



IMPROVING BUSINESS EDUCATORS' USAGE OF SYNCHRONOUS INTERACTIVE RESOURCES FOR TEACHING AND LEARNING BUSINESS EDUCATION PROGRAMMES IN TERTIARY INSTITUTIONS IN EBONYI STATE IN POST COVID-19 ERA

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Abstract

This study examined ways of improving business educators' usage of synchronous interactive resources for teaching and learning of business education programmes in tertiary institutions in Ebonyi State in Post COVID-19 era. Two purposes of the study with their corresponding research questions and one hypothesis guided the study. The study adopted descriptive survey design. The population consisted of 47 business educators in all the tertiary institutions in Ebonyi State. There was no sampling since the population was manageable and were all used for the study. A structured questionnaire validated by three experts was used as instrument for data collection. The reliability of the instrument was ensured by using statistical package for social sciences and it yielded a reliability index of 0.78. Responses to the questionnaire items were analyzed using mean and standard deviation while the null hypothesis was tested using t-test statistical tool at 0.05 level of significance. Findings of the study revealed that business educators agreed that digital camera, smart phones, laptop computers, electronic bulletin boards among others are resources required for effective utilization of synchronous interactive instruction. The study also revealed that business educators getting trained on how to make online video conferencing and encouraging students to always send their questions through video are some of the ways business educators can improve their usage of synchronous interactive resources in teaching and learning of business education programmes in tertiary institutions in Ebonyi state in Post COVID-19 era. The study recommended among others that Managers of business education should organize training and retraining of business educators on the usage of synchronous interactive resources.

Introduction

Sudden outbreak of coronavirus forced global activities to be temporary suspended for some period. Educational system was one of the sectors greatly affected by the suspension caused by the pandemic as all schools were forced to close and most academic activities suspended. Butnaru, Nita, Anichiti and Brinza (2021) observed that schools abruptly stopped their traditional programmes and



migrated to online school system. This migration was eminent among schools in developed countries as most African countries (including Nigeria) seemed not prepared thereby leading to temporal closure of schools. As one of the programmes offered in Nigeria school system, business education programmes were also affected. This closure undoubtedly was caused by envisaged rapid spread of Covid-19 pandemic and death rates within the period. After closure of schools, efforts are been made towards enhancing teaching and learning in line with this new normal hence the need for usage of synchronous interactive instruction.

Synchronous interactive instruction is the use of internet enabled technologies in delivering instructions in real time. Martin and Parker (2014) defined synchronous interactive instruction as the application of technologies that enable teachers to interact with students while delivering their instructions using online channels. Teachers use different internet supported technologies where both teachers and students use technologies and online facilities at the same time for teaching and learning. Nwagwu (2015) explained that participants in synchronous interactive instruction attend to their online academic activities at the same time. Marwa, Mona and Sarah (2021) noted that use of synchronous interactive instructions need availability of different resources. These resources are used in real time by teachers to have contact with all the students from different locations at the same time through the internet. Nwagwu (2015) posited that Synchronous and asynchronous are the two types of electronic learning. The major difference between synchronous and asynchronous learning as identified by Hrastinski (2008) is that in synchronous, students and their teachers are always online at the same time. While in asynchronous learning, participants may not be online at the same time but have access to the instructional resources at self-pace.

According to Rockinson-Szapkin and Walker (2009), synchronous interactive instructions make use of web-conferencing or electronic conferencing enabled technologies. In synchronous interactive instructions, teachers deliver their instructions where the students connect and join the interactions on real time. If the resources in use is audio, the students can dial to participate in the real time classroom by using a pre-established telephone number. Recent technological advancement has made it that whether the teacher is using audio and/or video resources, students can download the instructional content for future references. According to Cook, Annetta, Dickerson and Minogue (2011), availability of different resources and stabled internet access are needed for effective use of synchronous interactive instruction and incase of any difficulty, the affected participant can use other means to get support from the teacher and as well join the class on real time. With the migration to electronic teaching, synchronous interactive instruction has proved to be effective in improving instructional delivery in post-COVID-19 era.

COVID-19 is World Health Organization's nomenclature for coronavirus disease 2019 (Shereen, Suliman, Abeer, Nadia & Rabeca, 2020). Shereen et al described coronavirus as a single stranded ribonucleic Acid (RNA) with minute size of sixty five to one hundred and twenty five nanometers which transmits severe acute respiratory syndrome found mostly in animals. This virus broke out in Wuhan China in late 2019 and led to death of thousands of people before spreading to other parts of the World (Adhikari, Meng, Wu, Mao, Ye, Wang, Sun, Sylvia, Rozelle, Raat and Zhou, 2020). Spread of this virus across the globe led to temporal closure of schools and face-to-face teaching and learning was stopped. According to Hodges, Moore, Lockee, Trust and Bond (2020), the pandemic necessitated that teachers had to plan and deliver their instructions from home. This was sustained throughout the peak period when the pandemic ravaged the world. Though adjudged to have been controlled, the effect is still new in minds of the people and school activities including teaching and learning of business education programme is gradually picking up.

Business education is one of the vocational education programmes aimed at equipping individuals with skills and knowledge required to function effectively in chosen occupation in world of business. According to Onyesom, Egbule and Okwuokenye (2012), business education is vocational instructions provided to students with the aim of preparing them to earn a living in the contemporary



and ever changing business environment. Business education programmes are planned to prepare students with requisite skills for contribution in business world as intelligent consumer and/or producer of business products. Olaniyi and Aina (2014) posited that business education programme is divided into education for business and education about business. Education for business equips learners with skills that makes them to fit into business oriented ventures like establishment of enterprises (Thaanyane, 2019). Students in business education are trained to possess accounting skills, secretarial skills, and entrepreneurial skills among others. Vocational business education programmes prepares students with practical skills needed to function effectively as producers of business products. Students are prepared to be job creators and have necessary competencies required for job adjustment. Education about business on the other hand equips the students with knowledge that will help them to be intelligent consumers of business products. Ubulom and Ogwunte (2017) explained that this aspect of business education prepares would-be teachers with needed pedagogical skills required for teaching business subjects or courses at all levels of education. All these programmes of business education were affected by outbreak of COVID-19 pandemic and as the programmes are gradually picking up, use of synchronous interactive instruction becomes imperative in the face of this new normal.

To effectively teach business programmes in this technological era, it is imperative to identify resources required for effective utilization of synchronous interactive instructions for teaching and learning. Ugwuogo (2012) opined that e-teaching becomes effective where the resources are available and are also put into use. In institutions where resources required for effective utilization of synchronous interactive instructions are available, the teachers are expected to possess needed skills. In this line, identification of ways through which business educators can improve their usage of synchronous interactive resources in teaching and learning becomes pertinent.

Statement of the Problem

The outbreak of COVID-19 negatively affected academic activities across the globe as schools were temporary closed. Students were sent home as most schools in Nigeria were unable to migrate to online learning. Business education programmes were also affected by this situation as many schools abruptly closed without completing their semester programmes. Inability of schools and lecturers to make use of synchronous interactive instruction suspended teaching and learning till when face-to-face classroom resumed. It is worrisome that business education that prepares students for the usage of information and communication in teaching and learning was unable to migrate its programmes to online in this new normal. The programme suffered setback as the programme lost some sessions and in some schools, after resumption, academic activities were compressed to meet up with semesters lost. It becomes perturbing that business educators seems not to know ways of improving their usage of synchronous interactive instructions in teaching and learning. It becomes imperative in post COVID-19 era to identify resources required for effective utilization of synchronous interactive instructions in teaching and learning of business education programmes and how to use them. Hence, the problem posed by this study is to identify ways of improving business educators' usage of synchronous interactive resources delivery of business education programmes in tertiary institutions in Ebonyi State.

Research Questions

The following research questions guided the study:

1. What are the resources required for effective utilization of synchronous interactive instructions for teaching and learning business education programmes in tertiary institutions in Ebonyi State in post-covid-19 era?
2. What are the ways business educators can improve their usage of synchronous
3. interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era.



Hypothesis

The following hypothesis guided the study and was tested at 0.05 level of significance.

There is no significant difference between the mean ratings of male and female business educators on ways they can improve their usage of synchronous resources in teaching and learning of business education programmes in tertiary institutions in Ebonyi State in post Covid-19 era.

Methodology

The design adopted for this study was a descriptive survey design. Descriptive survey design was appropriate for this study as information were gathered on the subject of investigation and were described in their original setting (Okoro, 2013). Population of this study composed of 47 business educators from all the tertiary institutions that offer business education programmes. Tertiary institutions in Ebonyi State that offer business education programmes are Alex Ekwueme Federal University, Ndufu-Alike Ikwo, Ebonyi State University, Abakaliki, Akanu-biam Federal Polytechnic Unwana and Ebonyi State College of Education Ikwo. All the business educators from these institutions were used as the population was manageable. Instrument for data collection was a structured questionnaire constructed by the researchers. The questionnaire items were patterned thus: Strongly Agree (SA)-4 points, Agreed (A)-3points, Disagree (D)-2points, and Strongly Disagree (SD)-1point. The instrument was validated by three experts from business education department of Ebonyi State University, Abakaliki. Reliability of the instrument was ensured by testing it using Cronbach Alpha and it yielded a reliability index of 0.78; indicating that the instrument was reliable. Copies of the questionnaire were directly administered on the respondents by the researchers and all of them were correctly filled and returned. Data collected were analyzed using mean and standard deviation while t-test was used for hypothesis. Items with mean rating of 2.50 and above were adjudged as agreed to by the respondents. Any item with mean rating of less than 2.5 was adjudged that respondents disagreed with the item. The hypothesis was tested using t-test statistical tool at 0.05 level of significance and any item whose calculated t-value was equal to or greater than critical t-value was rejected while any item whose calculated t-value was less than critical t-value was accepted.

Results

Research Question 1

What are the resources required for effective utilization of synchronous interactive instructions for teaching and learning business education programmes in tertiary institutions in Ebonyi State in post Covid-19 era?

Table 1: Mean responses on the resources required for effective utilization of synchronous interactive instructions for teaching and learning business education programmes in tertiary institutions in Ebonyi State in post Covid-19 era.

S/N	Resources Required for Usage of Synchronous Interactive Instruction	\bar{x}	SD	Decision
1.	Digital Camera	3.15	0.71	Agreed
2.	Smart Phone	2.79	0.53	Agreed
3.	Desktop Computers	2.48	0.76	Agreed
4.	Laptop Computers	3.91	0.82	Agreed
5.	Electronic Mails	2.30	0.69	Disagreed



6.	Electronic Bulletin Boards	3.01	0.55	Agreed
7.	Zoom Application	3.50	0.72	Agreed
8.	Power point	2.88	0.74	Agreed
9.	Internet Connection	3.70	0.80	Agreed
10.	Camera Stand	2.91	0.65	Agreed

Data as presented in Table 1 revealed that business educators agreed that digital camera, smart phones, laptop computers, electronic bulletin boards, Zoom application, power point, internet connection and camera stand are resources required for effective utilization of synchronous interactive instruction in teaching and learning business education programmes. Business educators disagreed that electronic mails are resources required for effective utilization of synchronous interactive instruction in teaching and learning business education programmes.

Research question 2

What are the ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era

Table 2: Mean responses on ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era

S/N	Ways of improving business educators' use of synchronous interactive resources in teaching and learning. Business educators	\bar{x}	SD	Decision
1.	getting trained on how to make online video conferencing	3.81	0.77	Agreed
2.	encouraging students to always send their questions through videos	2.99	0.52	Agreed
3.	orientating themselves with video conferencing interface	3.01	0.89	Agreed
4.	learning how to use audio conferencing that support real time interaction.	3.22	0.73	Agreed
5.	are to be regularly accessible to students online	2.66	0.91	Agreed
6.	are to always adhere strictly to class schedules	3.41	0.83	Agreed
7.	are to always create sense of community among students using synchronous interactive resources	3.27	0.64	Agreed



Data as presented in Table 2 above shows that respondents agreed to all the items as ways business educators can improve their usage of synchronous interactive instruction in teaching and learning business education programmes in post Covid-19 era. Their agreement is evident as all the items had mean ratings that are above the decision value of 2.50.

Hypothesis

There is no significant difference between the mean ratings of male and female business educators on ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era

Table 3: T-test analysis of differences in mean responses of business educators in Ebonyi State on ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era

Variable	N	Mean	SD	DF	T-cal	T-crit	Decision
Male	29	3.41	0.74	45	0.52	2.05	Accept
Female	18	3.28	0.91				

Table 3 above shows that calculated t-value is 0.52, the degree of freedom is 45 and critical t-value is 2.05, since the calculated t-value is less than critical t-value, the null hypothesis is accepted. This means that there is no significant difference in the mean ratings of male and female business educators on ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era.

Discussion of findings

Findings from this study as shown in table one revealed that synchronous interactive resources required for teaching and learning of business education programmes in tertiary institutions in Ebonyi State include digital camera, smart phone, laptop computers, Zoom applications among others. This finding is supported by that of Marwa, Mona and Sarah (2021), that unavailability of laptop computers and inadequacy of other resources are major barriers to e-learning. Therefore, for business educators to cope with the new normal and effectively use synchronous interactive instruction in teaching and learning, necessary resources are to be made available and adequate. Some of these resources such as smart phone and laptop computer could be provided by business educators and students. Applications like Zoom could be easily downloaded and installed on a smart phone and/or laptop computer for onward usage in teaching and learning.

From table two, the study revealed that all the items are ways business educators can improve their usage of synchronous interactive instructions in teaching and learning. Some of the ways as found by the study include business educators getting trained on how to make online videos, business educators orientating themselves with video conferencing, interface among others. This finding aligns with the view of Spencer (2012), who observed that for effective utilization of synchronous interactive instruction, teachers need to have necessary skills and get committed to delivering quality real time instructions. Martin and Parker (2014) noted that teachers should be able to



use available synchronous interactive resources to promote interactions and create online community where students could be easily reached. Analysis of the hypothesis showed that no

significant difference exist between the mean responses of male and female business educators on ways business educators can improve their usage of synchronous interactive resources in teaching and learning business education programmes in tertiary institutions in Ebonyi State during post covid-19 era.

Conclusion

The outbreak of Covid-19 accidentally and temporally paused educational activities across the global. Most countries without adequate technologies for online teaching and learning were disadvantaged. It becomes imperative that business educators get acquainted with ways they can improve their usage of synchronous interactive resources for continuity of delivering their programmes during this new normal. Their ability to utilize all the needed resources in creating real time teaching and learning opportunity will isolate the programme from such stoppage in the future.

Recommendations

On the strength of the findings and conclusions of this study, the following recommendations were made:

1. Managers of business education should organize training and retraining of business educators on the usage of synchronous interactive resources.
2. School administrators should provide digital cameras in business education laboratories for effective usage in real time teaching and learning. Also, Business educators should encourage their students to use their smart phones in creating academic online communities where they could be easily reached.
3. Network connectivity in business education programmes should be improved as utilization of synchronous interactive instructions need connectivity of available resources.

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