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EMERGING QUALITY ASSURANCE STRATEGIES REQUIRED OF VOCATIONAL AND TECHNOLOGY EDUCATION LECTURERS TO REVAMP TECHNOLOGY EDUCATION IN RIVERS STATE

By

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Abstract

The study was aimed at identifying the emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State. Two research questions and two hypotheses guided the study. The population of the study was 30 Vocational and Technology lecturers. There was no sampling. A self-developed instrument titled "Emerging Quality Assurance Strategies Required of Vocational and Technology Education Lecturers" (EQASRVTEL) was validated by three experts. Findings revealed that VTE lecturers should regularly access social media platform, be able to deliver instruction online, and response to student questions on social media among others are emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education. Findings further revealed that poor renumeration, lack of ICT facilities, inability of university authorities to sponsor VTE lecturers to conferences among others are challenges facing VTE lecturers to revamp technology education. Recommendations were made thus; Government should provide ICT facilities to VTE lecturers, regularly promote VTE lecturers based on performance, and that university authorities should sponsor lecturers to local and international conferences.

Key words: Emerging, Quality Assurance, Vocational and Technology Education, Revamp, Social Media, E-learning.

Introduction

The sudden revolution being experienced in the world today is a clarion call for the re-adjustment and total revamp of style of instructional delivering in technology institutions. This revolution has caused technology institutions and other tertiary institutions to opt for distance learning mode. The emergence of Covid-19 has necessitated the fact that lecturers must be computer literate and able to connect computer accessories to the internet. The disease has affected the world seriously, shutting down economic activities, travel, social life and causing people to stay at home (National Primary Health Care Development Agency, 2020). In the cause of this pandemic, governments around the world are promoting and enforcing measures to reduce the spread of this disease. Part of the measures designed by the government was to adopt E-learning; the online teaching and learning and the use of other social media platforms to deliver instruction to the students at all level (Wike, 2020).Technology institutions are not left out in the adoption of the E-learning mode of study.

E-learning refers to the use of Information and Communication Technology facilities to enhance effective instructional delivery and related interaction between students and lecturers at any given place. Ikechukwu (2013) defined e-learning as an innovative approach to delivery of electronically mediated, well-designed, learner-centred and interactive learning environment to anyone, anytime and anyplace by utilizing the internet and digital technologies in connection with instructional design principles. Asah in Mmeremikwu-Fiac and Onwukwe (2016) defined e-learning as the use of information and communication technology (ICT) which include computer network, communication and mobile technologies to enhance and extend learning. ICT facilities are the vehicles that drives effective e-learning in an academic environment.

Information and Communication Technology (ICT) is frequently used as an extended synonym for Information Technology (IT). Information and communication technology consists of all technical means used to handle information and aid communication, including computer and network hardware, telephone, broadcast media, as well as all types of audio and video processing and transmission and network-based control and monitoring functions. (Asonibare, 2016). They are intelligent building management

systems and audio-visual systems in modern information technology. ICT provides vocational and technology education lecturers and students access to vast stores of knowledge outside instructions obtained from the classrooms, as well as with multimedia tool to add to this store of knowledge. ICT is used for all kinds of technology devices which enable users to create, access and manipulate information on social media.

Social media can be defined as a website that enables users to create and share content or to participate in social networking. Social media are interactive computer mediated technologies that facilitate the creation or sharing of information, ideas, career interest and other forms of expression via communities and network (Wikipedia, 2020). Social media are now most often used to supplement traditional face-to-face classroom activities, to connect with peers and colleagues, share ideas, resources and experiences for extra-curricular activities (Ayodele & Aladeji 2016). The emergence of social media has forced vocational and technology education lecturers to think differently about the way learning occurs. Students and vocational and technology education lecturers alike are using new technologies to share idea, interest and also meet people with similar ideas and interest. Some of the social media expected to be used in technology education for enhancing teaching and learning are facebook, myspace, Youtube, Flickr, Blogs, Twitter and Whatsapp (Reuben, 2014).

Technology education lecturers are academic staff employed in the technological institutions for research and instructional delivering of vocational and technology education courses. This academic staff (lecturers) assist students to develop scientific knowledge and acquire skills that are profitable to the society; expose vocational and technology education students to various practical activities that make them to acquire the desired skills in their career pursuit (Nnamocha, 2019). To achieve these aims and objectives, lecturers of vocational and technology education have to readjust and adopt emerging quality assurance strategies with the sole aim to flourish in the 21st century era, where e-learning is now a common place.

These emerging qualities expected of vocational and technology education lecturers require them to be computer literate thus equipping them with the ability to deliver instruction online, easy response to students' questions on social media and ability to

operate smart devices among others. Emerging qualities could be viewed as qualities which arise from new knowledge or the innovative application of existing knowledge leading to the social change of new capacities. Beako (2017) described emerging qualities as qualities that are new or fairly well established but yet to be fully exploited by teachers and institutions. Abutu, Ogunsola and Bappah (2019) stated that emerging quality assurance strategies expected of vocational and technology education lecturers to achieve quality assurance to include: Ability to attend seminars, workshops and conferences, ability to involve in professional activities. In this study, emerging qualities are regarded as those newly developed qualities expected of lecturers of vocational and technology education to attain in a view to be relevant, versatile and able to deliver instruction effectively via e- learning. Compliance to these qualities will put the technology institutions on the fast lane to be revamped as ICT facilities will be considered as well as exhibiting required quality assurance.

Quality assurance refers to a mechanism for effectiveness and efficiency of professionals in different world of work including teaching profession. Okebukola, (2010) defined quality assurance as a process of maintaining standards in products and services through inspection or training of samples. Ajayi and Adegbesan (2010) highlighted more asserts that quality assurance is related to accountability, both of which are concerned with maximizing the effectiveness and efficiency of educational systems and services in relation to their contexts of their missions and their stated objectives. Quality assurance is designed to improve and prove the quality of methods and educational products and outcomes. Quality assurance includes defined standards of achievement, documented procedures for all identified process, established ways of responding to issues and clear accountability for outcomes (Dikeoch, Onwuagboke & Amaechi, 2019). Quality is a catalyst to revamp technology education in Rivers State.

Revamp can be defined as the total revolution or social change that affect the way people do something or managed an institution of learning. In this study, revamp refer to the tremendous charge leading to a higher positions of technology institutions. Revamp is a restructured, redesigned and rearranged technological institutions structures to meet up with the contemporary demands of the society. It is expected that vocational and

technology education lecturers are in the forefront to carry out these duties. They are expected to adjust to the current trends by imbibing emerging quality assurance necessary to revamp technology education in Rivers State. It is certain that challenges must be responsible for their inability to adopt to these qualities. The challenges can include: poor remuneration, lack of ICT facilities, inability of university authorities to sponsor vocational and technology education lecturers to local and international conferences, no befitting accommodation for vocational and technology education lecturers, no internet facilities among others (Beako, 2017). Abutu, Ogunsola and Bappah (2019) Stated that constraints against quality assurance by academic staff of vocational and technology education include: poor societal attitude towards ineffective retraining of vocational and technology education lecturers, inadequate practical training facilities, inadequate funding of vocational and technology education programmes and poor administration and supervision of vocational and technology education lecturers among others. It is this premise, the study aimed at identifying emerging quality assurance strategies required of vocational and technology education's lecturers to revamp technology education in Rivers State was carried out.

Statement of the Problem

Until recently, almost all vocational and technology education instruction took place in the classroom, or on the job, with students learning trade skills and trade theory from accredited professionals or established professionals in the industry. However, the spread of coronavirus disease (Covid- 19) has turned the process to a different dimension. Based on its spread, economic activities, banks, churches, mosques, school took new order of operation leading to E- life including E- learning. In this new order, it is observed that Vocational and technology education students and lecturers have been finding education processes difficult to teach and learn online, and do not have the emerging qualities for the application of smart devices, computers and social media platformsfor instructional delivery. In light of the foregoing, the study aimed at identifying emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State was carried out.

Purpose of the Study

The main purpose of the study is to identifying emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State. Specifically, the study sought to:

(1) ascertain emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

(2) determine challenges facing emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

Research Questions

The following research questions guided the study.

(1) What are the emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

(2) What are the challenges facing emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

Hypotheses

The following null hypotheses were formulated to guide the study and tested at 0.05 significance level

(1) There is no significant difference between the mean response of Vocational and Technology Education Lecturers of Rivers State University, Port Harcourt and Ignatius Ajuru University of Education, Port Harcourt on the emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

(2) There is no significant difference between the mean response of Vocational and Technology Education Lecturers of Rivers State University, Port Harcourt and Ignatius Ajuru University of Education, Port Harcourt on the challenges facing emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

Methods

The design used for the study was descriptive survey. The study was carried out in two universities, owned by the Rivers State Government. These two Universities offered technology education in the Department of Vocational and Technology Education. They are IgnatiusAjuru University of Education, Rumuolumeni, Port Harcourt and Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, Nigeria. The population of the study consisted of 30 respondents, comprises 16 lecturers drawn from the Department of Vocational and Technology Education, Rivers state University, Port Harcourt and 14 lecturers in the Faculty of Vocational and Technology Education, Ignatius Ajuru University of Education, Rumuolumini, Port Harcourt.

A self-developed instrument titled "Emerging Quality Assurance Strategies Required of Vocational and Technology Education Lecturers, (EQASRVTEL) was used to elicit information from respondents. The instrument was validated by two experts from the Department of Vocational and Technology Education, Rivers State University, Port Harcourt and one expert from the Department of Vocational and Technology Education, Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, Nigeria. The questionnaire consists of two parts: A and B. Part A dealt with personal data of respondents, Part B is sub-divided into two sections: 1 and 2, section 1 dealt with information on emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education while section 2 focused on challenges facing quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

The questionnaire items are based on four point likert scale response of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) with corresponding

values of 4, 3, 2, and 1 respectively. To determine the reliability coefficient of the instrument, a pilot test was conducted on five lecturers from the Department of industrial Technology Education, Michael Okpala University of Agriculture, Umunike, and was carried out using pilot test method. The reliability coefficient was determined using Crobach Alpha Coefficient which yielded 0.89 which implies that the instrument was very reliable and used for the study. Mean and standard deviation was used to answer the research questions, while t-test statistical tools was used to test the hypotheses. The decision rule for the research questions was any item with mean value equal to or less than 2.50 were rejected while mean value equal to or greater 2.50 were accepted. The hypotheses were tested at 0.05 level of significance with t-test statistical tool. For the null hypotheses, if the value of the t-calculated is less than the value of t-critical, the hypothesis was accepted, while if the value of the t-calculated is greater than or equal to the value of the t-critical, the hypothesis was rejected.

Results

Table 1: Mean and Standard Deviation on Emerging Quality Assurance Strategies Required to Revamp Technology Education

S/N	Emerging Qualities Assurance Required to Revamp Technology Education	$\overline{X}$	SD RSU Lecturers	Remark	$\overline{X}$	SD IAUOE Lecturers	Remark
1	Ability to access social media regularly	2.93	0.99	Agreed	4.01	0.89	Agreed
2	Ability to use smart devices	3.01	0.96	Agreed	2.82	1.03	Agreed
3	Ability to answers student's questions online	2.86	0.99	Agreed	2.79	1.14	Agreed
4	Ability to make observation on students Microsoft ware and send back	3.30	0.91	Agreed	2.69	1.16	Agreed

5	Ability to attend conferences online	3.10	0.95	Agreed	2.71	1.28	Agreed
6	Ability to teach online	3.07	0.97	Agreed	2.62	1.20	Agreed
7.	Ability to set exams online	2.67	1.02	Agreed	2.90	0.92	Agreed
8.	Ability to evaluate student's performance online	2.98	0.98	Agreed	2.94	0.94	Agreed
9	Ability to access student's work in email and make observation	3.26	0.93	Agreed	2.56	1.20	Agreed
10	Ability to mark examination questions online.	2.72	1.00	Agreed	2.60	1.16	Agreed
	Total Mean/Standard Deviation	**2.99**	**0.97**	Agreed	**2.76**	**1.09**	Agreed

The data presented on table 1 shows that the mean values are all greater than the criteria mean of 2.50. This implies that all the items are agreed to be emerging quality assurance strategies required of vocational and technology education's lecturers to revamp technology education in Rivers State.

Table 2: Mean and Standard Deviation on Challenges facing Emerging Quality Assurance Strategies Required to Revamp of Vocational and Technology Education's to Technology Education

S/N	Challenges facing Emerging Quality Assurance in Technology Education	$\overline{X}$	SD RSU Lecturers	Remark	$\overline{X}$	SD IAUOE Lecturers	Remark
11	Lack of ICT facilities	3.10	0.98	Agreed	2.61	1.03	Agreed
12	Inability of University authorities to sponsor VTE lecturers to conferences	3.22	0.96	Agreed	3.10	0.94	Agreed

13	No befitting accommodation for VTE Lecturers	2.69	1.09	Agreed	2.91	0.94	Agreed
14	No. Internet Facilities for VTE Lecturer	3.19	0.94	Agreed	3.10	0.94	Agreed
15	Poor remuneration for VTE Lecturers	3.33	0.90	Agreed	2.70	1.00	Agreed
16	Inadequate practical training facilities	2.72	1.06	Agreed	3.14	0.92	Agreed
17.	Poor supervision of VTE Lecturers	2.87	1.01	Agreed	2.69	1.05	Agreed
18	Poor societal attitude towards VTE lecturers	3.05	0.99	Agreed	2.76	1.02	Agreed
19	Ineffective retraining of VTE Lecturers	2.92	1.00	Agreed	3.04	0.97	Agreed
20	Inadequate finding of VTE programmes	3.14	0.97	Agreed	3.18	0.92	Agreed
	Total Mean/Standard Deviation	**3.02**	**0.78**	Agreed	**2.92**	**0.98**	Agreed

Vocational and Technology Education (VTE)

The information on table 2 shows that the mean values are all greater than the criterion mean of 2.50. This implies that all the items are agreed as challenges facing emerging quality assurance strategies required of vocational and technology educationlecturers to revamp technology education.

Table 3: T-test Analysis of Response on the Emerging Quality Assurance Strategies Required for Revamp Technology Education

Respondents	$\overline{X}$	**SD**	**No**	**df**	**Sig.**	**t-cal**	**t-cri**	**Remark**
RSU Lecturers	2.99	0.97	16					
				28	0.05	0.0458	$\pm$1.96	Accepted
IAUOE Lecturers	2.76	1.09	14					

Table 3 revealed that the mean value of calculated t-value is 0.0458 which is less than table value of 1.96 at 0.05 level of significance and at 28 degree of freedom. Therefore, the null hypothesis is accepted. This implies that the views of the vocational and technology education lecturers of Rivers State University and Ignatius Ajuru University of Education are the same.

Table 4: T-test Analysis of Response on the Challenges facing Emerging Quality Assurance Strategies to Revamp Technology Education

Respondents	$\overline{X}$	**SD**	**No**	**df**	**Sig.**	**t-cal**	**t-cri**	**Remark**
RSU Lecturers	3.02	0.78	16					
				28	0.05	0.0254	$\pm$1.96	Accepted
IAUOE Lecturers	2.92	0.98	14					

Table 4 revealed that the overall value of calculated t-value is 0.0254 which was less than t-table value of 1.96 at 0.05 level of significance and at 28 degree of freedom. Therefore, the null hypothesis was accepted. Based on this analysis, it was concluded that the view of vocational and technology education lecturers of Rivers State University and Vocational and Technology Education Lecturers of Ignatius Ajuru University of Education are the same.

Discussion

The findings of the study revealed 10 items as emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State. These emerging qualities include: ability to access social media regularly, ability to use smart devices, ability to answer students questions online, ability to make observation on students soft copy and send it back using available media platform,

ability to attend conferences online among others are the emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State. This finding is in agreement with Abutu, Ogunsola and Bappah (2019) who stated that emerging qualities required of vocational and technology education lecturers include ability to attend seminars, conferences and workshops online, ability to involve in professional activities among others. The finding also consented with Dikeoch, Onwuagboke and Amaechi(2019) who stated that quality assurance includes defined standards of achievement, documented procedures for all identified process, established ways of responding to issues and clear accountability for outcomes. The finding further revealed that there is no significant difference between the mean response of vocational and technology education lecturers of Rivers State University, Port Harcourt and Ignatius Ajuru University of Education, Port Harcourt on the emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

The findings further revealed 10-items as challenges facing emerging quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State. The finding include: lack of ICT facilities, lack of internet facilities, poor remuneration for vocational and technology education lecturers, poor supervision for vocational and technology educationlecturers, inadequate funding of vocational and technology education's programmes, no befitting accommodation for vocational and technology education lecturers among others are challenges facing emerging quality assurance in technology education in Rivers State. The finding is in line with Beako (2017) who identified challenges facing quality assurance include: poor remuneration, lack of ICT facilities, inability of university authorities to sponsor vocational and technology education lecturers to local and international conferences, no befitting accommodation for vocational and technology education lecturers, no internet facilities among others. The finding further revealed that there is no significant difference between the mean response of vocational and technology education lecturers of Rivers State University, Port Harcourt and Ignatius Ajuru University of Education, Port Harcourt on the challenges facing quality assurance strategies required of vocational and technology education lecturers to revamp technology education in Rivers State.

Conclusion

Vocational and technology education lecturers needs to swift over to utilization of ICT facilities and re-enforce considering the change that arose from the global pandemic (Covid-19). This is sequel to the fact that Government of all levels had announced for e-learning in the Universities. Therefore, it becomes imperative for vocational and technology education lecturers to adjust and readjust for relevancy and competency in their various disciplines towards revamping technology education in Rivers State.

Recommendations

Based on the findings, the researchers made the following recommendations:

1. The government should provide internet facilities to the Department of Vocational and Technology Education in the two Universities in Rivers State.
2. That the Government should sponsor conferences, seminars and workshops for vocational and technology education lecturers to enable them upgrade in their potentials and improve competencies.
3. The university authorities should provide ICT training regularly for all Vocational and Technology Education lecturers to enable them to be relevanced and useful in the computer age.

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