LAFIA JOURNAL OF LIBRARY AND INFORMATION SCIENCE
Volume 4, Number 1, 2023.
Available online ***https://journals.fulafia.edu.ng/index.php/ljlis***
ISSN:Print - 2814-0702, Online - 2814-0710
LJLIS

LAPTOP OWNERSHIP AND USE AMONG POSTGRADUATE STUDENTS AT THE FEDERAL UNIVERSITY OF PETROLEUM RESOURCES, EFFURUN

Akanbi Mohammed Lawal, PhD
Department of Library and Information Science,
University of Ilorin

Chinemerem Clement Ukangwa, PhD
Laz Otti Memorial Library,
Babcock University, Ilishan-Remo, Ogun State

Olawepo Saheed Adesina CLN
Federal College of Education, Abeokuta

Abstract
Rapid technological development over the past decades has prompted interest in using laptops as a teaching tool to enhance students learning. The purpose of this study was to investigate laptop ownership and the use among postgraduate students at the Federal University of Petroleum Resources, Effurun. A descriptive survey was employed in the study. The research population consist of 519 postgraduate students at the Federal University of Petroleum Resources, Effurun. A questionnaire was used as an instrument for data collection. The questionnaire was designed based on the objectives of the study. The results indicated that a substantial number of the participants owing laptop and extent of the usage is high because they considered it useful. The results indicated that the major challenges to using laptop include lack of access to the internet connectivity in the faculty, irregular power supply / watching moves, technology problems, product price, playing game/virus hazard and theft/pornography distraction. Recommendation were proffered among others that, management should provide access to the Internet connectivity so that students can efficiently and effectively use it without restriction and management should provide alternative power supply such as solar in the campus to facilitate better use of laptop by the students among others.
Keywords: *Postgraduate, Students, Laptop, Usage. Ownership, University.*

Introduction

Students in postgraduate programs acquire these degrees in order to advance in their fields of study or employment. Some postgraduate students continue their education to fulfil professional needs. As a result, obtaining higher degrees is necessary for their survival and professional growth. Graduate students favour internet information sources above conventional channels for their studies. Meanwhile, graduate students believed that having a laptop would help them with their study, and regulations requiring students to purchase one are not a recent development in academic settings. According to Newby (2000), starting in the fall of 2000, a sizable, highly regarded public university introduced a policy requiring all incoming students to have a laptop computer. It is now widely accepted that effective use of technologies such as software, spreadsheets, graphics and CAS calculators, and data logging equipment offers students new opportunities for fast, accurate computation, collection and analysis of real or simulated data, and investigation of links be-tween numerical, symbolic, and graphical representations of concepts. Due to their portability and affordability, laptop usage is on the rise in Nigeria. Following that, students utilize laptops every day throughout the academic year. Depending on the topic, different laptops are used. English essay writing and online grading, web research, and creating power point presentations for assignments in engineering and computer science classrooms are the most often used laptop apps in the classroom.

Additionally, students use laptops to create websites, code, create graphics, access web-based science lab projects and exercises, and create posters and logos. Laptops are also used in the classroom for taking notes on all subjects. Therefore, investigating laptop ownership and use among postgraduate students at the Federal University of Petroleum Resource was the goal of the current study. The Federal University of Petroleum Resources' postgraduate students' access to and use of laptop computers has not been the subject of any study. While it would appear more important to determine the proportion of laptop owners, investigate the quantity of laptop use, the purpose of use, and obstacles to efficient and effective laptop utilization.

Objectives of the Study

The general objective of the study is to investigate the laptop ownership and use among postgraduate students at the Federal University of Petroleum Resources, Effurun: The specific objectives of the study are to:

1. to ascertain the level of laptop ownership among postgraduate students
2. to explore the extent of the use of laptop among postgraduate students
3. to know the purpose of the use of laptop among postgraduate students

4. to ascertain the factors militating against postgraduate students attempt to own and use laptop.

Review of Related Literature

Students frequently experiment with numerous technology for their social, intellectual, and personal lives in the twenty-first century. According to Barry, et al. (2015), curriculum design that takes use of students' technological abilities and uses should consider the factors behind how much technology is used by students in teaching and learning. According to Newly Cross et al. (2015), the number of students who own tablets is rapidly rising. They further found changes in students' study habit with the use of handheld devices with statistical significant differences between course areas. According Aheto and Cronje (2018).in their study, digital device ownership and learning environmental preferences of students in South Africa and Ghana, 97% and 69% of students own laptops, respectively. Likewise, Oluleye et al. (2018), many students in higher education utilize laptops and exhibit a favourable attitude about embracing new advances in information and communication technology. As a result, prior research has shown that teachers preferred creating lesson plans on laptops because doing so saved time (Oluwafemi et al, (2020) and helped them generate higher-quality work (Silvernail & Lane, 2004). When it comes to resource utilization, (Khambari et al. 2009) emphasized that owning a laptop allows consumers access to a wider variety of resources, mostly via the Internet. These teachers, who welcomed the increased choice and access to a variety of resources that personal access to a laptop had provided them, were in favour of the option to download resources and games.

For at least four reasons, the usage of laptops in tutorial rooms in higher education appears to be accelerating quickly. First of all, kids nowadays have grown up with a consistent diet of technology and computers; they are digital natives who anticipate using computers frequently for a variety of instructional tasks (Tapscott, 2008). A mobile computer is an obvious and seems essential choice because these students demand access to computer technology anytime, anywhere (Montgomery, 2009; Palfrey & Gasser, 2008). Third, the price of mobile technology appears to have reached a tipping point where almost any higher education student can afford to purchase a laptop or notebook computer ("Laptop," n.d., Wilen-Daugenti, 2008). In 2009, over 87% of all higher education students owned a laptop computer (Smith, Salaway, & Caruso, 2009). Finally, since many universities offer ubiquitous access to the Internet, a laptop computer allows students to research, collaborate, and collect information almost anywhere

within the university environment including the classroom (McCrea, 2010).

Tella and Kosoko-Oyedeko (2013) in their study highlighted reasons for owing laptop, the result revealed that 145 (49.2%) indicated because it is mandatory as Communication Information Science Students. A total of 99 respondents (33.6%) indicated that they con-sider it very useful while 25 respondents (8.5%) indicated they can afford it. A total of 8 respondents (2.7%) each indicated that they own a laptop because they want to be like others and to show that they are Communication and Information Sciences students. These results clearly show that close to half of the respondents own a laptop because it is mandatory for them as CIS student. Similarly, Oluwafemi et al, (2020) in their study asserted that the majority of the male students have used laptops for 1-5years, average period of use was 25.6 months ±25.6. More than half of the students, 66.0% own a laptop while 87.3% of those who do not own a laptop borrow to use. Almost half, 48.2% use laptop daily for averagely 6.2 hours ±9.5 while 48.9% usually place laptop on their laps while using it. The result from their study further revealed that the students use their laptops to take notes in class while 39.5% always read with it. Non-academic use of the laptop by the students include emailing, 74.8%, instant messaging 65.8%, watching movies 91.7% and playing games ,76.8% (Oluwafemi et al, 2020).

Equally, Ragan et al (2014) concur, reporting students in a large class who chose to bring laptops, tended to use their laptops for unrelated class activities two-thirds of the time allotted to the lecture. According to Washington (2017) in his study, the impact of laptops in the classroom: An assessment on anticipation, motivation and students learning. The study revealed that, 46.9% of the respondents reported that laptops, tablets, and smartphones "somewhat increased" their time on tasks unrelated to class, while 32.6% of the respondents reported the technology having "no effect" on the time spent on unrelated tasks in the classroom. On the contrary, 10.2% of the respondents indicated that the technology "somewhat decreased" their tasks unrelated to class. Only 8.6% of the students reported that their laptops, etc., "significantly increased their time on tasks unrelated to class. The study shown that students were asked how often they used their laptops, tablets, or smartphones in the classroom. Over 65% of the respondents reported using those types of technology in most or all of the classes, with 21.1% reporting *"every class"* and 44.8% reporting *"most classes"*. Skolnik & Puzo (2008) used student surveys, a faculty survey and direct classroom observation to identify benefits of laptops in the classroom. The study revealed an increase in student spreadsheet skills and an increase proficiency in note taking. Likewise, *Tella and Kosoko-Oyedeko* (2013) asserted that laptop is beneficial for

academic purpose such as assignments and research, laptop provide access to online discussion, it makes work easier and faster.

Investigation on challenging laptop behaviour can be classified into three main areas: other students, communication, and entertainment. One of the biggest challenges noted was the distracting laptop behaviour of *other students* in the class (Barak et al., 2006; Fried, 2008). C*ommunication based challenges* were also problematic and involved instant messaging among peers for non-academic reasons and sending personal emails. Similarly, *Tella and Kosoko-Oyedeko* (2013) in their study highlighted the challenges of owing and using laptop by Communication Information Science Students. The results indicate lack of access to the internet connectivity in the faculty as the most prominent challenge with 197 respondents (66.7%). This is followed by the challenge of intermittent power supply indicated by 50 respondents (16.9%) and theft indicated by 43 respondents (14.6%) while 5 respondents (1.7%) indicated virus threat.

Research Methodology

The study adopted descriptive survey design. The population of the study comprised all the 519 postgraduate students at the Federal Universities of Petroleum Resources, Effurun, Delta State (2021/2022 Academic Session). The population figure is obtained from the establishment unit of university studied. The whole population 519 of the postgraduate students was used as sample of the study. This was as a result of the manageable size of the population meanwhile the questionnaire were distributed department by department. Total enumerative techniques was employed. The instrument for data collection for this research was a self-constructed questionnaire titled: Laptop Ownership and Use among Postgraduate Students at the Federal University of Petroleum Resources (LOUPSFUPRQ). The researchers distributed the questionnaire department by department with the help of co- lecturers as research assistants. Three research assistants from the institutions helped to distribute and collect the instruments since they are familiar with the respondents. Two research assistants from the faculty of engineering while one research assistants from the faculty of computer science. A period of 2 weeks was used for administration and collection of the instruments. Out of the 519 questionnaire that were distributed to the respondents, 426 was duly completed and found usable, which gives (82%) response rate. Results were analysed using Statistical Package for the Social Science (SPSS) and are presented in percentage, mean and standard deviation. For the responses, it was based on four (4)-point rating scale Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). It was based on four (4)-point rating scale and a mid-point mean of 2.5 and above was used as positive

response.

Data Analysis and Discussion
Presentation of the Results
Table 1: Questionnaires and Response Rate

Statement	No Questionnaire Administered	No Questionnaire Returned	Response Rate%
Department of Chemical Engineering	41	38	92
Department of Electrical/Electronic Engineering	45	42	93
Department of Marine Engineering	20	20	100
Department of Mechanical Engineering	48	45	93.7
Department of Petroleum Engineering	36	31	86.1
Department of Chemical Engineering	29	23	79.3
Department of Earth Science	40	31	77.5
Department of Chemistry	49	30	61.2
Department of Physics	25	19	76
Department of Environmental Management and Toxicology	139	94	67.6
Department of Mathematics and Computer Science	50	49	98
Total	**519**	**426**	**82**

Source: Establishment Units of the University under study
Source: Generated by Researcher using SPSS 20.0 from questionnaire response, 2022

As revealed in Table 1 above a total number of 519 copies of questionnaire were distributed and 426(82%) copies retrieved and were found useful. The response rate (82%) is considered adequate for the study because of the standard acceptable response rate for the studies is 60% and above. This is in line with Osuala's (2005) view that a minimum of 60% response rate is adequate for a research study.

Table 2: Distribution of Respondents by Gender

Gender	Frequency	Percentage
Male	329	77.2%
Female	97	22.7%
Total	426	99.9%

Source: Generated by Researcher using SPSS 20.0 from questionnaire response, 2022

Table 1 reveals that 329 (77.2%) were male while 97(62.3%) were female. This shows that there are more male postgraduate students than female. This may be as a result of the courses offered in the university.

Research Question 1: What is the level of laptop ownership among postgraduate students?

Table 3: Level of Laptop Ownership

Do you own a laptop	Frequency	Percentage
Yes	423	99.2%
No	3	0.7%
Total	426	99.2%

Source: Generated by Researcher using SPSS 20.0 from questionnaire response, 2022

Table 3 above shown level of laptop ownership, participants were tested to signpost whether or not they own a laptop. A substantial number of the participants indicated yes 423(99.2%) whereas 3(0.7%) of the participants indicated no. This is shown that approximately all the postgraduate students at the Federal University of Petroleum Resources own a laptop.

Research Question 2: What are the extent of the use of laptop among postgraduate students?

Table 4: Extent of the Use of Laptop

Variable	VHL	HE	LE	VLE	Weighted mean
Frequency	210	196	18	2	3.44
Very Frequency	292	115	10	9	3.61
Sometimes	46	65	109	206	3.11
Never/Rarely	0	0	129	297	1.69
Aggregate mean:					**4.74**
Criterion mean:					**2.5**

Table 4 shows the extent of the use of laptop by postgraduate students at the Federal University of Petroleum Resources. The table revealed that with an aggregate mean of 4.74 which is high than the criterion mean of 2.5, it can be concluded that the extent of the use of laptop by postgraduate students at the Federal University of Petroleum Resources is high.

Research Question 3: What are the purposes of the use of laptop among postgraduate students?

Table 5: Purpose for Owning Laptop

Why do you own a laptop	Frequency	Percentage
it is prerequisite for computer science student	49	11.5%
it is prerequisite for engineering student	181	42.4%
I consider it useful	187	43.8%
I just feel like having it	9	2.1%
Total	426	99.8%

Source: Generated by Researcher using SPSS 20.0 from questionnaire response, 2022

Table 5 shown the reasons for owing laptop among the participants, 187(43.8%) of the participants indicated that they consider it useful while 181(42.4%) indicated that, it is prerequisite for engineering student whereas 49(11.5%) indicated that, it is prerequisite for computer science students and 9(2.1%) indicated they just feel like having it. These outcomes obviously show that near partial of the participants' own a laptop because they considered it useful.

Research Question 4: What are the factors militating against postgraduate students attempt to and use laptop

Table 6: Factors Militating Against Own and Use of Laptop

Factors militating against own /use of **own** laptop	Frequency	Percentage
Virus hazard	241	75.3%
Theft	221	51.8%
Lack of access to the Internet connectivity	321	51.6%
Technology problems	273	64%
Internet fluctuation	220	51.6%
Watching moves	311	73%
Playing games	241	56.5%
Pornography distraction	221	51.8%
Product price	263	61.7%
Irregular power supply	311	73%

Source: Generated by Researcher using SPSS 20.0 from questionnaire response, 2022

Table 6 reveals the challenges of owing and using laptop by postgraduate students. The results shown lack of access to the internet connectivity in the faculty as the most prominent encounter with 321 respondents (75.3%). This is followed by the challenge of irregular power supply / watching moves indicated by 311 (73%), technology problems 273(64%), product price 263(61.7%), playing game/virus hazard 241(56.5%) and theft/pornography distraction 221(51.8%).

Discussion of Findings

The findings of the study showed that nearly all the postgraduate students at the Federal University of Petroleum Resources own a laptop and extent of the usage is high. This in line with the findings of Oluleye et al (2018) who opined that a significant number of higher institution students uses the laptop and also showed positive attitude to adopt other Information and Communication Technology developments. The results further shown that postgraduate students owing laptop as a result of the followings. They consider it useful, it is prerequisite for engineering student, and it is prerequisite for computer science students and just feel like having it. This is in consonance with the finding of Tella ***and Kosoko-Oyedeko*** **(2013) who opined that students owing laptop** because it is mandatory

as communication and information students, they consider it very useful, they can afford it and they own a laptop because they want to be like others.

Findings of this study showed that postgraduate students faced diverse challenges in the process of usage of laptop for academic achievement. The challenges factors are lack of access to the internet connectivity in the faculty as the most prominent encounter, irregular power supply / watching moves, technology problems, product price, playing game/virus hazard and theft/pornography distraction. This is agreed with the findings of Oluwafemi et al, (2020) who opined that the challenges of owing and using laptop such as playing games, watching movies, listening to music, and surfing the web during class; lack of access to the internet connectivity in the faculty as the most prominent challenge, intermittent power supply, theft, virus threat.

Conclusion

According to the study's findings, a large percentage of postgraduate students at the Federal University of Petroleum Resources own laptops and frequently use them. The assumption is that proactively incorporating worthwhile laptop activities into lectures will boost the frequency of helpful laptop behaviours. In addition to contributing to the body of literature, the study describes the prevalence of laptop ownership and usage, how postgraduate students perceive it when they use it, and challenges they encounter, including limited access to the internet, erratic power supplies/watching movements, technology issues, product price, playing games/virus risk, and theft/pornography distraction, among other issues.

1. Now that it has been proved that a laptop computer is essential for academic work, colleges have to kindly outfit their electronic libraries so that laptops can be checked out for free or purchased at a reduced price.
2. The faculty/school should ensure that appropriate access to internet connectivity is offered without any limits because students, especially those taking prerequisite courses, use laptops primarily for academic purposes, find them beneficial, and just like having one.
3. The school administration should provide adequate security to prevent reports of laptop theft and alternate power sources like solar on campus to enable pupils to utilize laptops more effectively.

References

Aheto, Kafui Simon-Peter and Cronje, Johannes (2018). Digital device ownership and learning environment preferences of students in South Africa and Ghana. *Turkish Online Journal of Distance Education-TOJDE 19*(3)

Barry, S., Murphy, K., & Drew, S. (2015). From deconstructive misalignment to constructive alignment: Exploring student uses of mobile technologies in university classrooms.
Computers & Education, 81, 202–210.

Cross, S., Sharples, M., & Healing, G. (2015). E-Pedagogy of Handheld Devices 2013 Survey:
Patterns of student use for learning (Research and Innovation Report). Milton Keynes, UK: The Open University.

Khambari, M. N. M., Moses, P., & Luan, W. S. (2009). Laptop ownership and use among educators: Reflections from school teachers in Malaysia. *International Journal of Instruction, 2*(2), 47-72.

Laptop (n.d.) In *Wikipedia.* Retrieved from http://en.wikipedia.org/wiki/Laptop

McCrea, B. (2010). 5 higher education's trends to watch. *Campus Technology*. From http://campustechnology.com/Articles/2009/12/09/5-Higher-Ed-Tech-Trends-To-Watchin-2010.aspx?p=1.

Montgomery, K. C. (2009). *Generation digital: Politics, commerce, and childhood in the age of the Internet.* Cambridge, MA: MIT Press.

Newby, G.B. (2000). *Student laptop ownership requirement and centralization of information technology services at a large public university.* From: http://www.petascale.org/papers/acit-laptop-final.pdf

Oluleye A, Ayotola A, Adewale J, Onuka AO, Odinko M, Ayeni A.(2018). Needs assessment of the University of Ibadan students' readiness for the educational technology initiative projects. Partnership for Higher Education- *Educational Technology Initiative* (PHEAETI).

Oluwafemi J. Adewusi, Adetayo Adetunji & Segun E. Ibitoye (2020): Factors associated with direct use of laptop on the lap among male university undergraduates in South Western Nigeria, *Archives of Environmental & Occupational Health*, DOI: 10.1080/19338244.2020.1825211

Palfrey, J. & Gasser, U. (2008). *Born digital*. Basic Books: NY.

Ragan, E., Jenning, S., Massey, J. & Doolittle, P. (2014). Unregulated use of laptops over time in large lecture classes. *Computers and Education. Doi: 10.1016/j.compedu.2014.05.002*

Skolnik, R., & Puzo, M. (2008). Utilization of laptop computers in the school of business classroom. *Academy of Educational Leadership Journal*, *12*(2), 1-10.

Silvernail, D., & Lane, D. (2004). *The impact of Maine's one-to-one laptop program on middle school teachers and students.* Portland, ME: Maine Educational Policy Research Institute.

Tapscott, D. (2008). *Grown up digital: How the next generation is changing your world.*

NY: McGraw-Hill.

Tella, A and Kosoko-Oyedeko G.A (2013). Ownership and use of laptops by communication and information sciences undergraduates at the University of Ilorin Nigeria. Proceedings of Informing Science & IT Education Conference (InSITE)

Washington, Melvin C. (2017). The impact of laptops in the classroom: An assessment on anticipation, motivation and student learning. *International Journal of Business, Humanities and Technology* 7(2)

Wilen-Daugenti, T. (2008). *Higher Education Trends & Statistics*, *Issue 1*. From http://www.cisco.com/web/about/ac79/edu/trends/issue01.html.