

**ZOOM VIDEO LEARNING AND THE MASTERING OF SKILLS OF OFFICE AND
INFORMATION MANAGEMENT STUDENTS IN IGNATIUS AJURU UNIVERSITY OF
EDUCATION, PORT HARCOURT.**

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Abstract

The study determine the impact zoon video learning on mastering of skillsof Office and Information management students in Ignatius Ajuru University of Education. The objective of the study was to: establish the impact of Zoom on the mastering of skills of Office and Information Management students. The research design for this study was the exploratory survey research design. The population of this study consisted of (360) students (level 100-400) in the Department of Office and Information Management, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt. A sample size of one hundred and eighty-nine (189) respondents was obtained using the Taro Yamene Formula. Structured questionnaire (EAOIMSAARS) was used as the main instrument for the collection of primary data for this work. A total of 189 copies of the questionnaire distributed, while 130 copies of were retrieved. The primary data collected from the field was be analyzed using simple percentage for answering research questions while Pearson's product moment correlation (PPMC) was used for the test of hypotheses. The finding revealed that the use of Zoom has a significant positive impact on mastering of skills of OIM students in Ignatius Ajuru University of Education, Port Harcourt. It was therefore recommended among others that management should provide data subscription for lecturers to enable them make regular use of Zoom delivering curriculum contents of Office and Information Management.

Keywords: Zoom Video Learning, Mastering of Skill, Academic Performance

Introduction

This study was necessitated by the deplorable state of educational system in Nigeria due to the inadequate modern teaching-learning facilities and infrastructures. Most libraries in Nigerian universities do not possess required audio-visual learning materials (AVMs) and the ones that have are hardly utilized as a result of lack of awareness on the part of the students. Formerly, schools depended on the face-to-face classroom teaching and learning experience but the paradigm shift in education has brought about gadgets that can improve such experiences (Graham, 2019).

Before the introduction of e-learning, many people who wanted to obtain tertiary institution degree had to compete for the few places that were offered by public universities. This kind of further education system was characterized by limited number of students that could be absorbed per an academic year. Various learning approaches are being put in place to compensate for the problems occasioned by this traditional learning paradigm. One of them has been the online instruction, which has the potential to provide opportunities for reflective and integrating learning outcomes (George, 2017). This approach when utilized provides the students with adaptive personalized e-learning experiences because it is a practical approach which can be replicated by the students to improve learning outcomes. It involves the use of mobile technologies such as personal digital assistants

and MP3/MP4 player, web-based teaching materials, computer rooms or web-sites, webinars, collaborative software and other technologies which can enable the students attend lectures without been physically present (Bentner, 2019). Zoom, Skype, Whatsapp, e-mail, blogs, wikis, etcetera are other collaborative packages available.

On the basis, the statement of the problem is to evaluate the impact of e-learning on academic achievement of Office Information and Management Students in Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt.

Research Hypothesis

Ho₁: There is no significant relationship between use of Zoom and the mastering of skills of Office and Information Management students in Ignatius Ajuru University of Education, Port Harcourt.

Zoom

Zoom Video Communications is the leader in modern enterprise video communications, with an easy, reliable cloud platform for video and audio conferencing, collaboration, chat, and webinars across mobile devices, desktops, telephones, and room systems. Zoom Rooms is the original software-based conference room solution used around the world in board, conference, huddle, and training rooms, as well as executive offices and classrooms. Founded in 2011, Zoom helps businesses and organizations bring their teams together in a frictionless environment to get more done. Zoom is a private company headquartered in San Jose, California. The company was founded by Eric S. Yuan (Zoom Video Communications Inc., 2020). With the rise in working from home and online collaboration among staff in different geographical locations, necessitated by the Covid-19 Pandemic, Zoom Videoconferencing application has become very popular in handling office meeting needs.

Zoom is a collaborative, cloud-based videoconferencing service offering features including online meetings, group messaging services, and secure recording of sessions (Zoom Video Communications Inc., 2016). As with comparable platforms like Skype, Zoom offers the ability to communicate in real time with geographically dispersed individuals via computer, tablet, or mobile device. However, unlike many other VoIP technologies, Zoom possesses a number of additional advantages that enhance its potential research utility. A key advantage of Zoom is its ability to securely record and store sessions without recourse to third-party software. This feature is particularly important in administration where the protection of highly sensitive data is required (Archibald et al., 2019). Other important security features include user-specific authentication, real-time encryption of meetings, and the ability to backup recordings to online remote server networks (the cloud) or local drives, which can then be shared securely for the purpose of collaboration (Zoom Video Communications Inc., 2016).

The merits and shortcomings of VoIP technologies, as well as comparisons with in-person data collection, are typically based on researchers' subjective assessments of the quality of interview data. However, as Weller (2015: 6) argues, "participants' experiences and assessments of the process have received far less attention", thus hindering efforts to improve interview quality and explore novel research applications. Further, most of the literature has concentrated on asynchronous online discussion forums rather than synchronous interaction (Archibald, et al., 2019). Tertiary Institutions are greatly leveraging on zoom video communication application to hold meetings and share files.

Initial areas of concern in use of zoom video communication application include the following:

Zoom-bombing: Zoom-bombing is when an intruder infiltrates and disrupts a video conference call. Not only could intruders share inappropriate content, they could also simply just quietly listen into or watch what's happening in the meeting and steal specific data to enhance social engineering and e-impersonation campaigns. Various changes have been made by Zoom to address Zoom-bombing including defaulting to users being put in the waiting room where a host must allow them

access. Advice has also been issued on ensuring that a password is used for all meetings and that the meeting URL is only provided to invited users.

General Vulnerabilities: Vulnerabilities have been identified, but recently, Zoom has been fairly quick to fix them. If installed, Zoom should be set to auto update, so all new fixes are applied as soon as available. Meeting links are generalized and reused so once someone has the link, they can always access in future.

Encryption: Currently, Zoom is using their own encryption, which is generally not recommended due to the highly complicated nature of encryption. Zoom does not use end-to-end encryption, so there is a potential that their current communication stream could be compromised. Zoom indicates that they are working on improvements.

Privacy: Ensure that the Zoom privacy policy is reviewed, understood, and determined acceptable for your organization. For free accounts, personal information will certainly be monetized. For paid accounts, organizations should understand what information is collected and how it is secured.

With the transition to remote work in the face of the COVID-19 pandemic, many organizations and schools are transitioning to using Zoom for online collaboration and learning. Information Technology Weapon (2020) noted that organizations using office zoom should practice cyber-security discipline and use the following tips to stay safe:

- (i) Use with caution and an understanding of the risks.
- (ii) Should not be used for secret or confidential meetings or conversations.
- (iii) Ensure users are aware of, and using, proper security settings and are staying up-to-date on ongoing changes.
- (iv) Set the application to auto-update so it is always up-to-date with latest fixes.
- (v) Ensure meeting recordings are also protected.
- (vi) Hosts should monitor participants of their meetings and not allow unknown users into meetings.
- (vii) For tighter control and deeper integration with other organization communication tools, consider a more mature conferencing solution.

In spite of the inherent cyber-security concerns, zoom video communication in one of the smoothest office social media platforms in vogue in Nigeria today.

Mastery of Skills

In line with the view of Kenneth (2017), this is one of the key measures or indicators of students' academic achievement in the teaching and learning process. Stephen (2016) conceptualized student mastery of skills as the extent to which a student responsively participates and reacts positively in the teaching and learning process. Like their counterparts in other disciplines, secretarial studies students are expected to lend their voice, make suggestions and contributions in the course of teaching and learning in order to show the extent he or she has acquired knowledge. As affirmed by Ranza (2017), the ability of students to participate actively by asking and responding to questions, as well as participating meaningfully in practical activities is the hallmark of student mastery of skill.

In evaluating a student's academic achievement especially in the award of scores, lecturers often consider the student's level of participation in the classroom setting (Kaplan and Haenlein, 2017). Of course, it takes an intelligent and outspoken secretarial studies student to participate in Shorthand class or Computer class. Secretarial students have indepth grasp of a course are often those who are most likely to react responsively in the teaching and learning process.

Students' High Quality of Work

Student high quality of work refers to observable and relative outcome of an individual as a result of exposure to more enlightening experiences and practices (Ibuchi, 2016; Kaplan & Haenlein,

2017). Secretarial studies as an emerging discipline is designed to provide observable behavioural changes in students and graduates of the discipline. As succinctly stated by Clement (2018), the principal behavioural changes expected of students and graduates of secretarial studies are in the area of developing necessary professional skills. As erroneously emphasized by many, the real thrust of academics is not the ability to pass examinations; it is really about developing the capacity of individuals (students), so that they can exude professional competencies and skills. A secretarial student can only be said to have achieved from the academic process, if he or she acquires some or one of the core skills in modern office and information management practice. Two of such cardinal skills include word processing skill and shorthand skill.

Word Processing Skills: Word processing is a term that means using a computer to create, edit, and print documents. It involves the use of electronic devices and programmes to produce documents such as letters, reports, and books (Yoshiki et al., 2015). The use of typewriter to type documents is gradually fading away. Modern companies that have a need for producing business letters or other types of text documents will need to have access to word processing software, printer, thus it is a demanded for a secretary that knows how to use the software very well to function effectively.

Secretaries and other word processing users now rely on computer to type, edit, format and print documents. Modern secretaries no longer make use of manual typewriters. Word Processing software like Microsoft Word has a lot of text features that can aid the production of mailable documents. However, this is only attainable if the secretary has good word processing skill. This is why Word Processing has incorporated into the curriculum of universities and polytechnics offering secretarial education. As a course, Word Processing is designed to prepare secretaries adequately on how to use computer system to prepare, type, edit, format, print, save, open and print documents using word processing packages such as WordPad, Word Perfect and Microsoft Word (Ibuchi, 2016). At the introductory level of this course in year two second semester, secretarial students are expected to get acquainted with the use of Microsoft Word, starting and quitting Microsoft Word, and get used to the components of the word processing environment such as title bar, menu bar, tool bar, work area, control box, minimize button, maximize button/restore button, close button, status bar, short cut, scroll bars, drawing bar, etc (IAUE, 2013).

Empirical Review

Zare, et al. (2016) investigated the impact of e-learning on creativity and content knowledge of chemistry students at the Payame Noor University of Hamedan, Iran. The study used the pre-test/post-test experimental design with a control group. The statistical population of the study included was 100 pure chemistry students who were following two separate classes. Forty students were selected from this group who placed in the experimental group ($n = 20$) and the control group ($n = 20$). Two instruments were used for data collection; a specifically developed test on the Introduction to Chemistry course and the Abedi Inventory for assessing creativity. Results of data analysis using the independent t-test (aided by SPSS) demonstrated statistically significantly higher scores for the experimental group on measured variables, knowledge and creativity. The study concluded that e-learning is effective for knowledge and creativity acquisitions among chemistry students and the greater e-learning opportunities should be provided for wider audiences. The study recommended training and retraining of lecturers in ICT.

Adeleke and Adesina (2018) examined the empirical comparison of the academic performance of students in the distance learning and traditional classroom environment. A combination of exploratory, causal comparative research designs and parametric tests has been adopted for the study. The objective of the study was to compare the academic performance students who learn under traditional teaching method and online instruction. The study used secondary data obtained from the Exams and Records Unit of Lagos State University for the 2010/2011 academic session. The measure of academic performance considered in this study is the graduating Cumulative Grade Point Average (CGPA) of students. Data collected were analyzed using Pearson Product Moment Correlation and Hostelling T-Square. The study revealed that although marginal differences exist

between the categories of students in performance, these differences are not significant enough to suggest difference in a performance due to the study mode, thus, this study concludes that performance of students in the selected courses is similar irrespective of the mode of education. The recommended blended learning.

Anekwe (2017) examined the impacts of virtual classroom learning on students of Nigerian Federal and State Universities. The paper adopted a descriptive approach. The study was carried out in two federal and two state universities in the South-East zone of Nigeria. Four research questions and four hypotheses guided the study. The sample comprised of 280 federal university students and 226 state university students given a total sample of 506 respondents. Stratified random sampling due to ownership (federal and state) was used. Questionnaire served as instrument for data collection. The data collected were analysed using means for research questions and independent sample t-test to test the hypotheses at 0.05 level of significance. The results showed among others that virtual classrooms have positive impacts on the students of federal and state universities, they reported positively on their continued support and preparedness for virtual classrooms. Based on the findings, the recommendation were that many more students should be made to be more aware of the impacts of the virtual classrooms. They should also be motivated to be participating more in virtual classrooms.

Osman (2017) examined the impact of Google classroom application on the teaching efficiency of pre-lecturers. The aim of the research is to study the impact of Google classroom application on the teaching - efficiency of educational college students, the sample of the research consist of (60) educational college students those who are at the average level of academic achievement (good - very good) and at an average level of socioeconomic they live in the western region of Saudi Arabia, free of physical disability and between the ages of 20 - 25 years. The researcher divided the sample into two groups of which (30) students as a control group and the other (30) students as an experimental group. The researcher followed the experimental approach in implementing the Google classroom on the research sample, that's the controlled group taught by the traditional way while the experimental group studied using Google classroom, throughout the first semester of the academic year 2016-2017 (October - December 2016) to share course materials. Then the researcher applied an observation card to test development on teaching efficiency and an achievement test in computer to test the research hypotheses. The results after testing the hypotheses were: There are significant statistical differences in the results between the experimental and controlled group when the Google classroom application applied, on teaching efficiency of educational courses.

Iliyasu et al. (2020) examined the effectiveness of Google Classroom as a digital tool in teaching and learning: Students' perceptions. The aim of this study is to evaluate Students' perceptions on the effectiveness of Google Classroom as a Digital tool in Teaching and Learning in Kebbi State University. The study was conducted through a Survey Research Design to investigate the Students' Perceptions. The population of study consists of all UG II Undergraduate Students, Faculty of Education, Kebbi State University of Science and Technology Aliero (KSUSTA). Data analysis was conducted using Descriptive Statistics. The results of the study indicated that Google Classroom is effective in improving Students access and attentiveness towards learning, knowledge and skills gained through Google Classroom makes Students to be active learners, as a Digital Tool, it provides meaningful feedback to both Students and Parents. However, Poor network hinders students from effective utilization of Google Classroom; thus, submitting their work late. The study therefore, recommended that teachers should integrate the conventional teaching with Google Classroom to improve Students' Performance. Google Classroom should also be a form of assessing Students' Assessment through online Assignments and Quizzes; hence making Students to participate actively in Educational Technology Classes. The University should also provide a standard network to enable Students join Google Classroom and submit their assignments on time.

Research Design

The study adopted the explanatory cross sectional survey research design.

Research Population

The population of this study comprised of three hundred and sixty (360) students (level 100-400) in the Department of Office and Information Management, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt.

Sample Size/Sampling Technique

A sample size of one hundred and eighty-nine (189) respondents was obtained using the Taro Yamene Formula.

Instrumentation

Primary data was obtained using a questionnaire designed by the researcher.

Administration of Instrument

A total of one hundred and sixty-two (189) copies of the questionnaire distributed, a total of one hundred and thirty (130) copies of the questionnaire were retrieved.

Method of Data Analysis

The primary data collected from the field was be analyzed using simple percentage for answering research questions while Pearson's product moment correlation (PPMC) was used for the test of hypotheses. The Pearson's product moment correlation formula is stated thus:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where:

X = Questionnaire response from Ignatius Ajuru University of Education

Y= Questionnaire response from Rivers State University

n= Number of respondents

Σ= Summation

Decision Rule: If the calculated r value is greater than the critical r value, the null hypotheses will be rejected, if otherwise, it will be accepted.

Test of Hypothesis

Ho₁: There is no significant relationship between use of Zoom and the mastering of skills of Office and Information Management students in Ignatius Ajuru University of Education, Port Harcourt.

Table 1: Correlation between Zoom and Mastering Of Skills of OIM Students

S/N	X	Y	XY	X ²	Y ²
1	30	30	900	900	900
2	17	16	272	289	256
3	6	9	54	36	81
4	6	6	36	36	36
5	30	15	450	900	225
6	20	10	200	400	100
7	21	8	168	441	64
8	9	7	63	81	49
9	20	25	500	400	625
10	19	18	342	361	324

11	11	17	187	121	289
12	4	6	24	16	36
13	26	30	780	676	900
14	14	12	168	196	144
15	11	10	110	121	100
16	8	9	72	64	81
$\Sigma x=252$ $\Sigma X^2=5038$ $\Sigma Y=228$ $\Sigma Y^2=4645$ $\Sigma XY=43$					

Source: Field Survey, 2024.

$$r = \frac{n \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n \Sigma X^2 - (\Sigma X)^2] [n \Sigma Y^2 - (\Sigma Y)^2]}} = \frac{16 \times 4326 - 252 \times 228}{\sqrt{[16 \times 5038 - 252^2] (16 \times 4210 - 228^2)}}$$

$$r = \frac{69216 - 57456}{\sqrt{17104 \times 15376}} = \frac{11760}{16217.00046} = 0.725$$

$$\therefore r = 0.725$$

Decision: Since the calculated r^2 value 0.725 is greater than the critical r^2 value 0.426 at 0.05 level of significance and n (16), the null hypothesis which stated that there is no significant relationship between use of Zoom and mastering of skills of OIM students in Ignatius Ajuru University of Education, Port Harcourt was rejected and the alternate accepted. This implies that there is a significant positive relationship between use of Zoom and mastering of skills of OIM students in Ignatius Ajuru University of Education, Port Harcourt.

Discussion of Findings

The analysis of research question one and test of hypothesis one revealed that the use of Zoom has a significant positive impact mastering of skills of OIM students in Ignatius Ajuru University of Education, Port Harcourt. This finding collaborates with the findings of Keshavarz et al. (2013) that e-learning has a positive impact on academic achievements of students in at the e-learning center in Khaje Nasir Toosi University. Mahmoodi et al. (2015) found that the use of e-learning in physiology teaching-learning process improves students learning and creativity. The implication of these findings is that the use of e-learning application like zoom makes learning very interesting for students in Office and Information Management (OIM). Learning via zoom makes OIM students to feel as digital citizens and this makes it possible for them to contribute meaningfully in the teaching and learning process. Thus, learning via zoom gives OIM students the leverage of asking and answering questions in the teaching and learning process. Another study done by Zare et al. (2015), found that the use of online media such as zoom application enhances students' academic achievement. Although the students were not in the Department of Office and Information Management, the finding of this study points to the fact that the zoom learning is capable of enhancing OIM students' academic achievement.

CONCLUSIONS

Based on the analysis of data and discussion of findings, the study concluded that zoom video learning is instrumental to academic achievement of OIM students in Ignatius Ajuru University of Education, Port Harcourt. The study also concluded that easy-to-use e-learning applications such as Zoom enhances the academic achievement of OIM students in Ignatius Ajuru University of Education, Port Harcourt. Generally, the study concluded that e-learning applications enhances the academic achievement of students in the Department of Office and Information Management, Ignatius Ajuru University of Education, Port Harcourt.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Management should provide data subscription for lecturers to enable them make regular use of Zoom delivering curriculum contents of Office and Information Management (OIM). This will encourage OIM students to participate actively in the teaching and learning process irrespective of their location.
2. Hands-on computer training should be provided for both lecturers and students in the Department of Office and Information Management in order to adequately equip them with the digital skills and mindset needed in making regular use of Google Classroom which will enhance the digital knowledge of the students.
3. Lecturers and students in the Department of Office and Information Management in Ignatius Ajuru University of Education, Port Harcourt should continue creating and using Whatsapp academic group chats for teaching and learning. OIM students should also establish Whatsapp reading room where they share academic contents.

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