, is generally believed to be a permanent positive change in behaviour as a result of experience. To realize the expected change in behaviour, various methods and strategies are applied. The effectiveness of the pedagogical procedure used by the teacher will, according to Vigaray, Lopez, Paris, Yanez, Martinez, Cuevas, Posadas and Valles (2010), determine to a large extent, the knowledge and skills that students acquire, besides the development of their intellectual capacity. Hence, instructors must make use of appropriate pedagogical strategies to ensure effective learning outcome.

Entrepreneurship education, according to Oduma (2012), is a programme of instruction that will enable the beneficiary to be properly prepared or trained to establish and manage a profit-making business. Oduma noted that entrepreneurial education involves specialized training which will enable the learner to acquire the skills, ideas and managerial abilities and capabilities for self-employment. Similarly, Lukman and Oviawe (2010) regard it as a process of providing individuals with the abilities to recognize business opportunities and insight, knowledge and skills and to successfully take advantage of them. In their view, entrepreneurial education will train and educate interested person(s) in the art and science of creating businesses or small business management. The position of Oduma (2012), Lukman and Oviawe (2010) agree with Osuala (2004) who stated that entrepreneurship education prepares youths and adults to undertake the creation and management of small business enterprise.

Giving the genesis of entrepreneurship education in Nigeria, Agboola (2014) pointed out that the Federal Government of Nigeria, in its campaign against unemployment, endemic poverty and retro-development, directed tertiary institutions in the country to introduce entrepreneurship education as a compulsory subject for all undergraduates irrespective of their field of study. The purpose, according to him, was to promote entrepreneurial education and consequently entrepreneurial spirit among graduates of the institutions. He further pointed out that entrepreneurship is a veritable combination of business educators' **education about business**, and **education for business**. It is important to note that:

> "*Business education today cannot and should not be divorced from entrepreneurship education. To function effectively, entrepreneurs should have good knowledge of business. The entrepreneur should understand the economic climate, business environment, business classification (education about business). The entrepreneur should also have, in addition to technical skills in specialized areas, knowledge about how to convert technical knowledge to sellable skills, how to manage the business and how to build intricate relationships with consumers and the public in order to grow the business. This is*

education for business; an indubitable, inalienable domain of tertiary business education."
(Agboola, 2014 p.42)

From the above, there is no doubt that entrepreneurship education is one of the major businesses of business education.

The next question, however, would be: why online entrepreneurship education? The issue of unemployment and endemic poverty cannot be overemphasized. With due recognition of the fact that graduates from the various tertiary institutions lacked entrepreneurial skills, and that there exist youths and adults who had not the privilege to study full-time in any tertiary institution, distance education and online learning are now very popular. Online education is essentially a form of distance learning. Distance learning, according to Okolocha and Nwaokwa (2015), increases peoples' access to education so much so that even people who taught it impossible to attend conventional school benefit from it. By way of definition, distance learning is the type of education delivery in which teachers and students are separated by physical distance through the use of technological tools (Enang, 2015). Enang believed strongly that distance learning is a veritable tool for widening access to mass education. This position is in line with the National Policy of Education of Nigeria (FGN, 2013). Okeke in Enang (2015) postulated that access to university education means free unlimited, unhindered and unfettered opportunities to university education. University education, according to Okebukola (2008), provides high level human resources for driving the economy and ensuring rapid social transformation. A wide range of technologies are available to tertiary institutions to facilitate distance and online learning. With this trend in view, consideration must be had for pedagogical strategies for effective online entrepreneurial education as it is for the face-to-face entrepreneurial pedagogical strategies.

The Hanover Research Council (2009) cited the Times Educational Supplement report of 2002 to the effect that there is growing evidence from research in e-learning that certain strategies will enhance teaching and learning just as certain strategies do work in face-to-face pedagogy. Lally and Walington (2002) emphasized that successful e-learning must involve a combination of course design issues and pedagogical issues.

Several approaches to the teaching of entrepreneurship have been suggested. For instance, Kim and Bank (2006) in a survey of instructors and administrators in postsecondary institutions primarily belonging to Multimedia Educational Resources for Learning and Online Teaching and the Western Cooperative for Educational Telecommunications estimated that, in their order of importance, the role the following teaching strategies will play in the future online teaching include: group problem-solving and collaborative tasks; problem-based learning; discussion; case based strategies; simulations or role playing; student-generated content; coaching or mentoring; guided learning; exploratory or discovery; lecturing or teacher-directed activities; modeling of the solution process and Socratic questioning. Sithole and Lumadi (2012) believed that the best way of learning business skills is through direct experience and practice in a real enterprise, and the use of closely simulated contexts. Sithole and Lumadi stressed that

this can be achieved through establishing mini enterprises in schools which are run and managed by students themselves. The advantages, according to Sithole, are that it will focus on the development of basic business skills, business management skills and personal entrepreneurial skills. The approach suggested by Sithole (2010) maybe applicable in online entrepreneurial education only if the learner or group of learners will practice in real business enterprises located in the focal community.

A discussion of online learning cannot be complete without mention of the appropriate and effective online technologies. Porter (2006) noted that although there is a tremendous variety in educational technologies available to online instructors, the field of distance learning technology is changing quickly, hence the need for teachers and administrators to keep a close watch on emerging trends and associated best practices. Some of the emerging online technologies identified include: mobile technologies, cloud computing, geocoded data, personal web programs, semantic-aware applications and smart objects. However, Hanover Research Council (2009) observed that the six online education technologies are emerging as educational tools. Online technologies such as web-pages, discussion forums, course management systems, audio tools, and video tools are well-entrenched in the field of online education. The Hanover Research Council is of the view that:

> *"Teaching methods including training in technology for distance learning students, interactive teaching that fosters critical dialogue, mentoring, cooperative peer learning, group out-of-class activities, and the use of e-mail or web announcements to inform student about opportunities for interaction should be designed into online course to enhance student learning."* (p.15).

2. Statement of the Problem

Online entrepreneurship education has become much more necessary given the instrumental role entrepreneurs play in stimulating economic growth (Barkawi, 2015). The Federal Government of Nigeria realized this in 2007 when, through National Universities Commission, made it mandatory for all universities to mount entrepreneurship studies in their programmes in 2007/2008 academic year (Nwekeaku, 2013). The aim was to reduce unemployment and poverty.

However, before the introduction of the programme, there were graduates who were still unemployed or improperly/under- employed. Given the opportunity to reach out to graduates who did not study entrepreneurship and those who had had no opportunity to study in a regular university, there is need to take advantage of available technologies and extensively use online entrepreneurship education. These necessitated this study.

Besides, Business Education has been advised to consistently prepare its graduates for the teaching of entrepreneurship education by including items on the pedagogy of entrepreneurship in its curriculum (Agboola, 2014). Agboola further suggested that

Business Education Departments or units should change their name to Business and Entrepreneurship Education to reflect the realities of the present. Given the need to increase access to entrepreneurship education as a means of checking unemployment and poverty; and in view of the fact that Business Education programmes do not seem to have had not included pedagogical strategies for teaching online entrepreneurship education in the curriculum, the need for this study has become obvious – to determine the pedagogical strategies for effective online entrepreneurial education.

2.1 Purpose of the Study
The major purpose of the study was to determine the pedagogical strategies for effective online entrepreneurial education. Specifically, the study sought to determine:
1) Strategies for preparing students for online entrepreneurial education.
2) Strategies for creating conducive online learning environment.
3) Effective strategies for monitoring students' progress in online entrepreneurial education.
4) Student assessment and data evaluation strategies for online entrepreneurial education.

2.2 Research Questions
The following research questions guided the study:
1) What are the strategies for preparing students for online entrepreneurial education?
2) What are the strategies for creating conducive online learning environment for the students?
3) What are the effective strategies for monitoring students' progress in online entrepreneurial education?
4) What are the strategies for student assessment and data evaluation in online entrepreneurial education?

2.3 Hypotheses
The following hypotheses, which were tested at 0.05 level of significance, also guided the study:
Ho: There is no statistically significant difference between the mean responses of business educators in universities and those in colleges of education on the pedagogical strategies for:
1) Preparing students for online entrepreneurial education.
2) Creating conducive online learning environment for students of entrepreneurial education.
3) Effective monitoring of students' progress in online entrepreneurial education.
4) Student assessment and data evaluation in online entrepreneurial education.

3. Methodology

The population studied consisted of 50 business teacher educators in selected Universities and colleges of education in Ebonyi and Enugu States. No sample was drawn as the entire population was studied. The instrument for the study was a questionnaire made up of 52 items structured using a modified Likert scale of four points – Strongly Agree (4); Agree (3); Disagree (2) and Strongly Disagree (1). The questionnaire was duly validated. A reliability coefficient of 0.75 was obtained. A total of 50 copies of the questionnaire were administered and all copies were properly completed and returned. The quantity returned represents 100 per cent. Data collected were analyzed using mean, standard deviation and t-test statistics.

4. Results

It was found that all the items (1-52) were accepted by the respondents as pedagogical strategies for effective online entrepreneurial education. It was also found that, except for items 6, 22, 43, 48 and 52 about which there was statistically significant difference in the mean responses of the business educators in the universities and those in the colleges of education; there was no statistically significant difference in their opinion concerning the remaining 47 strategies for effective online entrepreneurial education. See the details in the data presented on Tables 1-8.

Research Question 1: What are the pedagogical strategies for preparing students for online entrepreneurial education? Data collected to answer this question is presented on Table 1.

Table 1: Pedagogical Strategies for Preparing Students for Online Entrepreneurial Education

S/N	Items Prepare students for learning by	$\bar{x}$	SD	Decision
1.	Posting a welcome message to help students to start.	3.28	0.70	A
2.	Providing brief orientation for students to make them familiar with the terminologies and tools used in the course management system.	3.62	0.49	SA
3.	Providing contact information for technical help in various places and forms.	3.14	0.67	A
4.	Providing personal contact information standard response times and preferred communication methods.	3.46	0.50	A
5.	Reminding students to open personal e-mail addresses.	3.20	0.88	A
6.	Providing on-line office hours as needed.	3.12	0.79	A
7.	Providing guidelines for participation and effective learning.	3.52	0.54	SA
8.	Providing resources and strategies for on-line learning.	3.30	0.81	A
9.	Including students' frequently asked questions with respect to courses, registration, tuition, course materials, etc.	3.42	0.70	A
10.	Indicating course goals and learning objectives.	3.40	0.49	A
11.	Indicating required and optional course materials or textbooks.	3.24	0.62	A
12.	Indicating clear and specific grading policies.	3.32	0.65	A

13.	Providing guidelines for students' participation and collaboration.	3.44	0.54	A
14.	Providing policies on assignments submission and grading.	3.20	0.57	A
15.	Providing etiquette guideline for online courses.	3.22	0.64	A

From Table 1, it is clear that the respondents agreed with all the items as pedagogical strategies for preparing students for effective online entrepreneurial education. The business educators strongly agreed with items 2 and 7. This shows how important they considered the two items to be.

Research Question 2: What are the pedagogical strategies for creating conducive online learning environment? Data collected to answer this research question is presented in Table 2.

Table 2: Pedagogical Strategies for Creating Conducive On-line Learning Environment

S/N	Items	$\bar{x}$	SD	Decision
	Create a warm and conducive learning environment by:			
16.	Welcoming students before the course begins via e-mail.	3.14	0.72	A
17.	Posting a personal introduction with an informal tone.	2.68	0.74	A
18.	Providing encouragements and supports especially to beginning students.	3.42	0.60	A
19.	Encouraging students to create their own homepage or develop a social space in the course site.	3.24	0.51	A
20.	Uploading relevant pictures to the course site and encourage students to do the same.	3.20	0.57	A
21.	Letting students know the importance of effective participation in the learning process.	3.78	0.41	SA
22.	Providing opportunities for students to critique and reflect upon certain course topics.	3.46	0.54	A
23.	Encouraging students to make use of the internet for research and to be critical about the information they find and share.	3.68	0.51	SA
24.	Encouraging students to be productive learners by logging in regularly into the course site, submitting assignment on time, participating in discussions and cooperating with team mates.	3.60	0.57	SA
25.	Providing opportunities for active problem-solving and team work.	3.44	0.61	A
26.	Encouraging active participation in online discussions.	3.22	0.70	A
27.	Using multiple discussion formats.	3.00	0.72	A
28.	Responding to student comments and questions within time frame set at the beginning of the course.	3.58	0.53	SA
29.	Providing feedback to the entire class on specific assignments or discussions.	3.42	0.60	A
30.	Providing weekly wrap up before the next lesson.	3.38	0.60	A

From Table 2 above, the respondents agreed with all the items as pedagogical strategies for creating conducive online learning environments for entrepreneurship education. For items 21, 23, 24 and 28, the respondents indicated strong agreement.

Research Question 3: This research question sought to determine effective strategies for monitoring students' progress in online entrepreneurial education. Data collected to answer the question is presented in Table 3 below.

Table 3: Effective Strategies for Monitoring Students'
Progress in Online Entrepreneurship Education

S/N	Items	$\bar{x}$	SD	Decision
31.	Letting students know that those who lag behind may not complete the course on schedule.	3.62	0.49	SA
32.	Using available educational technology such as course management system to track student programme.	3.32	0.51	A
33.	Contacting students who have not logged in for over a week to find out if they are experiencing technical difficulties or problems with course activities.	3.38	0.56	A
34.	Contacting students who have not completed their assignments by e-mail phone.	3.22	0.70	A
35.	Ensuring that the assessment criteria measure both the quantity and quality of on-line message.	3.34	0.51	A
36.	Assigning points to messages that encourage additional postings.	3.14	0.60	A
37.	Providing opportunities for students' collaboration and facilitating collaborative learning processes and tools.	3.44	0.57	A
38.	Using conversational tone that makes students feel comfortable in online learning environment.	3.44	0.54	A
39.	Providing meaningful feedback for all assignments and comments.	3.34	0.65	A
40.	Providing weekly summary of discussion topics to demonstrate full participation.	3.16	0.61	A
41.	Giving up the traditional powers as a teacher and allowing students become managers of the online learning.	2.92	0.77	A
42.	Allowing students to take responsibility for their peers learning as well as their own.	2.88	0.62	A
43.	Providing opportunities for review.	3.08	0.66	A
44.	Providing web etiquette guidelines.	3.24	0.71	A
45.	Intervening only when students cannot resolve their conflicts.	2.84	0.76	A
46	Providing regular opportunities for peer evaluation so that students can give their expression.	3.30	0.50	A

From Table 3 above, the data presented show that the respondents agreed with all the items as effective pedagogical strategies for monitoring students' progress in online entrepreneurial education programme.

Research Question 4: This question sought to determine students' assessment and data evaluation strategies for online entrepreneurial education. The data collected to answer the research question is presented in Table 4.

Table 4: Student Assessment and Data Evaluation
Strategies for Online Entrepreneurial Education

S/N	Items	$\bar{x}$	SD	Decision
47.	Evaluation process should use several methods and apply specific standards for students learning.	3.50	0.54	SA
48.	Regular review of intended learning outcomes to ensure clarity, utility and appropriateness.	3.54	0.50	SA
49.	Timely evaluation at regular intervals to increase course flexibility for students.	3.34	0.59	A
50.	Integration of some sort of verification methods to ensure academic integrity.	3.20	0.49	A
51.	Vary assessment strategies (self-tests, quizzes, projects, etc) in alignment to objectives.	3.58	0.49	SA
52.	Articulate assessment criteria clearly.	3.40	0.57	A

From Table 4 above, the respondents strongly agreed with items 47, 48 and 51 and agreed with the rest of the items accepting them as strategies for students' assessment and data evaluation in online entrepreneurial education.

Hypothesis 1: There is no statistically significant difference between the mean responses of business educators in universities and those in colleges of education on the pedagogical strategies for preparing students for online entrepreneurial education.

Table 5: Pedagogical Strategies for Preparing
Students for Effective Online Entrepreneurial Education

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
1.	Posting a welcome message to help students to start.	UNIV.	20	3.05	0.89	48	1.95	2.000	Accepted
		COE	30	3.43	0.50				
2.	Providing brief orientation for students to make them familiar with the terminologies and tools used in the course management system.	UNIV.	20	3.60	0.50	48	0.23	2.000	Accepted
		COE	30	3.63	0.49				
3.	Providing contact information for technical help in various places and forms.	UNIV.	20	3.35	0.59	48	1.85	2.000	Accepted
		COE	30	3.00	0.70				
4.	Providing personal contact information, standard response time and preferred communication methods.	UNIV.	20	3.35	0.49	48	1.27	2.000	Accepted
		COE	30	3.53	0.51				
5.	Reminding students to open personal e-mail addresses.	UNIV.	20	3.00	0.92	48	1.45	2.000	Accepted
		COE	30	3.37	0.85				
6.	Providing online office hours as needed.	UNIV.	20	2.85	0.88	48	2.01	2.000	Rejected
		COE	30	3.30	0.70				
7.	Providing guidelines for participation and effective learning.	UNIV.	20	3.50	0.51	48	0.21	2.000	Accepted
		COE	30	3.53	0.57				
8.	Providing resources and strategies for online learning.	UNIV.	20	3.25	0.79	48	0.35	2.000	Accepted
		COE	30	3.33	0.84				
9.	Including students frequently asked questions with respect to courses, registration, tuition, course materials, etc.	UNIV.	20	3.50	0.61	48	0.65	2.000	Accepted
		COE	30	3.37	0.77				
10.	Indicating course goals and learning objectives.	UNIV.	20	3.35	0.49	48	0.58	2.000	Accepted
		COE	30	3.43	0.50				

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
11.	Indicating required and optional course materials or textbooks.	UNIV.	20	3.20	0.62	48	0.37	2.000	Accepted
		COE	30	3.27	0.64				
12.	Indicating clear and specific grading policies.	UNIV.	20	3.35	0.59	48	0.26	2.000	Accepted
		COE	30	3.30	0.70				
13.	Providing guidelines for student participation and collaboration.	UNIV.	20	3.30	0.57	48	1.51	2.000	Accepted
		COE	30	3.53	0.51				
14.	Providing policies on assignments submission and grading.	UNIV.	20	3.15	0.59	48	0.50	2.000	Accepted
		COE	30	3.23	0.57				
15.	Providing etiquette guideline for online courses.	UNIV.	20	3.30	0.57	48	0.31	2.000	Accepted
		COE	30	3.17	0.70				

From Table 5, it can be seen that in all the items (1-15) except No 6, the t-calculated is less than the t-critical. The null hypothesis is accepted, and by implication, there is no statistically significant difference in the mean responses of business teacher educators in the Universities and those in the colleges of education studied. Hence, all the items form pedagogical strategies for effective online entrepreneurial education.

Hypothesis 2: There is no statistically significant difference between the mean responses of business teacher educators in universities and those in colleges of education on the pedagogical strategies for creating conducive online learning environments for students of entrepreneurial education.

Table 6: Pedagogical Strategies for Creating Conducive Online
Learning Environment for Students of Entrepreneurial Education

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
16.	Welcoming students before the course begins via e-mail.	UNIV.	20	3.10	0.64	48	0.31	2.000	Accepted
		COE	30	3.17	0.79				
17.	Posting a personal introduction with an informal tone.	UNIV.	20	2.55	0.83	48	1.01	2.000	Accepted
		COE	30	2.77	0.68				
18.	Providing encouragements and supports especially to beginning students.	UNIV.	20	3.40	0.60	48	0.19	2.000	Accepted
		COE	30	3.43	0.63				
19.	Encouraging students to create their own home page or develop a social space in the course site.	UNIV.	20	3.35	0.49	48	1.23	2.000	Accepted
		COE	30	3.17	0.53				
20.	Uploading relevant pictures to the course site and encourage students to do the same.	UNIV.	20	3.25	0.64	48	0.50	2.000	Accepted
		COE	30	3.17	0.53				
21.	Letting students know the importance of effective participation in the learning process.	UNIV.	20	3.75	0.44	48	0.41	2.000	Accepted
		COE	30	3.80	0.41				
22.	Providing opportunities for students to critique and reflect upon certain course topics.	UNIV.	20	3.25	0.55	48	2.33	2.000	Rejected
		COE	30	3.60	0.50				
23.	Encouraging students to make use of the internet for research and to be critical about the information they find and share.	UNIV.	20	3.60	0.60	48	0.90	2.000	Accepted
		COE	30	3.73	0.45				
24.	Encouraging students to be productive learners by logging in regularly into the course site, submitting assignments on time, participating in discussions and cooperating with team mates.	UNIV.	20	3.60	0.50	48	0.00	2.000	Accepted
		COE	30	3.60	0.62				
25.	Providing opportunities for active problem-solving and team work.	UNIV.	20	3.45	0.51	48	0.09	2.000	Accepted
		COE	30	3.43	0.68				

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
26.	Encouraging active participation in on line discussions.	UNIV. COE	20 30	3.25 3.20	0.55 0.81	48	0.24	2.000	Accepted
27.	Using multiple discussion formats.	UNIV. COE	20 30	2.95 3.03	0.69 0.77	48	0.39	2.000	Accepted
28.	Responding to student comments and questions within time frame set at the beginning of the course.	UNIV. COE	20 30	3.65 3.53	0.49 0.57	48	0.75	2.000	Accepted
29.	Providing feedback to the entire class on specific assignments and discussion.	UNIV. COE	20 30	3.35 3.47	0.59 0.63	48	0.66	2.000	Accepted
30.	Providing weekly wrap up before the next lesson.	UNIV. COE	20 30	3.30 3.43	0.47 0.68	48	0.76	2.000	Accepted

Data presented on Table 6 show that for all the items, except No. 22, t-calculated is less that t-critical. Therefore, the null hypotheses for those items were accepted. For these, there is no statistically significant difference in the responses of business educators in the universities and those in the colleges of education studied. However, for item 22, the business educators differ in their agreement concerning providing opportunities for students to critique and reflect upon certain course topics.

Hypothesis 3: There is no statistically significant difference between the mean responses of business educators in universities and those in colleges of education on the pedagogical strategies for effective monitoring of students' progress in online entrepreneurial education.

Table 7: Pedagogical Strategies for Effective Monitoring
of Students' Progress in Online Entrepreneurial Education

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
31.	Letting student know that those who lag behind may not complete the course on schedule.	UNIV. COE	20 30	3.75 3.53	0.44 0.51	48	1.55	2.000	Accepted
32.	Using available educational technology such as course management system to tract student progress.	UNIV. COE	20 30	3.40 3.27	0.50 0.52	48	0.90	2.000	Accepted
33.	Contacting students who have not logged in for over a week to find out if they are experiencing technical difficulties or problems with course activities.	UNIV. COE	20 30	3.30 3.43	0.47 0.63	48	0.81	2.000	Accepted
34.	Contacting students who have not completed their assignments by e-mail or phone.	UNIV. COE	20 30	3.20 3.23	0.62 0.77	48	0.16	2.000	Accepted
35.	Ensuring that the assessment criteria measure both the quantity and quality of online message.	UNIV. COE	20 30	3.25 3.40	0.44 0.56	48	1.00	2.000	Accepted
36.	Assigning points to messages that encourage additional postings.	UNIV. COE	20 30	3.15 3.13	0.59 0.63	48	0.09	2.000	Accepted
37.	Providing opportunities for student collaboration and facilitating collaborative learning processes and tools.	UNIV. COE	20 30	3.55 3.37	0.51 0.62	48	1.10	2.000	Accepted

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
38.	Using conversational tone that makes students feel comfortable in online learning environment.	UNIV. COE	20 30	3.30 3.53	0.57 0.51	48	1.51	2.000	Accepted
39.	Providing meaningful feedback for all assignments and comments.	UNIV. COE	20 30	3.30 3.37	0.66 0.67	48	0.35	2.000	Accepted
40.	Providing weekly summary of discussion topics to demonstrate your participation	UNIV. COE	20 30	3.25 3.10	0.55 0.66	48	0.84	2.000	Accepted
41.	Giving up the traditional powers as a teacher and allow students become managers of the online learning.	UNIV. COE	20 30	2.85 2.97	0.88 0.72	48	0.52	2.000	Accepted
42.	Allowing students to take responsibility for their peers learning as well as their own.	UNIV. COE	20 30	2.75 2.97	0.64 0.62	48	1.20	2.000	Accepted
43.	Providing opportunities for peer review.	UNIV. COE	20 30	2.85 3.23	0.75 0.57	48	2.06	2.000	Rejected
44.	Providing web etiquette guidelines.	UNIV. COE	20 30	3.25 3.23	0.72 0.73	48	0.08	2.000	Accepted
45.	Intervening only when students cannot resolve their conflicts.	UNIV. COE	20 30	2.80 2.87	0.70 0.82	48	0.30	2.000	Accepted
46.	Providing regular opportunities for peer evaluation so that students can give their expressions.	UNIV. COE	20 30	3.20 3.37	0.52 0.49	48	1.50	2.000	Accepted

From Table 7, except for item 43 (providing opportunities for peer review), there is no statistically significant difference between the mean responses of business educators in the universities and those in the colleges of education studied on the pedagogical strategies for monitoring students' progress in online entrepreneurial education. In the items affected (31-42; 44-46), t-calculated is less than t-critical. However, for item 43, t-calculated is more than it critical, indicating the existence of a significant statistical difference.

Hypothesis 4: There is no statistically significant difference between the mean responses of business educators in universities and those in colleges of education on the pedagogical strategies for students' assessment and data evaluation in online entrepreneurial education.

Table 8: Pedagogical Strategies for Students' Assessment
and Data Evaluation in Online Entrepreneurial Education

S/N	Items	Inst. Type	No	$\bar{x}$	SD	df	t-cal	t-crit	Decision
47.	Evaluation process should use several methods and apply specific standards for students learning.	UNIV. COE	20 30	3.50 3.50	0.51 0.57	48	0.00	2.00	Accepted
48.	Regular review of intended learning outcomes to ensure clarity, utility and appropriateness.	UNIV. COE	20 30	3.35 3.67	0.49 0.48	48	2.27	2.000	Accepted
49.	Timely evaluation at regular intervals to increase course flexibility for students.	UNIV. COE	20 30	3.25 3.40	0.72 0.50	48	0.87	2.000	Accepted

50.	Integration of some sort of verification method to ensure academic integrity.	UNIV. COE	20 30	3.25 3.17	0.53 0.51	48	0.58	2.000	Accepted
51.	Vary assessment strategies (self-tests, quizzes, projects etc.) and align to objectives.	UNIV. COE	20 30	3.45 3.67	0.51 0.48	48	1.53	2.000	Accepted
52.	Articulate assessment criteria clearly.	UNIV. COE	20 30	3.20 3.53	0.52 0.57	48	2.09	2.000	Accepted

From Table 8, t-calculated for items 47, 49, 50, and 51 are less that the t-critical. This means that there is no significant difference in the responses of the respondents. However, items 48 and 52 show that t-calculated is greater than the t-critical meaning that there is a significant difference between the responses of business educators in the universities and those in the colleges of education on the pedagogical strategies for students' assessment and data evaluation in effective online time entrepreneurial education.

5. Discussion

Pedagogical strategies are all about introducing innovation in educational delivery. Innovative educational strategies are needed to develop entrepreneurial spirits and talents which are required to function effectively in a competitive environment. The findings of the study have shown that all the 52 items listed were accepted by both the University and college of education business teacher educators studied as pedagogical strategies for effective online entrepreneurial education.

Concerning the pedagogical strategies for preparing students for effective online entrepreneurial education, the findings agree with Hanover Research Council (2009) which supports that online instructors need to apply the strategies for providing sufficient orientation for students concerning instructional methods and technologies applicable. The Council also emphasized the need to provide intending online students with course goals, expectations, structure, course and institutional policies before the commencement of the training programme. For online entrepreneurship programme to be truly effective, sufficient guidelines must be provided for the students to secure their participation and collaboration. On the issue of providing online office hours, there is a significant difference in the mean responses of the respondents. The reason for the difference is yet to be determined, but experience and level of education and training of the respondents may be the cause. However, it must be recalled that all the respondents agreed that it is one of the strategies and very essential too.

Conducive online learning environment is certainly inevitable for online entrepreneurship education and training. Conducive online community/environment will foster students' culture, and constructive participation in learning activities (Hanover Research Council, 2009). Besides, students will have the opportunity to interact with one another and also with their instructors. Such interaction will allow for feedback to and from the in time class.

Monitoring students' progress is generally essential in teaching. It is in monitoring that it is determined whether objectives are achieved or not. Attainment of objectives in teaching is like reaching one destination in traveling (Igboke, 2012). Without effective monitoring, it will be difficult to determine the level of success or failure. Table 3 contains the strategies considered by the respondents as good for monitoring student progress in effective online entrepreneurship education. For entrepreneurship education to be most useful it must address and develop in student the skills necessary as an entrepreneur (Arvanites, Glasgo and Stumpf, 2011).

Concerning the strategies for student assessment and data evaluation in online entrepreneurship education, the respondents agreed with all the strategies listed. This agrees with Hanover Research Council (2009) which stipulated best practices in student assessment and data evaluation. In addition, Pennsylvania State University's world campus guide of best practices in online teaching strategies in Hanover Research Council (2009) emphasized the need for instructors to gather and analyze student evaluation data with a view to improving course content and pedagogy. Correct assessment and data evaluation will enable the teacher and the institution to produce and provide valid and reliable report on the progress of the online students. With valid and reliable evaluation report made available to all interested parties, the work of teaching is complete.

6. Conclusion

Based on the findings of this study, it was concluded that for the purposes of preparing students for online entrepreneurial education; creating conducive online learning environment; monitoring students' progress and students' assessment and data evaluation, the 52 strategies listed are necessary and relevant for effective online entrepreneurial education at the tertiary level of education. This is confirmed by the agreement expressed by the respondents and the fact that out of 52 strategies, there was no significant difference in the mean response of the business educators on 47 of them.

7. Recommendations

Based on the findings and conclusion, it is recommended that all tertiary institutions teaching entrepreneurship education online should systematically apply the strategies identified in this study. This is important when we consider and agree with Barkawi (2015) that entrepreneurship is fast emerging as a transformational megatrend of the 21st century given its capacity to reshape the economies of nations.

Departments of Business Education and all institutions offering online entrepreneurship education could have a blend of appropriate and relevant technologies, competent and experienced manpower to enable application of the pedagogical strategies in online entrepreneurship education.

The National Universities Commission (NUC) could encourage Nigerian universities to mount online entrepreneurship education programmes. This will help

build the capacity of unemployed graduates and particularly those who graduated before the introduction of entrepreneurship education programme into the Nigeria tertiary institutions.

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