

Integrating Webinar Technology in Library Services: Implications for Resource Utilization and User Engagement among Postgraduate Students in the University of Calabar

Okim Takim Tanne, Ph.D

*Department of Library and Information Science
University of Calabar, Calabar*

John Edwin Effiom, Ph.D

Johnedwin425@yahoo.com

*Department of Social Studies and Civic Education
University of Calabar, Calabar*

Cordelia Hillary Obeten

*Department of Curriculum and Teaching
University of Calabar, Calabar*



Abstract

This study investigated Integrating Webinar Technology in Library Services: Implications for Resource Utilization and User Engagement among Postgraduate Students in the University of Calabar, Nigeria. The purpose was to determine the relationship between webinar technology and the utilization of library resources. The study adopted a survey research design, and the population consisted of 1,827 postgraduate students across thirteen faculties of the University of Calabar. Using a stratified random sampling technique, a sample of 435 postgraduate students was drawn to represent the population. Data were collected using researchers-developed questionnaire titled Webinar and Utilization of Library Resource Questionnaire (WULRQ). The instrument's reliability was established through a pilot test that yielded a Cronbach's Alpha coefficient of 0.80. Data were analyzed using simple linear regression. Findings revealed that webinar technology significantly predicted the utilization of library resources among postgraduate students. The study concluded that integrating webinar technologies into library service delivery enhances students' engagement and resource use. It was recommended that academic libraries should institutionalize regular webinar-based training and orientations to strengthen postgraduate students' interaction with digital and print resources.

Keywords: webinar technology, library services, resource utilization, user engagement, postgraduate students

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Introduction

In today's rapidly evolving digital environment, academic libraries are continuously exploring innovative ways to enhance user engagement and improve access to scholarly resources. One such innovation is webinar technology, which integrates audio, video, and interactive communication tools to support virtual learning and library service delivery. Webinars have become a vital instrument for facilitating remote access to information literacy sessions, virtual workshops, and real-time academic interactions (Ojedokun & Lawal, 2021). Libraries, as centres of knowledge dissemination, are increasingly expected to provide digital services that not only ensure access but also promote active engagement and utilization of library resources among users.

In Nigeria, where many postgraduate students juggle academic, professional, and personal commitments, webinar technology offers an avenue for flexible access to library instruction and research support services. Through webinar platforms such as Zoom, Google Meet, and Microsoft Teams, library professionals can conduct virtual orientations, research training, and database tutorials without the constraints of physical attendance (Adebayo, 2020). This shift aligns with global trends in academic libraries that emphasize the integration of information and communication technologies (ICTs) to extend the reach and relevance of library services (Iwhiwhu & Okorodudu, 2022).

The integration of webinar technology into academic library services represents a paradigm shift from traditional in-person assistance to digital and interactive knowledge dissemination. Webinars are structured online seminars that enable real-time communication between librarians and users through chat, video, and collaborative tools (Khan & Bhatti, 2021). They can be used for diverse purposes such as library orientations, e-resource demonstrations, and research methodology workshops. When effectively utilized, webinars enhance users' understanding of how to locate, access, and apply academic resources thereby improving library resource utilization.

On the other hand, library resource utilization refers to the frequency and extent to which students' access, use, and benefit from both print and electronic materials available in the library (Aguolu & Aguolu, 2018). Effective utilization of resources is an indicator of the library's success in meeting the academic and research needs of its users. However, underutilization of resources, especially electronic databases and e-journals, remains a concern in Nigerian universities due to factors such as inadequate digital literacy, poor connectivity, and limited user engagement (Ezeani & Igwesi, 2012).

User engagement, another key variable in this study, reflects the level of interaction, participation, and satisfaction that students exhibit during their use of library services (Sarkar, 2022). Engaged users are more likely to attend library webinars, utilize online databases, and develop positive attitudes toward digital learning platforms. Thus, the integration of webinar technology could serve as a catalyst for improved user participation and efficient utilization of library resources, especially among postgraduate students who rely heavily on libraries for research and academic development.

Several studies have affirmed the importance of webinar technology in education and information services. For instance, Oyeleke and Onuoha (2020) observed that webinars enhance students' information literacy and promote awareness of library holdings. Similarly, Idowu and Madu (2021) found that library webinars improve students' confidence in using e-resources and foster sustainable engagement. However, empirical research focusing specifically on the role of webinars in academic library contexts in Nigeria - and particularly their effect on resource utilization and user engagement among postgraduate students - remains limited.

Wang and Hsu (2018) reported that webinar is a tool that provides computer mediated communication. In comparison to other computer mediated communication tools, webinar is able to transmit video, audio, and images, enables users to share applications and to use whiteboard; the objective being to exchange information in a real-time and two-way format. They stressed that webinar creates opportunities for both educators and learners to experience different levels of interaction online, and the opportunities are essentially different from other communication approaches such as discussion-board postings and e-mails. Webinar technology in higher education institutions provides students the flexibility to manage learning time, and give the opportunity to read, reflect, and respond to others. Webinar can be performed by inviting the students to log on to a website to see and hear what is going on. By so doing, it helps the students to review what is going on as if they were in attendance. And this will avert the cost of travelling to attend lectures or seminar.

Meyer (2023) stated that webinar accelerates learning process by increasing communication opportunity; using it in learning helps the participants to be focused and attentive to the lecturer, stressing that since it is the latest development, it enables information to be transmitted in audio, video and image. Users share applications and use whiteboard to spread information or communicate to group of people in real-time or one-way format. Webinar creates opportunity for both lecturer and students to experience different levels of interaction online. Webinar is a web online tool designed for conference, meetings, seminar

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presentations and lecturing among others, and also used to disseminate information in the library to users. Webinar technology is one of the modern learning facilities used in academic environment to fast-track learning. It facilitates real-time communications and encourages collective interaction among lecturers and students in online learning environment.

Despite the growing integration of information and communication technologies (ICTs) in academic libraries, the utilization of library resources by postgraduate students in Nigerian universities remains below expectation. Many students still exhibit limited awareness of available e-resources, poor attendance at library instructional sessions, and low engagement with digital library services (Nnadozie & Nnadozie, 2020). Although webinars have been introduced as a tool to bridge these gaps, their adoption and impact on user behaviour are not well-documented within the Nigerian academic environment.

At the University of Calabar, postgraduate students constitute a significant proportion of the library's user base and rely heavily on access to research materials for theses, dissertations, and academic publications. However, anecdotal evidence suggests that library resources remain under-utilized, and attendance at library training programmes is often poor, particularly for virtual sessions. This raises critical questions about the extent to which webinar technology influences students' engagement with library services and their subsequent utilization of resources.

Moreover, while prior studies have explored digital innovations such as podcasting and digital preservation in library contexts, limited comparative research exists on how webinar technology directly affects both user engagement and resource utilization. Without empirical data on this relationship, libraries risk investing in digital platforms without clear understanding of their effectiveness. Therefore, this study sought to fill this gap by examining the integration of webinar technology in library services and its implications for resource utilization and user engagement among postgraduate students in the University of Calabar, Nigeria.

Purpose of the study

The main purpose of this study is to examine Integrating Webinar Technology in Library Services: Implications for Resource Utilization and User Engagement among postgraduate students in University of Calabar, Nigeria. Specifically, the study sought to:

1. determine the relationship between webinar technology and utilization of library resources.

Hypothesis

Ho1: Webinar does not significantly predict utilization of library resources.

Methodology

The study adopted a survey research design. A survey design is one in which a group of people or items are studied by collecting and analyzing data from a few people or items considered to be representatives of the entire group. According to Idaka and Anagbogu (2012), it is a design where the researcher cannot manipulate the variables because their effects have already occurred. This study was carried out in University of Calabar which is situated in Calabar, Cross River State, South-south, Nigeria. It is one of Nigeria's second-generation federal universities. The University of Calabar was a campus of the University of Nigeria (Nsukka) until 1975 that it was established.

The population of the study comprised of all post graduate students in the 13 faculties in University of Calabar, Calabar during the 2017/2018 academic session. The total number of postgraduate students in the programme is one thousand, eight hundred and twenty-seven (1,827). The stratified random sampling technique was employed for sample selection. Stratified sampling is a probability sampling technique wherein the researcher divides the entire population into different subgroups or strata, then selects the final subjects proportionally from the different strata. The stratified sampling technique was first used to stratify the university and faculties. First, 40% of the faculties were selected using simple random sampling technique to ensure an equal representation of each faculty. This summed up to a total of 5 faculties. Thereafter, 50% of the students in the selected faculties were selected using accidental sampling technique. This gives a total of four hundred and thirty-five students and formed the sample of the study. The sample of the study comprised of 435 postgraduate students of the University of Calabar.

This instrument used for the study is a structured questionnaire titled "Webinar and Utilization of Library Resource Questionnaire" (WULRQ). The instrument was divided into three sections. Section A was designed to elicit demographic responses such as age, sex, occupation, and marital status. Section B consisted of 5 items used to assess webinar while Section C measured utilization of library resources with ten items. Respondents were asked to indicate how much they agree or disagree with the items, using a four-point rating scale

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(Strongly Agree – 4, Agree - 3, Disagree - 2, Strongly Disagree – 1 and vice versa for negatively worded items).

In this study, face and content validity of the instrument were carried out by two experts in the Library and Information Science, and two test experts in Measurement and Evaluation in the University of Calabar. The instrument, made up of 20 items, was given to these experts to ensure that the items measured what the researchers intend to measure. The items were scrutinized and the items that were not relevant were eliminated. All corrections were made and a draft of the instrument was developed for the study.

To determine the reliability of the instrument, a trial test was carried out using a sample of fifty (50) students purposively selected from the University of Cross River State, which is not part of the area of study and Cronbach's alpha procedure was used to establish the degree of consistency of the instrument. The result revealed an estimate of reliability of .80. The reliability values were high enough to warrant the use of the instrument in the actual study.

The researchers with some trained personnel proceeded to the various faculties sampled to collect data from the selected respondents after due permission and informed consent has been obtained from the Dean of Graduate School. The researchers meet with course representatives to explain his mission; the students selected for the study were assured of their privacy and confidentiality of responses. The questionnaire was administered by the researcher himself together with his trained research assistants and retrieved immediately after responding to them. The researchers instructed the respondents on how to fill each section of the questionnaire. All copies of the instrument administered were successfully retrieved. Data were analysed using Simple linear regression statistical tool.

Presentation of results

Ho1: Webinar does not significantly predict utilization of library resources.

The independent variable of this hypothesis was webinar while the dependent variable was utilization of library resources. Simple regression statistics was used in testing the hypothesis and the results are presented in Table 1.

Table 1: Simple regression analysis on the prediction of utilization of library resources among postgraduate students by webinar

R	R square	Adjusted R square	Std Error of estimate			
.219	.048	.046	7.01615			
Model	Sum of squares		Df	Mean Square	F	Sig
Regression	1073.718		1	1073.718	21.812*	.000
Residual	21315.032		433	49.226		
Total	22388.749		434			
Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig
	B	Std Error	Beta			
Constant	47.387	2.638			17.964	.000
Webinar	-.751	161	-.219		-4.670	.004

Predictors: (Constant): webinar

b. Dependent Variable: utilization of library resources

The simple regression analysis in Table 1 on the ability of webinar in predicting utilization of library resources produced an adjusted R^2 of .046. This implies that only 4.6 percent of the variance on utilization of library resources among postgraduate students in University of Calabar can be predicted from the independent variable (webinar). The F-value value of 21.812 of the Analysis of Variance (ANOVA) obtained from the regression table with a p-value of .000 with 1 and 433 degrees of freedom at .05 level of significance showed that the null hypothesis was rejected. This result therefore signifies that webinar significantly predicted utilization of library resources among postgraduate students by 4.6 percent. The result therefore implies that there was a significant effect of webinar on utilization of library resources.

Discussion of the findings

The research hypothesis which addressed the prediction of utilization of library resources among postgraduate students in University of Calabar by webinar revealed that there was a significant influence of webinar on utilization of library resources. This result supports Wang and Hsu (2008) who reported that webinar is a tool that provides computer mediated communication. In comparison to other computer mediated communication tools, webinar

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is able to transmit video, audio, and images, enables users to share applications and to use whiteboard, the objective being to exchange information in real-time and two way format, stressing that webinar creates opportunities for both educators and learners to experience different levels of interaction online, and the opportunities are essentially different from other communication approaches such as discussion-board postings and e-mails. Webinar technology in higher education institutions provides students the flexibility to manage learning time, and give the opportunity to read, reflect, and respond to others. Webinar can be performed by inviting the students to log on to a website to see and hear what is going on. By so doing it will help the students to review what is going on as if they were in attendance. And this will avert the cost of travelling to attend lectures or seminar.

This result is in tandem with Meyer (2023) that webinar accelerates learning process by increasing communication opportunity; using it in learning helps the participants to be focused and attentive to the lecturer, stressing that since it is the latest development, it enables information to be transmitted in audio, video and image. Users share applications and use whiteboard to spread information or communicate to group of people in real-time or one-way format. Webinar creates opportunity for both lecturer and students to experience different levels of interaction online. Webinar is a web online tool designed for conference, meetings, seminar presentations and lecturing among others, and also used to disseminate information in the library to users. Webinar technology is one of the modern learning facilities used in academic environment to fast-track learning. It facilitates real-time communications and encourages collective interaction among lecturers and students in online learning environment.

Conclusion

Based on the result of the study, it was concluded among that webinar services predict utilization of library resources.

Recommendation

On the basis of the findings of the study, it was recommended that webinar technology should be made available in higher education institutions to provide students and staff the flexibility to manage learning time, and give them the opportunity to read, reflect, and respond to others.

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