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ASSESSING SECONDARY SCHOOL TEACHERS' PERCEPTION TOWARDS USING LEARNING MANAGEMENT SYSTEM IN OYO STATE

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ABSTRACT
This study was carried out to assess secondary school teachers' perception towards using learning management system in Oyo State. The survey research design was used. The population for this study consisted of 15, 705 registered teachers. The sample of the study were 1,400 respondents. Multi-stage sampling procedure was used to select the sample. The instrument for data collection was an adapted questionnaire from Olorunmonu (2024). The instrument was validated and tested for reliability using Cronbach's alpha which yielded 0.85. Mean, percentage, ANOVA, t-test, Pearson Product Moment Correlation, (PPMC) were used to answer research questions and test hypotheses at 0.05 level of significance respectively. The results of the findings indicated that teachers have positive perceptions towards the use of LMS with (2.95); there were no significant difference in teachers' perception of LMS use based on educational qualification and gender; there was significant difference in teachers' perception of LMS use based on work experience; (t=4.631, P=0.003 P < 0.05); and there was significant relationship of institutional support and teachers' perception of LMS use; (t=0.142, P= .001 P < 0.05;) . It was recommended that secondary school teachers in Oyo State be encouraged to undergo courses on making use of LMS to enhance efficient teaching and effective learning.

Keywords: Learning Management System, Secondary Schools, perception, Teacher

Introduction

Education is a tool that avails people with knowledge, skills, techniques and information which empowers them for national socio-economic growth and development. Education has been greatly affected by the rapid change in technology which is used in teaching and learning. Information and Communication Technology (ICT) equips teachers and students with skills essential for work and life in the 21st century (Hawwal &Adam, 2022). Information technologies help teachers to assess students' academic needs. As technology becomes prevalent and accessible to students of all ages, teachers are encouraged to find innovative and creative ways to incorporate technology into their instructional tasks.

The utilisation of ICTs in educational processes has emerged as a highly notable advancement. This phenomenon has arisen due to positive anticipations regarding the significance of ICT in advancing higher education and facilitating a more efficient and adaptable learning encounter (Coates, James, & Baldwin, 2015). There is a prevalent argument suggesting that ICT possesses the capacity to revolutionise the possibilities of higher education instruction, hence fostering a student-centered learning experience (Bingimlas, 2019; Drent & Meelissen, 2018). Nevertheless, it has been contended by Chang (2018) that technology has been sluggish in effecting substantial or basic alterations to educational frameworks. Educational institutions are progressively embracing Learning Management Systems (LMS) as a prevalent technological tool to facilitate the educational process and enhance students' learning experiences (Lonn & Teasley, 2019; McGill & Klobas, 2019).

Although the utilisation of LMS is prevalent, it remains uncertain whether this technology has met anticipated outcomes, particularly within secondary school institutions. LMS is an electronic learning platform that provides a range of tools for delivering course materials and information. It facilitates interaction and communication between teachers and students, as well as among students themselves, without any restrictions on time or location (Chang, 2018).

LMSs are employed in numerous courses across high schools and universities, and it is anticipated that this quantity will rise in the future (Chang, 2018). While the original purpose of these technologies was to facilitate remote learning, they have now become an essential component of the educational journey for students across many backgrounds. Incorporating virtual elements into campus-based courses and complementing conventional in-person instruction, these tools are extensively employed (Lonn & Teasley, 2019). The increasing fascination with the implementation and utilisation of LMS has been propelled by the expected advantages of this system for both educators and learners. There is a prevalent argument suggesting that LMSs have the capacity to enhance student learning, optimise instructional efficiency, and foster innovation in the realm of education (Chang, 2018; Lonn & Teasley, 2019). Additional assertions have been put out suggesting that LMSs will significantly alter educational methodologies and introduce novel efficiencies to the teaching process. Broad et al. (2014) argue that the implementation of LMS has the potential to redirect the learning experience from the instructor to the student, with the teacher assuming the role of a facilitator in the student learning process.

Sharifov, Safikhanova and Mustafa (2021), opined that education has been revolutionised by enhancing a range of social and constructive teaching methods due to the implementation of LMS. This is achieved by enabling students to conveniently access and engage with diverse educational materials (Sharifov et al., 2021). Additionally, it offers the potential to incorporate numerous of these methodologies, and certain aspects within it to promote student-centered

methodologies for education. This statement underscores the perspective that the mere provision of technology, namely LMS in this context, does not ensure the effective utilisation of technology by instructors. The adoption and implementation of technology in the classroom are contingent upon the teachers themselves, rather than solely relying on the availability of tools (Singh, 2021).

Statement of the Problem

Internationally, it is evident that the Covid 19 pandemic changed every aspect of our life and education is not an exception. As the series of the pandemic-induced lockdown resulted in movement from traditional pedagogy to e-learning platforms such as Learning Management System for teaching and learning processes. Learning Management System (LMS) is an application software used to plan, implement and assess learning process in educational institutions. After Covid19 pandemic which changed every aspect of human life and education, LMS became the focus of teachers and students when physical classrooms were not visible. More importantly many teachers were not LMS compliant. LMS such as Google classroom, Canvas, Moodle, and blackboard are some of the electronic learning platforms that provide a range of tools for delivering course materials and information. LMS has the potential to redirect the learning experience from the instructor to the students, with the teacher assuming the role of facilitator in the teaching learning process. It also has the potential to revolutionize education by enhancing a range of social and constructive teaching methods. LMS makes it possible to upload and download materials in various forms, allowing for continual updates and access. It also possesses the potential to serve as a valuable instrument in augmenting students learning outcomes and enhancing pedagogical approaches. LMS has the capacity to enhance student learning, optimise instructional efficiently, and foster innovation in the realm of education.

Utilisation of LMS in the realm of education can pose a serious setback in teaching and learning processes if the needed facilities are not in place. While LMS may lead to extra administrative costs for schools, they can become a technological barrier for untrained teachers and a social barrier for students who are reliant on face to face interaction to fully benefit from learning process. However, the use of LMS in school is perceived to be challenging because of technical issues such as unstable internet connection and electricity, lack of needed devices, limited technical experience and skills, and lack of e-learning pedagogy. Therefore, this study aimed at investigating teachers' perception and attitude towards using LMS in secondary school in Oyo State.

Research Questions

The following research questions were answered in the study:

1. What is the secondary school teachers' perception of the use of LMS in Oyo State?
2. What is the influence of teachers' educational qualification on perception of the use of LMS in Oyo State?
3. Is there any influence of secondary school teachers' work experience on perception of the use of LMS in Oyo State?
4. Is there a difference between male and female teachers on perception of the use of LMS in Oyo State?
5. Does institutional support have relationship with the secondary school teachers' perception of the use of LMS in Oyo State?

Research Hypotheses

The following hypotheses were tested in this study at 0.05 level of significance:

H_{o1}: There is no significant influence of secondary school teachers' educational qualification on perception to the use of LMS in Oyo State.

H_{o2}: There is no significant influence of secondary school teachers' work experience on perception of the use of LMS in Oyo State.

H_{o3}: There is no significant difference between male and female teachers' perception of the use of LMS in Oyo State.

H_{o4}: There is no relationship between institutional support and secondary school teachers' perception of the use of LMS in Oyo State.

Theoretical Framework

Learning theories are ideals about the ways students learn and retain information. Understanding and application of these theories is important for effective teaching. These principles provide different frameworks that teachers can use to adapt to students' diverse learning styles and academic needs. In this study, researcher will look into diffusion of innovation and social cognitive theories.

The theory seeks to explain how, why, and at what rate new ideas and technology spread. The diffusion of innovation theory, as proposed by Rogers (2004), has been widely embraced by several educational research studies as a framework for comprehending the utilisation and adoption of information and communication technology (ICT) at both individual and institutional levels. This theory has been extensively examined by many researchers.

Social Cognitive Theory is an interpersonal level theory developed by Albert Bandura that emphasizes the dynamic interaction between people, their behaviour, and their environment. It also suggests that an individual's behaviour choices are selected based on internal and external factors, such as environment, media outlets, and past experiences because of the desire to achieve a certain outcome. (Bandura, 1986).

Method

The study utilised the survey research design. The population for this study consisted of all secondary school teachers in Oyo state which were 15, 705, while the target population was all teachers in Ibadan, Oyo, Ogbomosho and Ibarapa Zones. Multi-stage sampling procedure was used to select secondary school teachers. At the first stage, purposive sampling technique was used to select Ibadan, Oyo, Ogbomosho and Ibarapa Zones based on accessibility to ICT facilities. At the second stage, purposive sampling was utilized to select 10 secondary schools from each of the zones based on availability of internet facilities. At the third stage, simple random sampling technique was used to select the teachers from each of the secondary schools selected. A total of 1400 copies of questionnaire was proportionally distributed to each of the zones selected for the study based on the sample size of each of the zone determined and using researcher's advisory model 2006. 1,216 respondents were returned while only 1,117 were valid and used for the study. Adapted questionnaire from Olorunmonu (2024) was used to collect data and data was validated and tested for reliability using Cronbach's alpha which yielded 0.85. Mean, percentage, ANOVA, t-test, Pearson Product Moment Correlation, (PPMC) were used to answer research questions and test hypotheses at 0.05 level of significance respectively.

Results and Discussion of Findings

This chapter presents the results of the study based on the demographic data analysis and research questions that were raised respectively.

Demographic Data Analysis

The section presents the demographic data of respondents

Table 1. Distribution of Demographic Data

Variables	Categories	Frequency	Percentage
Gender	Male	493	44.1
	female	624	55.9
	Total	**1,117**	**100.0**
Academic qualification	NCE	253	22.6
	DEGREE	577	51.7
	MASTER/PGDE	237	21.2
	Ph.D.	50	4.5
	Total	**1,117**	**100.0**
Teaching year of experience	1-10 years	587	52.6
	11-20 years	323	28.9
	21-30years& above	207	18.5
	Total	**1,117**	**100.0**
Age Range	20-30 years	422	37.8
	31-40 years	321	28.7
	41-50 years	248	22.2
	51 years and above	126	11.3
	Total	**1,117**	**100.0**

Table 1 above showed that 1, 117 respondents participated in the study. Table 1 shows the gender distribution of the respondents in this study. Out of these 1,117 teachers, 493(44.1%) are male while 624(55.9%) are female. The result from this table shows that female teachers participated more than male teachers in the study. It also shows the distribution of the teachers by educational qualifications. The table revealed that the majority hold a Degree with 577(51.7%). This is followed by those with an NCE qualification 253(22.6%) and those with Master degree or PGDE 237(21.2%). Only a small proportion 50(4.5%) had a PhD qualification. It further shows the distribution of the teachers according to experiences. The largest group of respondents had 1 to 10yrs of experience, representing 587(52.6%), those with 11 to 20 years of experience were 323(28.9%), and those with 21 to 30 years and above of experience were 207(18.5%). Finally, it shows the distribution of the teachers by age. The table revealed that 422(37.8%) of the teachers were within the ages of 20 to 30 years. Those aged 31 to 40 years were 321 (28.7%), the 41 to 50 age group constitutes 248 (22.2%) while the smallest proportion, 126 (11.3%) is represented by those aged 51 years and above.

Analysis of Research Questions

Research Question 1: What is the perception of the use of Learning Management System (LMS) by Secondary School Teachers in Oyo State?

Table 2:

Teachers' Perception of the Use of LMS in Secondary School

Items	SA	A	D	SD	Mean	Std. D
Learning how to operate LMS will be difficult for me.	89	95	446	487	1.81	.89
It will be easy for me to use the LMS to finish my teaching	297	664	83	73	3.06	.77
It would be easy for me to become skillful at using the LMS.	276	755	80	6	3.17	.56
The process of using the LMS to do my teaching is clear and understandable.	152	796	159	10	2.98	.56
I will find the LMS easy to use	275	766	44	32	3.15	.62
I quickly understand the LMS process	245	774	94	4	3.13	.55
To upload quizzes is easy when using LMS	254	668	193	2	3.05	.64
LMS is easy to handle problem whenever I encounter them	147	830	99	41	2.97	.61
LMS helps me to monitor my students learning progress	218	720	163	16	3.02	.63
LMS App is easy to operate	164	751	135	67	2.91	.71
Using the LMS would improve my teaching performance	314	648	153	2	3.14	.64
Using the LMS would reduce the efficiency of my teaching performance	91	311	479	236	2.23	.87
Using the LMS would reduce my ability to do daily teaching	75	376	503	163	2.33	.80
Using the LMS would make my teaching interesting	383	607	74	53	3.18	.75
Using the LMS would let me feel that I control the basic process of my teaching	228	743	146	0	3.07	.57
Using LMS improves my teaching	318	686	109	4	3.18	.60
LMS helps me teach more efficiently	236	766	109	6	3.10	.57
LMS makes my teaching more flexible	186	871	26	34	3.08	.55
LMS is useful for me to upload my course materials at my will	226	830	23	38	3.11	.59
LMSs are useful for global teaching	448	607	15	47	3.30	.70
Average Mean						**2.95**

Table 2 presents the responses of secondary school teachers in Oyo State regarding their perception of LMS usage. The result shows a generally positive perception, with a weighted average mean of 2.95 out of a maximum of 4.00. Most items recorded mean scores above the

midpoint of 2.50, indicating agreement. Teachers perceived LMS as easy to use, helpful for improving teaching efficiency and flexibility, and useful for uploading materials and tracking students' learning progress. Only a few negatively worded items recorded disagreement, suggesting that the majority of teachers do not find LMS difficult or detrimental to their teaching. Therefore, it can be concluded that secondary school teachers in Oyo State have a positive perception of LMS usage.

Research Question 2: What is the difference in the perception to use LMS by secondary school teachers in Oyo State based on educational qualification?

The data indicates difference in perception based on educational qualifications, but this differences in mean scores appear to be relatively small.

Research Question 3: What is the difference in the perception to use LMS by secondary school teachers in Oyo State based on work experience?

It explores whether differences exist in secondary school teachers' perception toward the use of LMS based on their work experience. The mean scores are as follows: 0-10years (M = 29.03, SD = 3.69), 11-20years (M = 29.29, SD = 3.59), 21-30 years (M = 28.83, SD = 3.59), and 31years and above (M = 29.15, SD = 5.82). The data shows minimal differences in perception toward LMS use across the different levels of work experience.

Research Question 4: Is there difference between male and female secondary school teachers' perception to the use of LMS in Oyo State?

The data indicates a minor difference in perception towards LMS use between male and female teachers, with female teachers showing slightly more favourable perception.

Research Question 5: What is the relationship between institutional support and perceptions of secondary school teachers to the use of LMS in Oyo State?

The result shows that there is a minimal relationship between institutional support and perceptions secondary school teachers to the use of LMS in Oyo State?

Hypotheses Testing

Hypothesis One:

H_{01}: There is no significant difference in the perception of LMS usage among secondary school teachers in Oyo State based on their educational qualifications.

Table 3:

Summary of ANOVA Showing Difference in the Perception of LMS Usage among Secondary School Teachers in Oyo State based on Qualification

Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	620.417	3	206.806	4.773	.054	Not Rejected
Within Groups	48220.422	1113	43.325			
Total	**48840.840**	**1116**				

Table 3 shows the difference in the perception of LMS usage among secondary school teachers in Oyo State based on their educational qualifications. The ANOVA results shows that there is no significant difference in the perception of LMS usage among secondary school teachers in Oyo State based on their educational qualifications ($F_{(3, 1113)} = 4.773$; p .054 > 0.05). Hence, hypothesis 1 is not rejected.

Hypothesis Two:

H_o2: There is no significant difference in the perception of LMS usage among secondary school teachers in Oyo State based on their work experience.

Table 4:

Summary of ANOVA Showing Difference in the Perception of LMS Usage among Secondary School Teachers in Oyo State based on Work Experience

Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	602.144	3	200.715			
Within Groups	48238.696	1113	43.341	4.631	.003	Rejected
Total	**48840.840**	**1116**				

Table 4 shows the difference in the perception on of LMS usage among secondary school teachers in Oyo State based on their work experience. The ANOVA results shows that there is significant difference in the perception of LMS usage among secondary school teachers in Oyo State based on their work experience ($F_{(3, 1113)} = 4.631$; p .003 < 0.05). Hence, hypothesis 2 is rejected.

Hypothesis Three:

H_o3: There is no significant difference between male and female teachers' perceptions of LMS usage in Oyo State.

Table 5:

Summary of T-test Showing Difference in Male and Female Teachers' Perceptions of LMS Usage in Oyo State

Grouping Variable (Gender)	N	Mean	Std. D	Df	T	Sig.	Remark
Male	493	58.81	6.70	1115	-.730	.466	Not Rejected
Female	624	59.09	6.55				

Table 5 shows the difference between male and female teachers' perceptions of LMS usage in Oyo State. The table shows that the mean score for male teachers is 58.81 while that of female teachers is 59.09. The values of the mean scores do not reveal an appreciable difference. Therefore, there

is no significant difference between male and female teachers' perceptions of LMS usage in Oyo State (df = 1115; t = -.730; p .466 > 0.05). Hence, hypothesis 3 is not rejected.

Hypothesis Four:

H₀: There is no relationship between institutional support and perception of the use of LMS by secondary school teachers in Oyo State.

Table 6:

Summary of Pearson Product Moment Correlation Showing Influence of Institutional Support on the Teachers' Perception of the Use of LMS

Variable	Mean	Std. D	N	r	Sig(p)	Remark
Institutional Support	24.33	2.59				Rejected
Teachers' Perception	58.97	6.62	1117	.142	.001	

Table 6 shows the influence of institutional support on the perception of the use of LMS by secondary school teachers in Oyo State. The analysis shows that institutional support has a significant, albeit weak, positive influence on teachers' perception of LMS usage in secondary schools in Oyo State (N = 1117; r = .142; p .001 < 0.05). Hence, hypothesis 4 is rejected. This suggests that increasing institutional support could improve teachers' perception of LMS usage in secondary schools in Oyo State.

Discussions

This study examined teachers' perception and attitude towards using learning management system in secondary schools in oyo state. The moderating variables are gender, teaching qualification, working experience and institutional support.

The finding of teachers' perception on the use of LMS was examined using research question (1) one. The result shows that the perception of teachers toward the use of LMS in secondary school is 2.95 out of 4.00 maximum value obtainable which means the value is above average. This means secondary school teachers have positive perception on the use of LMS for teaching and learning processes. By Implication, since the teachers' perception on the use of LMS platform for teaching is above average, teaching and learning with technology is going seamlessly without any hindrances. Therefore, secondary school teachers can compete with their counterparts in higher institution of learning and in secondary axis globally. This finding is in consonance with works of phutela & Dwivedi (2019) and Al- Azawei, A., (2019), which claimed that positive perception of teachers in the use of technology for teaching and learning is advantageous to teachers in teaching their students effectively. It is also in line with the finding of Muritala (2021), who found positive perception of teachers on the use of Mobile learning for teaching.

Table 3 shows the difference in the perception of LMS usage among secondary school teachers in Oyo State based on their educational qualifications. The ANOVA was used to test hyphothesis 1 and results shows that there is no significant difference in the perception of LMS usage among secondary school teachers in Oyo State based on their educational qualifications ($F_{(3, 1113)} = 4.773$; $p > 0.05$). Hence, hypothesis 1 was not rejected. By implication, teacher's educational qualification such as NCE, degree, Master and PhD didn't have any significant difference in the perception of teachers towards using LMS for teaching and learning process. Irrespective of the

certificate acquired, it does not have anything to do with teacher's perception towards using LMS for teaching in Nigeria. Therefore, regardless of teachers' educational qualification, they should be able to have positive perception towards using LMS for teaching. The finding contradicts that of Muritala, (2021), who found significant differences on the use of mobile technologies based on educational qualification. The result corroborates that of Bariham (2019), who noted that postgraduate qualifications at Masters or higher level were not significantly related to students' achievement.

The result shows in table 4 difference in perception to use LMS across the different levels of work experience. To determine whether these differences are statistically significant, ANOVA was used to test hypothesis 2 and it was discovered that there is a significant difference in the perception of LMS based on their work experience. Therefore, the stated hypothesis 2 was rejected. By implication, teachers' work experiences have significant difference in the perception toward using LMS for teaching in secondary schools. This corroborates with findings of Muritala, (2021), who submitted that teachers' perception on the use of mobile technologies in teaching and learning based on years of experience are significantly different. Also, in line with the study of Maccallum & Jeffrey, (2013), who found out the perception of teachers on the use of technology based on work experiences is significant.

The result shows in table 5 that there is no difference in perception of LMS use between male and female and it was further validated by using t-test to test hypothesis 3 which result shows that there is no significant difference between male and female teachers' perceptions of LMS usage. Hence, hypothesis 3 is not rejected, by implication, the gender does not have anything to do with teacher's perception on the use of LMS for teaching. This corroborates Yusuf et al (2021), finding which revealed no statistically significant difference in the technological pedagogical content knowledge (TPACK) of male and female teachers. It is also, in support of Bariham (2019), who submitted that there is no significant difference between male and female use of technology for teaching.

The results show in table 6 weak positive relationship. This suggest that while increased institutional support is associated with improved perceptions of LMS use, the influence is minimal. It further tested by hypothesis 4 which reveals that there is significant difference on teacher's perception of LMS usage in secondary schools. By implication the teacher supported by school administrators in the area of technology materials provided will have positive perception on the use of LMS for teaching in secondary schools in Oyo state. This corroborates Aromide, et al (2015), who submitted that accessibility, location and ease of use of instructional resources determine and influence teachers' level of integration of instructional technology for teaching. Also in line with the study of Olawale (2024), who submitted that institutional support have significant effect on teachers technological pedagogical.

Conclusion

Based on the data collected and the results of the analysis done, this study concludes that, secondary school teachers have positive perception and attitude towards the use of LMS for teaching. It was observed that some demographic variables such as educational qualifications, gender do not have significant influence on LMS adoption, highlighting the need for inclusive strategies that cater for all teachers. On the other hands, work experience and institutional support play more significant role in LMS adoption by secondary school teachers. To enhance the effectiveness of LMS adoption and utilization by secondary school teachers, all education stakeholders must adopt comprehensive approaches that combine robust systems, uninterrupted

electricity, adequate training and substantial investments in technological infrastructure. This strategy will better align with teachers' needs and ensure more fruitful and widespread adoption of LMS for educational purposes.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are made:

1. The Government should equip schools with required ICT facilities to make usage of LMS easier.
2. The School should train teachers on how to use LMS for learning in regardless of their educational qualification.
3. Future research should focus on other moderating variables other than gender to make research robust such as Age, school ownership and rural and urban Area.
4. The Government school organize training for teachers in regardless of their gender on how to use LMS.
5. The School should invest in technological infrastructure to ensure all teachers have equal access to quality ICT facilities, addressing disparities related to school support.

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