

UTILIZATION OF OPEN EDUCATIONAL RESOURCES FOR ENRICHED INSTRUCTIONAL CONTENT OF BUSINESS EDUCATION COURSES IN RIVERS STATE UNIVERSITIES

DAMBO, Boma Isabella & KAYII, NumbaraBari Emmanuel

Department of Business Education, Faculty of Education
Rivers State University, Port Harcourt, Nigeria
numbarabari.kayii@ust.edu.ng

Abstract

The study is aimed at assessing the utilization of open educational resources by Business Education lecturers for enriching the instructional content of business education courses in Rivers State universities. Two research questions were posed and answered while two corresponding hypotheses were tested at 0.05 level of significance. This study adopted the descriptive survey research design. The population of this study consists of thirty-eight (38) Business Education Lecturers teaching in the two (2) state-owned universities offering Business Education programme. The entire population was studied. The instrument for the study was designed by the researchers and titled "Utilization of Open Educational Resources Questionnaire (UOERQ)." The instrument was validated by three experts. Cronbach Alpha was used to determine the reliability coefficient, which yielded 0.89 frequency counts, percentage, and mean set at 2.50 and the standard deviation was used to analyze the data collected to answer the two research questions and t-test the hypotheses at 0.05 level of significance. The results of the study revealed that there was no significant difference in the mean responses of Business Education lecturers to the utilization of online tutorials and digital learning objects for enriching the instructional content of courses in Rivers State universities. It was recommended that, since online tutorials have a unique role to play in assisting educators in overcoming their initial resistance to innovation adoption and understanding the powerful teaching potential that technology-rich learning environments represent, they have a unique role to play in assisting educators in overcoming their initial resistance to innovation adoption, and Business Education lecturers should explore the use of digital learning objects for instructional delivery to tap into the inherent benefits of open education resources.

Keywords: OER, Online tutorials, Digital learning objects, Business Education, Instructional Content.

Introduction

Teaching and learning resources were frequently seen as important intellectual property available only to a restricted group of students, professors, and institutions in the competitive world of higher education in previous decades and were continually constrained. However, an increasing number of institutions and individuals are sharing such digital resources over the Internet without any legal, financial, or technical barriers, making it easier for lecturers to incorporate the necessary ingredients to enrich instructional content with material from open educational resources.

The Massachusetts Institute of Technology (MIT) started posting course materials to the Web in 2001 as part of its Open Course Ware effort (OCW). As a result of this improvement, education will become more accessible to anyone who wants to learn, and lecturers will be able to improve their teaching skills because of this improvement (Krelja-Kurelovic, 2016).

The use of OER in the instructional delivery process benefits both lecturers and students tremendously. Improved instructional delivery and a broader pool of learning resources are two of the benefits (Onwuagboke, Singh & Fook, 2015). Both lecturers and students experience less stress during the instructional delivery and learning process, and students are more likely to comprehend better because of their exposure to these tools.

Curriculum maps, course materials, full and portions of e-courses, lesson plans, learning materials, textbooks, audio and video recordings, simulations, experiments, and other educational and research tools are all included under the term "Open Educational Resources" (Krelja-Kurelovic, 2016; Groom, 2013; Butcher, 2011).

All public domain resources available for study, teaching, and learning that are distributed under an open license that ensures free access, use, adaptation, and redistribution by others with no or few restrictions on their use are referred to as Open Educational Resources (OER). Materials that can be used to augment course content include open courseware, learning modules, open textbooks, streaming videos, open access periodicals, online tutorials, and digital learning objects.

- i. Open courseware is a digital publication of high-quality educational materials for college and university students that is free and open to the public. These materials are organized into courses and often include course design and evaluation elements as well as theme content. (2017, Open Education Consortium).
- ii. Learning modules: a tool that arranges course materials into a logical, sequential order, taking students through the curriculum and exams in the order that the instructor prefers. Soon, instructors will be able to contribute prepared material, files, online links, discussion topics, assignments, exams and quizzes, and assessments. Students can be required to complete each segment before going on to the next section if the content is organized in this fashion (Grodecka & Sliwowski, 2014).
- iii. Open textbooks: usually written by professors and published on the internet with the help of universities or new commercial enterprises. This new business model allows textbooks to be accessed for free online.
- iv. Streaming videos, which are compressed videos that are uploaded to the Internet and seen in real time by the user. A Web user does not have to wait for a file to download before playing it with streaming video or streaming media.
- v. Open access journals, open access to online research publications, and the rights to fully utilize these materials in the digital world.
- vi. Online tutorials; this is a self-study activity that is either recorded or interactive and is designed to teach a certain learning result.
- vii. Digital learning objects (DLOs) are small, modular, discrete pieces of learning that are delivered and used electronically.

The academic knowledge that is delivered in a classroom/learning situation by the teacher is referred to as instructional content (Akpomi, Kayii & Nwile, 2022; Amesi & Giami, 2018). In addition to researching and preparing content for courses, Business Education lecturers provide lecture notes, training manuals, for webinars or the classroom, creating reference materials, documentation, and presentations, among other things.

The goal of these tasks is to organize knowledge at a high level to give it a meaningful and logical framework that will assist students understand and retain the information as well as access the information they need fast. Static content such as blocks on course pages, reading assignments from the course textbook(s), submitted documents, external links, or rich media kept in the cloud for the aim of introducing concepts to the learner is referred to as instructional content. In choosing content for the students, the business education lecturer gives some thought as to how long each piece of content will take to “digest,” specify the category students to benefit most from the content and when content should be optional for business education students.

Statement of the Problem

The age of scouring the globe for resources to provide students with high-quality instruction and research is coming to an end. However, as the internet has developed, lecturers and students have access to a variety of educational resources that are tailored to their learning and teaching styles, allowing students to become more active participants in the educational process through collaboration in virtual learning communities. Lecturers can compare their own teaching materials with those of other lecturers all over the world, learn how to release their work under an open license, and improve the quality of their teaching practice and encourage pedagogical innovation by lowering the cost of accessing educational materials using open educational resources (McGreal, Kinuthia & Marshall, 2013). Several research studies have been conducted on the use and integration of open educational resource components for instructional delivery. The increasing proliferation of open access achievements and online tutorials creates new options for teaching and learning while also highlighting issues in higher education teaching and learning processes (Wojciechowski, 2015). Vieyra and González (2020) presented findings from a study on how to integrate digital learning to promote new sorts of learning possibilities not available in the classroom and provide enrichment activities for gifted and highly motivated students that are critical to the personalization of learning because they develop and refine new knowledge and abilities for innovative learning. In a separate study, Frantiska (2016) found that digital learning objects can be used to show more curricular material and add value to different parts of the teaching-learning process.

To make open educational resources more widely used, people need to know more about them, be able to recognize OER repositories, make sure their content is good, and set up collaborative communities online. Lecturers share their teaching materials with colleagues and students both inside and outside their institution on an informal basis. When comparing these reasons provided by scholars with the realities on the ground in Rivers State universities, very little seems to be done on the utilization of open educational resources for enriching the instructional content of business education courses in Rivers State universities. Many university lecturers may or may not have become interested in using web-based open educational resources to improve the content of Business Education courses over time. Hence, this study is designed to seek lecturers' perception on the utilization of open educational resources for enriching the instructional content of Business Education courses in Rivers State universities.

Purpose of the Study

The study is set to assess the utilization of open educational resources by Business Education lecturers for enriched instructional content of business education courses in Rivers State universities. Specifically, the study find out:

- i. The extent of utilization of online tutorials for enriched instructional content of Business Education courses in Rivers State universities.
- ii. The extent of utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities.

Research Questions

- i. To what extent do Business Education lecturers utilize online tutorials for enriched instructional content of Business Education courses in Rivers State universities?
- ii. To what extent do Business Education lecturers utilize digital learning objects for enriched instructional content of Business Education courses in Rivers State universities?

Hypotheses

- i. There is no significant difference in the mean responses of Business Education lecturers in Rivers State University and Ignatius Ajuru University of Education on the utilization of online tutorials for enriched instructional content of Business Education courses in Rivers State universities.
- ii. There is no significant difference in the mean responses of Business Education lecturers in Rivers State University and Ignatius Ajuru University of Education on the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities.

METHODOLOGY

The study used a descriptive survey research design to analyze the views of Business Education Lecturers in Rivers State universities on the use of online tutorials for expanded instructional content in Business Education courses. The population of this study consists of seventy-eight hundred (38) Business Education Lecturers teaching in the two (2) state-owned universities running Business Education programmes. The two (2) state-owned universities and the number of Business Education lecturers that make up the population are shown below:

Table 3.1: Population Distribution of Business Education Lecturers in Rivers State Universities, Nigeria

S/N	Names of Universities	Number of Lecturers		Total No. of Lecturers
		Male	Female	
1	Rivers State University	12	8	20
2	Ignatius Ajuru University of Education	13	5	18
Total		25	13	38

Source: office of the Head of Departments (2021)

The sample for the study was determined via census sampling, which included all the lecturers in the two (2) institutions, because the number was manageable by the researchers. The researchers developed self-structured instrument tagged "Utilization of Open Educational Resources Questionnaire (UOERQ)." as the study's instrument. The instrument was divided into three sections: 'A' contained demographic information on the respondents, and 'B' had questionnaire items organized on a 4-point Likert scale. Three Business Education experts face validated the instrument. Outside of the sampled institutions, the instrument was pilot tested on a group of 20 lecturers. The reliability co-efficient was calculated using Cronbach Alpha, and the result was 0.89. The researchers and one

assistant administered 38 copies questionnaire on the respondents and 37 duly completed copies, representing 98.7% were retrieved and found usable for data analysis. The data was analyzed using frequency counts, percentages, a mean of 2.50, and the standard deviation to answer the two research questions and t-test to test the hypotheses at the 0.05 level of significance

Result

Research Question 1: To what extent do Business Education lecturers utilize online tutorials for enriched instructional content of Business Education courses in Rivers State universities?

Table 2: Mean Score on the extent of utilization of online tutorials for enriched instructional content of business education courses in Rivers State universities.

S/NO	Statement	Mean	RMK
1	Use record tutorials to enrich lectures	1.89	LE
2	Schedule students for online tutorials in designated online room using software like Adobe connect.	2.26	LE
3	Reduced academic pressure by introducing discussion topic to students and later refer then used recorded or join interactive tutorials,	2.64	HE
4	Expand professional network with interactive tutorials	3.05	HE
5	Online tutorials is used to introduce different approaches to the module material to help in providing make links and develop grasp of the course content as a whole	2.83	HE
6	Direct students to work on problems or having discussions in small groups after interaction recorded materials	2.56	HE
	Grand Mean	2.54	HE

Table 2 showed that items (1 and 2) had mean scores below cut off point of 2.50. This revealed that respondents considered the items low regarding the utilization of online tutorials for enriched instructional content of business education courses in Rivers State universities. On the other hand, four items (3, 4, 5, and 6) had mean scores above the cut off 2.50, indicating that respondents considered the items high regarding the utilization of online tutorials for enriched instructional content of business education courses in Rivers State universities. With the grand mean of 2.54, indicates that the high extent of utilization of online tutorials for enriched instructional content of business education courses in Rivers State universities.

Research Question 2: To what extent do Business Education lecturers utilize digital learning objects for enriched instructional content of Business Education courses in Rivers State universities?

Table 3: Mean Score on the extent of utilization of digital learning objects for enriched instructional content of business education courses in Rivers State universities.

S/NO	Statement	Mean	RMK
1	Utilizes produced and scheduled audio podcasts	2.87	HE
2	Utilizes produced and scheduled audio vodcasts	3.08	HE
3	Creating effective and engaging animated presentations from digital learning objects	2.605	LE
4	Students used and referred to other course mates: PRIMO (Peer-Reviewed Instructional Materials Online Database), LIONTV: Library Information Literacy Online Network from Animated Tutorial Sharing Project (ANTS), and other learning object repositories/databases as directed by the course lecturer.	2.435	LE
5	digital notebook that can be shared with students using e-book convertors	1.98	LE
	Grand Mean	2.59	HE

Table 3 showed that items (10 and 11) had mean scores below cut off point of 2.50. This revealed that respondents considered the items low regarding the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities. On the contrary, three items (7, 8, and 9) had mean scores above the cut off 2.50, indicating that respondents considered the items high regarding the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities. With the grand mean of 2.54, indicates that the high extent of utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities.

Hypotheses

H0₁: There is no significant difference in the mean responses of Business Education lecturers in Rivers State University and Ignatius Ajuru University of Education on the utilization of online tutorials for enriched instructional content of Business Education courses in Rivers State universities.

Table 4: t-test Analysis on the utilization of online tutorials for enriched instructional content of Business Education courses in Rivers State universities

Institutions	N	\bar{X}	SD	Df	t-cal	Sig. level	t-crit	Decision
RSU	20	2.50	0.82	35	0.44	0.05	2.042	Sig
IAUE	18	2.59	0.85					

Table 4 shows that at 35 degrees of freedom and a 0.05 level of significance, the computed (t-cal) value is 0.44 and the critical (t-crit) value is 2.042. At the 0.05 level of significance, the calculated value of 0.44 is less than the critical value of 2.042. As a result, the null hypothesis of no significant difference in mean answers of Business Education lecturers to the use of online tutorials to supplement the instructional content of courses in Rivers State universities is maintained.

H0₂: There is no significant difference in the mean responses of Business Education lecturers in Rivers State University and Ignatius Ajuru University of Education on the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities.

Table 5: t-test Analysis on the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities

Institutions	N	\bar{X}	SD	Df	t-cal	Sig. level	t-crit	Decision
RSU	20	2.71	0.83	35	0.14	0.05	2.042	Sig
IAUE	18	2.48	1.03					

The calculated (t-cal) value is 0.14, and the critical (t-crit) value is 2.042 at 35 degrees of freedom and 0.05 level of significance, as shown in Table 5. At the 0.05 level of significance, the calculated value of 0.14 is less than the critical value of 2.042. As a result, the null hypothesis of no significant difference in the mean responses of Business Education lecturers on the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities is upheld.

Discussion of Findings

The result of the first finding showed that the respondents considered the items high regarding the utilization of online tutorials for enriched instructional content of business education courses in Rivers State universities. This finding is in line with the report by Wojciechowski (2015) that online tutorial provides new opportunities for teaching and learning practices in higher education. The result in Table 3 revealed that respondents considered the items high regarding the utilization of digital learning objects for enriched instructional content of Business Education courses in Rivers State universities. This finding agrees with the report of Vieira and González (2020) that integration of digital learning objects provide learning opportunities and enrich activities for gifted and highly motivated students. Similarly, Falloon, Janson, and Janson (2018) discovered from a study digital learning objects are vital to individualized learning and present refined new knowledge and skills. Also, aligning to this finding is Frantiska (2016) who revealed that digital learning objects provide an extended platform for presenting curricular material and add value to the different stages of the teaching-learning process.

Conclusion

Open Educational Resources (OER) are openly licensed for business educators, who are free to edit, reorder, and remix OER content in a variety of ways. In general, the findings revealed that Business Education lecturers in Rivers State universities made extensive use of online tutorials and digital learning objects to supplement the instructional content of their business education courses. Furthermore, the study found that there was no statistically significant difference in the mean scores of Business Education lecturers on the use of digital learning objects for enriching the instructional content of Business Education courses in Rivers State universities.

Recommendations

Based on the findings of this study, the following recommendation was made:

1. Since online tutorials have a unique role to play in assisting educators in overcoming their initial resistance to innovation adoption and understanding the powerful teaching potential that technology-rich learning environments represent, they have a unique role to play in assisting educators in overcoming their initial resistance to innovation adoption.
2. Business Education lecturers should explore the use of digital learning objects for instructional delivery to tap into the inherent benefits of open education resources.

References

- Akpomi, M.E., Kayii, N.E & Nwile, C.B (2022). Multiple Disruptions and remediating influence on learning of postgraduate Business Education Programmes of Rivers State Universities in Post Covid-19 Era. *International Journal of Multidisciplinary Research and Growth Evaluation*. 3(2), 67-72
- Amesi, J & Giami, D.K (2018). Challenges hindering the availability of instructional resources for entrepreneurial skills acquisition among Business Education students in tertiary institutions, Rivers State. *International Journal of Education and Evaluation*, 4(1), 78-86.
- Butcher, N. (2011). A Basic Guide to Open Educational Resources (OER), Commonwealth of Learning & UNESCO, <http://www.col.org/resources/basic-guide-open-educational-resources-oer>
- Falloon, G (2015). Digital Learning Objects and the development of students' thinking skills
- Falloon, G., Janson, A., & Janson, R. (2010). Learning objects and the development of students' key competencies: A New Zealand school experience. *Australasian Journal of Educational Technology*, 26(5), 1-19.

- Frantiska, J. (2016). *Creating Reusable Learning Objects*. Switzerland: Springer International Publishing, DOI 10.1007/978-3-319-32889-8
- Grodecka, K. & Sliwowski, K. (2014). *Open Educational Resources Mythbusting Guide*, <http://mythbusting.oerpolicy.eu/>
- Groom, C. (2013). *A Guide to Open Educational Resources*, JISC, <http://www.oerafrica.org/resource/guide-open-educational-resources>.
- Kortemeyer, G. (2013). Ten years later: why open educational resources have not noticeably affected higher education, and why we should care, *Educause Review*, <http://www.educause.edu/ero/article>.
- Krelja-Kurelovic, E. (2016). Advantages and limitations of usage of open educational resources in small countries. *International Journal of Research in Education and Science (IJRES)*, 2(1), 136-142.
- McKerlich, R. & Ives, C. & McGreal, R. (2013). Measuring use and creation of open educational resources in higher education. *The International Review of Research in Open and Distance Learning*, 14 (4), 123-136.
- McGreal, R., Kinuthia, W. & Marshall, S. (2013). *Open educational resources: Innovation, research and practice*, Commonwealth of Learning & Athabasca University, Vancouver, <http://oasis.col.org/handle/11599/486>
- Onwuagboke, B. B. C., Singh, T. K. R., & Fook, F. S. (2015). Need for ICT integration for effective instructional delivery in Nigeria colleges of education. *Journal of Education and Practice*, 6(3), 51-56
- Otemuyiwa, B. I. & Attah, J. O. (2020). Teachers' perception on the use of information and communication technology for instructional delivery. *International Journal of Innovative Technology Integration in education (IJITIE)* 4(2), 25-33.
- Rolfe, V. (2012). Open educational resources: staff attitudes and awareness, *Research in Learning Technology*, 20, 88-95.
- Torres N. P. M. (2013). Embracing openness: The challenges of OER in Latin American education, *Open Praxis*, 5(1) 81-89, DOI:10.5944/openpraxis.5.1.33
- Vieyra, G. Q & González, L.F.M (2020). Learning objects in online education: A systemic approach. *European Journal of Education*, 3(3), 62-71
- Wojciechowski, J. (2015). Karolina Grodecka, Kamil Śliwowski, *Open Educational Resources myth busting: Creative Commons 2014*. *Biblioteka*, (19(28), 283. doi: 10.14746/b.2015.19.20