Paper presentation **Sub-theme: Building Resilience**

EVALUATION OF LEARNERS' CENTREDNESS ON THE UTILIZATION OF LEARNING MANAGEMENT SYSTEM

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Abstract
We live in a rapidly changing world in which learners are constantly being inundated with knowledge and are expected to be more responsible for their learning. Although, the 21st century technologies including the Learning Management System (LMS) have emerged, evaluations of such innovations are few. Thus, this study evaluated learners' centredness on the utilization of Learning Management System in a dual mode tertiary institution in southwest, Nigeria. The study adopted a descriptive survey research design. The main data collection instrument was created using Google form and 376 learners completed and submitted the questionnaire online. Data collected were analyzed using means and standard deviation. The study revealed that learners are positively inclined to the utilization of the LMS for obtaining learning resources with a mean value of 3.06±1.20 and with a mean value of 3.28±1.13, learners agreed that the LMS encourages learners' centredness in terms of flexibility and accessibility. However, with a mean value of 2.81±1.4, learners were not satisfied with instructional delivery and feedback mechanisms on the LMS. It was recommended among other things that more virtual laboratories should be made available with full facilities to foster learners' academic performance and create conducive environment for facilitators during interactive sessions.
Keywords: Centredness, Learners, Learning Management System, Utilization

Introduction

The acceptance of learner-centeredness approach in education has resulted in dynamic changes in the perception of education, teaching and learning. During the teaching-learning process, learners participate willingly at the stages of decision making, planning, application and evaluation by showing interest with determination in learner-centered teaching (Adebola, 2018). Learner-centered teaching is believed to have brought about the change in questions from "What should we teach?", "How should we teach?", "With what should we teach?" to a perspective where "What would he/she like to learn?", "What will she/he do to learn?", "What would assist him/her in his/her learning?", to what extent did she/he learn?" Rightly, in learner-centered teaching learners actively participate in the decision making process about what to learn, how to learn, and what kind of help is required, and how to decide how much is learned (Lea and Sttenhanson, 2016). Also, learner-centered approach makes learners responsible for what they learn and the job of the teacher essentially is that of a guardian and facilitator.

Learners have the right to learn within the context of culture, community and past experiences. Facilitators who adhere to learner-centric classrooms are strongly guided by constructivism, naturalistic, social constructivism, existentialism, humanism, and progressive philosophies. Learner-centeredness, is an approach which puts the learner at the center of the learning process (Ali, 2015). Learner-centered learning helps the leaner to improve learning towards learning how to improve skills such as critical thinking, problem-solving and reflective thinking (Meyer, 2003).

Learner-centered learning environments are set up in such a way that they give learners the chance to take the responsibility for organizing, analyzing and synthesizing knowledge, and consequently play a more active role in their own learning (Uden, 2007). This approach gives learners the chance to take individual responsibility and adapt an active role in the teaching-learning process at the highest level. The mechanisms of self-confidence and self-control in individuals improve at a better rate. Learner-centered teaching provides opportunities to develop learners' skills of transferring knowledge to other situations, triggering retention, and motivation for learning.

UNESCO (2002), opines that open and distance learning approach reflects that all or most of teaching is conducted by someone removed in time and space from the learner, and that the mission aims to include greater dimensions of openness and flexibility, whether in terms of access, curriculum or other elements of structure. For adult learner, open and distance learning means increased access and flexibility as well as combination of work and education. It also means a more learner-centered approach, enrichment, higher quality and new ways of interaction.

In Open and Distance Learning (ODL), the learner support services such as Learning Management System (LMS) depends on information communication technology, namely, print correspondence, telephone, audio conferencing and radio, audiotapes, video and computer-based technology (Chen, 2009). The learning management system is made up of tutoring; counseling; administrative and library support (McLaren, 2010). The need to provide such learning support services is borne out of the notion that individual learning of a learner needs to be facilitated for quality learning to

take place. Educators are thus leveraging on this education technology to improve learners' engagement, peer interaction, and collaboration; collect lesson feedback; improve communication and extend the place and time of learning (Allen, 2011). The conceptualization of ODL has evolved with the undergirding technology and resulting instructional possibilities. From this perspective, learners are supposed to be knowledge builders who treat any material that they acquire from the internet as resources to support their sense making and knowledge construction (Hartley, 2012).

The major dimensions of usability defined by Parpala *et al*. (2010) are effectiveness, efficiency, and satisfaction. The basic parameter for the evaluation of e-learning technologies and systems is usability. Usability means quality and puts the users and their real needs in the center. Therefore, investigation of usability and its integration or contribution to the learning process is worthwhile.

Therefore, user-based methods and inspection methods are most commonly adopted for evaluating the usability of interactive systems (Estes, 2014). It is important to know that information and communication technology is the foundation of realizing e-learning; standardization is the guarantee of a good online learning system, and evaluation is the approach to examine the effectiveness of a competent learner support service (Estes, 2014).

To assist in updating and adapting the evaluation proposal for distance learning, a quality characteristics catalog for a learning management system is of high importance this include characteristics which can be varied into technical (functionality, performance, usability, security, portability), educational (pedagogical), sociocultural (communication) and socioeconomic (support) (Gray, 2001). This catalog was developed, based on a systematic review that aimed to find work related to the models and quality characteristics for a learning management system that is designed to be learner-centered. As a kind of network application based on e-learning platform, effective learner support service is related to content provider, technology provider, equipment provider, network provider and service provider. In the process of disseminating and applying e-learning technology, the standardization of e-learning will play a leading role (Walker, 2009).

Nevertheless, another way of measuring and analyzing the effectiveness, quality and perception of the learning experience in a distance education system as noted by Meyer (2003), is through the evaluation of the learner support system.

Statement of the Problem

Experience has shown that the problems of instructional delivery with appropriate technology, assessment procedures, facilitation and learner support services are not entirely solved in Open and Distance Learning environment. However, in countries like Nigeria, e-learning is challenged with both technical and pedagogical inefficiencies (Johnson, 2006). Blended learning domain solely relies on the Learning Management System (LMS) as the medium that exist between facilitator and the learner in their online classes. Hence, the achievement of learner-centeredness is somewhat questionable as learners study and assimilate at different pace, have diversity of needs and wide range of interests. Distance learning focuses on a single learner and is expected to provide similar results in all participants but due to some uncertain factors (such as instructional delivery, learner interaction, learners' attitude towards education technology and so on), all academic objectives are not achieved through the learning management system. As a result, this study is focused on the evaluation of distance learners' centeredness on the use of learning management system in Distance Learning Institute, University of Lagos.

Research Questions

1. What are the perceptions of learners on the learning management system in terms of learning resources?
2. Are learners satisfied with the learning management system as regards instructional delivery and feedback?
3. What are learners' experience on the learning management system concerning ease of interaction and learning?
4. To what extent can the learning management system be more learner-centered?

Research Hypothesis

Ho: Learners centeredness on the learning management system has no significance on learners' academic achievement.

H_1: Learners centeredness on the learning management system has significance on learners' academic achievement.

Theoretical Framework

Constructivist's Approach to Teaching and Learning

This study is anchored on the theory of Constructivism by Piaget who was one of the early proponents of constructivism. Piaget saw children constructing their own knowledge through their own activity, or in Piagetian terms through the processes of assimilation and accommodation. Assimilation is the activity that permits the gradual

incorporation of new ideas and information into a person's mental schemes, that is to say when people tackle new situations they try to incorporate the novelty of the outside world into what they already know and understand. New ideas and information are not always readily assimilated, so that a person's understanding is constrained. Individuals do not submit passively to such constraints but adjust their thinking, their mental schemes, so that they can deal with these novel ideas and information. Thus, accommodation is the activity of modifying assimilatory schemes.

Constructivism is an approach in education that argues that knowledge which is justified belief undergoes construction and reconstruction by a learner from his experiences, observation and interactions in a social setting until understanding and meaningful learning is facilitated (Oladipo, 2009). In a more comprehensive way, constructivism can be viewed, as a theory of meaning making, knowledge construction and reconstruction that fosters conceptual understanding and which provides insight on how learners move along the pathway of their own worldview to scientific viewpoints using socio-cognitive anchors.

Research methods and participants

The study adopted a descriptive survey. The population of the study consists of the undergraduate learners from year 2 to year 6 which sums up to sixteen thousand eight hundred and twenty-one (16821). Fifty learners were selected from each programs using random sampling method. Giving a sample size of 400 participants. The instrument used for data collection is questionnaire, which was titled: "Evaluation of Distance Learners' Centeredness on the Use of Learning Management System (EDLECELEMS)". This is constructed in accordance with the research questions. The questionnaire consisted of two parts. Part one is designed to elicit relevant background information about the respondents. Part two deals with the sections of items raised from the research questions of the study. The respondents were required to tick (√) at the appropriate response applicable to them, as well as given free option to express their views; the questionnaire was developed through Google research document and deployed online through the use of learners' social media platforms. The rest of the questions are designed in line with the Likert scale and require the respondents to tick any of the options to indicate their level of agreement, and the response mode include the following: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Cronbach reliability coefficient was used for this study because it helps to establish the internal consistency of the responses. Analyses were performed using mean and standard deviation. A criterion of harmonized mean value of 3.00 was adopted. Any mean that ranked from 3.00 and above was regarded as positive and accepted while the values of less than 3.00 was considered as negative and rejected. Specifically, for each research question, real limit of numbers was used to determine the decision level as follows; Strongly Agree, Agree, Disagree, Strongly Disagree.

Findings

Presentation and Analysis of Respondent Bio-Data

A total of 376 learners responded to the questionnaire deployed through

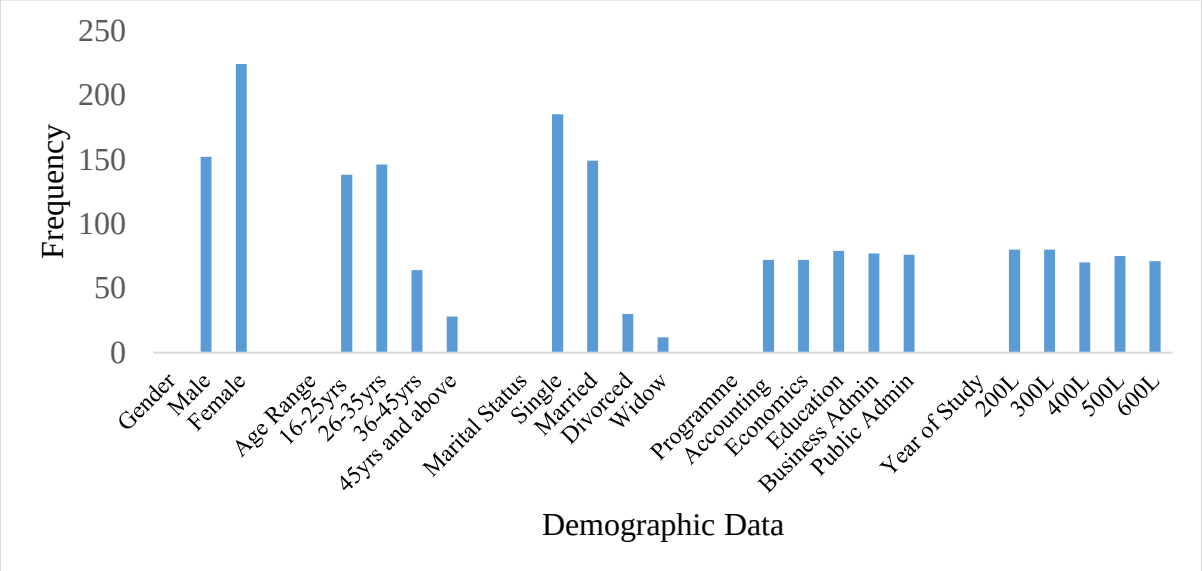

Figure 1: Demographic representation of respondents

Figure 1 shows the demographic data of the respondents in frequency and percentage respectively: Male respondents were 40.4 % while female respondents were 59.6 %. The age range 16-25 has 36.7 %; the age range 26-35 has 38.8 %; 36-45 has 17 % while the age group of 46 years and above has 7.5 %. The distribution of respondents according to marital status goes thus: Single 49.2 %; Married 39.7 %; Divorced 7.8 % and widowed respondents 3.2 %. Respondents studying Accounting or Economics represents 19.1 % each while 21.1 %, 20.5 % and 20.2 % are learners in Education, Business Administration and Public Administration respectively. This implies that majority of the respondents were female learners and larger percentage were young adults who seek to acquire tertiary education through Open and Distance Learning platform.

Research Question 1: What are the perceptions of learners on the learning management system in terms of learning resources?

Table 1: Learners' perception on LMS in terms of learning resources

S/N	Questionnaire Items	MEAN	SDev
1	LMS is only a platform for continuous assessment and study materials	3.60	1.50
2	Learning resources on the LMS perfectly suffice for classroom	3.90	1.13
3	Learning resources on the LMS are not simplified enough to be understood by learners.	3.21	1.31
4	Learning Management System makes learning easy and fun	3.10	0.21
5	The LMS does not make learning as flexible as it should be	1.50	1.84
	Mean (Ẍ)	**3.06**	

Table 1 shows that majority of the statements (2, 3 and 4) have mean scores that are above the cut-off mark of 3.00 that was regarded as acceptable limit while statement 5 is below limit of 3.00 which is considered unacceptable. This implies that learners' perception towards the learning management system in terms of learning resources is somewhat positive. However, learners perceive LMS as a platform for continuous assessment and study materials and not flexible enough.

Research Question 2: Are learners satisfied with the learning management system as regards instructional delivery and feedback?

Table 2: Mean and Standard Deviation of LMS regarding instructional delivery and feedback?

S/N	Questionnaire Items	MEAN	SDev
6	Facilitators are not readily available on the LMS for live discussion	3.00	1.91
7	The feedback on the LMS by facilitators is timely	1.94	1.44
8	LMS is only a platform to access learning materials and not facilitators	3.07	1.10
9	Learners are satisfied with the instructional delivery and feedback on the LMS	2.65	1.21
10	Facilitators only deploy instructions and give feedbacks when exams are near.	3.41	1.50
	Mean (Ẍ)	**2.81**	

Table 2 shows that statements 7 and 9 are below the mean cut-off mark of 3.00 indicating that they are unacceptable. On the other hand statements 8 and 10 are above the mean threshold. This implies that learners are not motivated enough to accept digital learning. This also implies that the Institute should make the LMS more efficient in terms of instructional delivery and feedback.

Research Question 3: What are learners' experiences on the learning management system concerning ease of interaction and learning?

Table 3: Mean and Standard Deviation of LMS concerning Interaction and Learning

S/N	Questionnaire Items	MEAN	SDev

11	There is no option for learners' group learning or discussion on the LMS	3.40	0.32
12	Not all facilitators make use of the LMS	3.50	1.57
13	Interaction and learning on the LMS is satisfactory	1.07	0.32
14	LMS makes learning and interaction with peers and facilitators easy	3.15	1.01
15	Learning and interaction on the LMS is not encouraging	3.08	1.05
	Mean (Ẍ)	**2.84**	

The result on Table 3 shows that most of the statements are above 3.00 which denotes that they are acceptable statements except for statement 13. This implies that there is ease of interaction and learning on the learning management system and as well, it is satisfactory.

Research Question 4: To what extent can the learning management system be more learner-centered?

Table 4: Mean and Standard Deviation on LMS and Learner Centeredness

S/N	Questionnaire Items	MEAN	SDev
16	Learners prefer studying via LMS because learning is determined at learners' pace and time	3.40	1.32
17	LMS makes learning centered around the learner	3.50	1.57
18	Some learners are not satisfied with the interface of LMS	3.07	1.32
19	The LMS makes learning flexible and accessible to learners at all times	3.01	0.43
20	Learners determine what and when to study on the LMS	3.41	1.01
		3.28	

The result on Table 4 shows that all the learners are in agreement that the learning management system imbibes learners' centredness; however, some learners are not satisfied with the interface of learning management system.

Presentation and Analysis of Hypotheses

Hypothesis: Learners centredness on the learning management system has (no) significance on learners' academic achievement.

Table 5: Hypothesis

Variables	N	Mean	SDev	df	r-cal	r-tab	P	Inference
Digital Learning Environment	376	43.67	8.180	298	0.255	0.195	0.05	**Significant**
Academic Achievement	376	49.67	16.93					

Table 5 shows that the mean scores of digital learning environment, 43.67 is less than academic achievement, 49.7.

Also, the standard deviation of digital learning environment, 8.180 is less than academic achievement, 16.93. In addition, the correlation coefficient r-value, of the two variables is 0.255. The calculated R-value is significant since it is greater than the critical r-value of 0.195, given 298 degrees of freedom at 0.05 level of significance. Consequently, the hypothesis which states "Learners centeredness on the learning management system has significance on learners' academic achievement" are thus accepted. Hence, the Hypothesis which states that, "Learners centredness on the learning management system has no significance on learners' academic achievement" is hereby rejected.

Discussion

The purpose of this study is to "Evaluate Distance Learners' Centeredness on the use of Learning Management System in Distance Learning Institute, University of Lagos". The data analysis as regards research question one reveals that learners' perception towards the learning management system in terms of learning resources is positive. However, learners perceive LMS as a platform for continuous assessment and study materials. Attitudes are "inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic" (Taiwo, 2010). This is in corroboration Rosenberg *et al.* (2013) where it is noted that e-learning is at least as effective as traditional instructional strategies and that there are no major differences in academic performance between the more traditional and more technology-oriented modes of instruction. More so, in relation to online teaching, some studies indicate that this medium of delivery has a positive impact on learning resources.

Research question two reveals that facilitators are not readily available on the learning management system for live discussion. Also, feedbacks are not timely and for these reasons, majority of the distance learners are not satisfied with the learning management system as regards instructional delivery and feedback. This is inclined with Idowu (2014) when he opined that, "Criteria such as accuracy, comprehensiveness, balanced and accurate presentation and currency as well as style and functionality are being utilized to select internet sites of value to their users".

The third research question sought find out what are learners' experiences on the learning management system concerning ease of interaction and learning. According to the data analysis, interaction and learning is not at its best and unsatisfactory as distance learners find it discouraging, interaction and learning on the learning management. This might occur in continuum due to the reality that Higher Institutions in Nigeria have not been properly funded, and the academic libraries are unable to acquire and install information and communications technology facilities.

Conclusion

The approach of learner-centeredness in teaching and learning has gained tremendous ground in the education sector. However, the technicality for it sustenance in many parts of the world in meeting up with the SDG 4 depends on technological platforms. Enhancing the Learning Management System which is one of the commonly used medium in developing world like Nigeria will go a long way in providing education for all.

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