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USE OF MULTIMEDIA TECHNOLOGY AMONG THE LECTURER AND STUDENTS OF OSUN STATE UNIVERSITY

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1. INTRODUCTION

The roles of any university to the national development through high level of manpower training to provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interest of all Nigerians, provide high quality career counselling and lifelong learning programme that prepare undergraduate students with the knowledge and skills for self-reliance and the world of work, reduce skill shortages through the production of skilled manpower relevant to the needs of labour market, promote and encourage scholarships, entrepreneurship and community services as well as to promote national and international understanding and interaction. Universities, therefore, pursue their objectives through teaching, research, dissemination of existing and new information, and the pursuit of service to the community and storehouse of knowledge. However, Huda and Hidayah (2015) found out that a crucial way to fulfil these roles and achieve great success is through good access to and proper use of Multimedia Technology (MMT). These technologies are mainly available in the university to support teaching and learning. The researchers explained further that over the past 30 years, the advancement in technology appropriate for lecturers and undergraduate students use has increased remarkably. Furthermore, Rodewald (2016) elucidated that the use of multimedia technologies can be found as early as 1922 when Thomas Edison proclaimed that “Motion picture is destined to revolutionize our educational system and that in a few years it will supplant the use of textbooks”. It was clarified further that MMT integration could change curriculum and modify the responsibilities of lecturers to those who make learning an active process and development of tasks to advance undergraduate students knowledge as well as interactions in studying and learning.

In this 21st century, the stereotyped traditional learning process and settings are mostly out of trend while the use of MMT containing audio, visual animation effects naturally and humanly gives more access to information and offers a sense of reality and operates excellently as to the development of lecturers and students’ interest and motivation in teaching and learning (Patel, 2013). Conceptually, the term MMT according to Ampa (2015), MMT is the use of computers or other electronic digitally manipulated means to create and combine text, art, graphics, audio, and video that allow users to interact, create, and communicate. Chun, Kern, and Smith (2016) also noted that MMT is the ability to combine various media in the form of text, video, graphic, audio, and interaction used to convey messages from the sender to the recipient of the message. MMT can be found on electronic equipment ranging from mobile phones and portable audio-visual devices to desktop computers others include camcorder, digital camera, webcam, information graphics, interactive whiteboard, podcast, video slide share, optical scanner, CD-ROM drive, projector, media player, television, mobile phone, digital microphone, DVD and video cassette recorders (Rao, Rao, and Rao, 2016; Khan, 2015). The importance of MMT in academic environment cannot be overemphasized. This is because, the standard for effective teaching and learning materials are flexible by accommodating navigation, hyperlink, an interface for teaching and learning, easily updatable, content related materials, user-friendly and suitable (Rusmanto, 2012). Furthermore, it enhances teaching content and also changes the lecturer centered model to learner-centered model, that is, from “sage on stage” to “guide on the side as well as a partner in the learning process, guiding undergraduate students to independently discover meaning within the subject are and basically enriches teaching and learning efficiency (Jayanthi, 2017). The researcher clarified further that, the benefit of MMT goes beyond time and space, visual and dependable atmosphere for teaching and learning but also stimulates undergraduate students’ creativities, uniquely inspired positive thinking and communication

skills in social practice and increases classroom information for both the lecturers and undergraduate students.

In order to increase the use of MMT in educational institutions in Nigeria, Aina and Adekanye (2013) stated that Nigerian government established several educational MMT centres for the provision/procurement and distribution of educational media to educational institutions such as the Curriculum Development Centre, Enugu, this produces maps and graphs for schools in its graphic arts section and National Education Technology Centre, Kaduna that has contributed greatly to the growth and development of high-level manpower for educational broadcasting in Nigeria. The government also emphasized that the United Nations Education Scientific and Cultural Organization (UNESCO), the United State Agency for International Development (USAID) and United Nation Development Programme (UNDP), among others immensely contributed in diverse ways to the provision of MMT in Nigeria. Similarly, the recent developments in the field of MMT have led to a renewed interest in Osun State Government to embark on a ground-breaking step through its Opón Ìmò Technology Enhanced Learning System (OTELS) by launching a multimedia device called Opón Ìmò, “Tablet of Knowledge” for the education sector which was expected to revolutionize learning in the State and around the world.

Due to the fact that multimedia technology provides academic institutions with the opportunity to harmonize teaching and learning processes, it is unfortunate that there was low usage of these technologies among lecturers and undergraduate students despite huge amount of investment that has been spent on the purported technology (Ani & Ugwu, 2016). Furthermore, despite the fact many studies had been carried on the use of multimedia technologies, to the best knowledge of the researcher, it was observed that the situation of Osun State University is yet to be investigated. Therefore, it is against this backdrop that this study attempt to examine the use of multimedia technology by the lecturers and undergraduate students in Osun State University.

2. Research questions of the Study

- i. What are the multimedia technologies available in Osun State University?
- ii. What are the perceptions of lecturers and students about the use of multimedia technologies?
- iii. What is the frequency of use of multimedia technology by lecturer and students in Osun State University?
- iv. What are the challenges that lecturers and students encountered while using multimedia technologies?

3. Hypothesis

H₀₁ There is no significance difference in the perception of lecturer and students about the use of OPAC

4. Scope of the Study

The study specifically required to examine the use of MMT between Lecturers and Undergraduate Students in Osun State University. It covers the lecturers and undergraduate students in Osun State University. Geographically, the study covers the whole campuses spread across the six geopolitical zones of Osun State namely; Osogbo, Ejigbo, Ifetedo, Ikire, Ipetu-Ijesa, and Okuku.

5. Literature Review

The need to use MMT in education has attracted worldwide grounds because it is a significant means of refining the quality and standard of teaching and learning. This concurrence is due to the fact that the use of MMT in education has an enthusiastic advantage on lecturers and undergraduate student's inspirations to teach and learn respectively (Abilimi, Amoako, Ayembillah & Yeboah, 2016). Popovska and Zaharieva (2014) noted that lecturers and undergraduate students use MMT to tap into resources across geographical boundaries, communicate with experts outside the institution, and safely connect and collaborate with other undergraduate students, parents and the local community. Importantly, online tools and programs provide access to the full suite of subject and learning areas not offered within the classroom. Furthermore, the availability of MMT provides lecturers and undergraduate students with a powerful communication medium and offers them new insights into organizing, synthesizing, and evaluating information. It has the potential to change the roles of lecturers and undergraduate students by allowing them to create their own interpretations of information (Karen & Barron, 2002). Luqman and Furqon (2017) hold the view that the availability of MMT in the university serves as the incorporation of elements of audio, visual, text, animation integrative designed to create dynamic presentations. MMT as one type of media is specified as the use of computers to create and combine text, graphic, moving image (video and animation) by incorporating a link. WebCrawler (2013) identified MMT as the medium, gadgets, and machines that are needed in transmitting information to learners. There are various types of MMT currently utilized in teaching and learning processes via academic university which are: computer system, microphone, mobile device, Internet, television, interactive whiteboard, digital video, online media stream, digital game, pod-cast, projectors, mobile phone, digital player and camcorder.

Abilimi et.al (2016) in their study investigates the availability of educational resources in high schools education in Ghana at the Akuapem North Municipality. The study concludes that majority of lecturers and students surveyed indicated that there are more than enough MMT in the institution. Aramide and Bolarinwa (2010) conducted another study on the availability and use of multimedia and electronic resources by distance learning students in Nigerian universities. The study mainly focused on the availability of Audio-Visual and electronic resources, competence of students in the use of AV and electronic resources and their frequency of use in National Open University of Nigeria (NOUN). The area of study for this research is Ibadan study centre. A total of 149 students were selected for the study across departments at the Ibadan study centre. The researcher used questionnaire to elicit information from respondents. The data was analyzed by the use of percentages and frequency distribution. The study revealed that the institution provides video recordings, posters, charts, electronic databases, and email, while students make personal provision of audio recordings, pictures, radio, television, multimedia projectors, e-documents, CD-ROMs, computers, telephones, printers, and digital cameras. Other multimedia technology available in higher institution of learning include digital microphones which are sometimes used in big classrooms that are characterized by endless noise, so lecturers can resort to these wireless digital microphones. Also, students can use the same microphone when asking questions from their lecturers in class, or when they are explaining a subject to their fellow students during a classroom debate (Hamed, 2015). Another example of MMT used for teaching and learning is modern smart whiteboards have touch screen functionality as noted by Hamed (2015), with which the lecturers can illustrate points using a pen or their finger. Using a projector, lecturers can display visual images on these whiteboards which improve the learning process. Students will learn more easily with visual images. Also, students can use a whiteboard to draw, write or

manipulate images. Smart whiteboards come in various sizes, the wide ones are better because they can show a larger image and can also be used by two students at a time. Most of them are electronically powered, so they can be switched on with a button, and they can also save lecturer's work for later use. The projector is an optical instrument that projects and enlarges the image of the individual slide onto a screen or wall (McGraw-Hill, 2017). The projectors on the other hand enable lecturers to create bulleted PowerPoint presentations or other highly organized notes for the class. With the use of projectors in the classroom, students can take better notes with the ability to discern what information the lecturer's display is most useful to them. Additionally, students can ask the lecturers to repeat a slide if they missed information, or even ask that the lecturers to email the presentation for further review. It releases lecturers from being bound to chalk and dry-erase boards to present information to their students. With the use of projectors, lecturers can now use films, slides, and images to teach students about a variety of subjects (Uluyol & Şahin, 2016).

On the other hands, the use of multimedia seems to be influence on how individual perceived those technologies. The term perception refers to sense organs and external energy or stimuli in order to be able to culminate in attitudes, beliefs, opinions, ideas, and insights. The physical energy received by a sense organ forms perceptual experiences; this is why different people perceive and view things differently depending on their sensory interpretation of the stimulus (Ihuoma, 2012). Alebaikan (2010) suggested three conditions for acceptance of perceptions. First, perceptions are influenced by the stimulus, individual's experience, intention and social needs. Second, the perceiver selects information and forms hypothesis to decide what is actually happening. Third, perceptions are an activity of higher mental processes that enable us to have our own view of the world, anticipate future happening and act accordingly. In this study, the exploration of the respondent perceptions, as in the latter statement, allows for understanding how the lecturers and undergraduate students use MMT. The researcher explained further that perceptions are not only influenced by physical stimulation, which is limited in information value but also derived from past experience and memory. Comi, Argentin, Gui, Origo, and Pagani (2017) believe that computer-based teaching methods may increase students performances when there is an increase in students awareness in MMT use. The researchers argued further that engaging in computer-based teaching methods may increase lecturers and students academic output. If users find a specific technology as a useful one, then the users develop a positive intention of using it and if otherwise it will be rejected. Cassady (1998) who conducted a study on undergraduate students and lecturers perceptions of the effectiveness of computer-aided presentations in lecturers oriented undergraduate course; the report shows that undergraduate students found the computer-aided presentations to be superior to regular class instruction. Hossain, Hasan, Chan, and Ahmed (2017) argue that lecturers' perception towards the use of MMT influences undergraduate students, perception towards technology. They argued further that unless we identify lecturer's perception towards MMT, we cannot expect the lecturers to effectively support the integration of technology into the curriculum. The more knowledgeable the lecturer is with the multimedia applications instruction, the more favourable his perception will be, and the perception of the lecturer towards the multimedia use will affect teaching.

Commenting on lecturer's perception towards the use of MMT, Hew and Brush (2007) opined that lecturers who easily accept and incorporate new ideas, changes and reforms into their practices are more likely to make use of MMT in their teaching. Such lecturers would have a positive perception towards the use of technology in teaching and learning processes. In acceptance, implementation, and success of any new technology, positive perceptions are

expected to be paramount. The studies presented thus far provided evidence that the perceptions of lecturers and undergraduate students towards the use of MMT will determine the effective use of the technology for teaching and learning. This opinion was revealed by Beauchamp and Kennewell (2013) that only when the special features of MMT are perceived and performed by both lecturers and undergraduate students, can its influence be revealed. Diatmika, Irianto, and Baridwan (2016) noted that lecturers and undergraduate students are likely to perceive a technology as easier to use and useful if they have direct experience in using it. Furthermore, Atkinson (1996) who argued that attention is essential in developing cautious perception. According to Atkinson "In business and professional life the successful man is usually he who has developed perceptive powers; he who has learned to perceive, observe, and note". Therefore, perception depends mainly upon observation and notice. Similarly, Kisanga (2016) explained that there was limited use of MMT in educational training due to minimal technical support. Smeets (2005) carried out an investigation on the frequency use of MMT. It was revealed that the MMT often used by the lecturers and students. Regarding the lecturers and undergraduate students frequency use of MMT, it was revealed that frequency use of computer, media player and the use of the internet for information search were used daily, weekly or more often by the majority of the respondents. This is line with Oshinaike and Adekunmisi (2012) investigation on uses of MMT.

Furthermore, Nwalo (2003) noted that there is a gross lack of trained personnel to handle the few available multimedia resources. This disrupts the proper usage of these resources in libraries. In a situation where librarians are not computer literate, it becomes difficult to operate the system. This limits the proper usage of multimedia resources in libraries because it is the knowledge a man has that he can put into proper usage to help others acquire something from it. Michael (2005) noted that multimedia resources such as films and sound recording seem particularly complex in terms of their format, specification and conservation or preservation needs and are not easy to categorize, catalogue, handle, store or distribute, thereby hampering their accessibility. A study carried out at Illinois state university (2011) showed several factors that affected the use of multimedia resources. The study shows that majority of the respondents agreed that three factors imposed barriers to the use of multimedia resources are; lack of institutional support; lack of financial support; and lack of time to learn new technology. In the same vein, Furr and Bacharach (2014) reported that lack of computer system and other specific software to support some areas of teaching and research. Onasanya, Shehu, Oduwaiye, and Shehu, (2010) postulated that Lack of electricity supply; High Internet Service Providers (ISP) fees; Insufficient and irregular funding of multimedia initiatives; The absence of enabling environment, including highly regulated telecommunication industry; unsatisfactory performance of internet service providers and absence of incentives to promote innovation and risk taking, and high costs of multimedia resources are some of the challenges that affect the use of multimedia resources. Furthermore, a study conducted by Jegede (2011) on the availability and use of instructional media in institutions in Lagos State, found that epileptic power supply; lack of operational manpower; lack of maintenance culture; funding; lack of knowledge in the use of instructional media; outdated instructional media and incompatibility of software.

6. Methodology

This study employed descriptive survey design. This type of study describes the quantitative or numeric description of trends, attitudes, behaviours, or opinions of a population by studying a sample of that population. From sample results, the researcher generalizes or draws inferences to the population (Creswell, 2014). This method was considered appropriate because

it enabled the researcher to have an understanding of the attitudes and perceptions randomly selected towards the use of MMT in the university. Furthermore, the population of this study comprises all lecturers, year 2 and year 3 undergraduate students of Osun State University. Year 2 and 3 undergraduate students were included because they might have enough knowledge on the use of MMT. As at 2018, the total number of lecturers and undergraduate students in Osun state university is 299 and 471 undergraduate students of year 2 and year 3 respectively across the six campuses divided into colleges that made up the institution i.e. College of Agriculture (Ejigbo); College of Education (Ipetu-Ijesa); College of Humanities and Culture (Ikire); College of Law (Ifetedo); College of Management and Social Sciences (Okuku); College of Science, Engineering and Technology (Osogbo). Stratified random sampling technique was used to select sample size. Therefore, the study selected 192 and 377 lecturers and undergraduate students respectively by using Raosoft sample size calculator at 90% level of confidence. Questionnaire was used to collect data from the respondents. The questionnaire was divided into 2 parts (Part A and Part B). Part A deals with the demographic of respondents while Part B contained items to capture data on the four research questions. In order to determine if the instrument worth what is expected to measure, the validity of the instruments was approved by MMT experts from the Faculty of Communication and Information Sciences, University of Ilorin. The reliability was subjected to Cronbach Alpha as the coefficient of reliability (r). The results are as follow: scale on the availability of MMT had a co-efficient of 0.83; perceptions of lecturers and undergraduate students about MMT had a co-efficient of 0.721; frequency of use of MMT had a co-efficient of 0.754; and challenges to the effective use of MMT had a co-efficient of 0.582. In this study, research assistant was employed to help the researcher in data collection and this technique enabled the researcher to approach many respondents more easily. A total number of 192 and 377 copies of the questionnaire were administered to the lecturers and undergraduate students respectively. Out of which 173 and 313 were retrieved from lecturers and undergraduate students respectively. Before they filled up the questionnaire, they were given a short brief about the study and how to answer the questionnaire. Data was analysed using Statistical Package IBM - SPSS Version 21.0 software. Quantitative data derived from the demographic section and other closed questions were analyzed using descriptive statistics of frequency counts and percentages while T-test was used to test the only null hypothesis of the study.

7. Data Analysis

The demographic information is presented in Tables below:

Table 1 Distribution of Respondents by campus

Category	Okuku	Ikire	Osogbo	Ifetedo	Ejigbo	Ipetu-Ijesha
Lecturers	34	30	56	10	20	23
Students	59	54	101	21	24	54

Table 2 Distribution of respondents by gender

Status	Gender	Frequency	Percentage %
Lecturers	Male	98	56.6
	Female	75	43.4
	Total	173	100

Students	Male	173	55.3
	Female	140	44.7
	Total	313	100

Table 3 Distribution of respondents by age

Status	Age	Frequency	Percentage
Lecturers	16-25	3	1.7
	26-35	46	26.6
	36-45	78	45.1
	46-55	29	16.8
	above 56	17	9.8
	Total	173	100
Students	16-25	197	63.0
	26-35	67	22.0
	36-45	23	7.0
	46-55	19	6.0
	above 56	7	2.0
	Total	313	100

The demographic information of the respondents showed that majority of the respondents were from Osogbo campus representing 56 and 101 lecturer and students respectively. Based on their gender, the result shows that, 56.6% of the lecturers were male; while 55.3% students were male. This shows that majority of the respondents were male. Furthermore, the result showed that majority of the lecturers fall between the ages of 36-45 years old, while majority of the undergraduate students were between the ages of 16-25 years old.

Research Question 1: What are the multimedia technologies available in Osun State University?

Table 4: Available multimedia technologies available in Osun State University

Statements	Available		Not Available	
	L	S	L	S
Television	85.9	79.6	14.1	20.4

Projector	65.2	89.6	34.8	10.4
Radio	84.6	88.4	15.4	11.6
Digital microphone	73.2	79.4	26.8	20.6
Multimedia software	6.7	3.8	93.3	96.2
Interactive with board	35.2	23.9	64.8	76.1
Internet facilities	70.6	85.5	29.4	14.5
Media player	84.2	86.7	15.8	13.3
Computer	86.4	88.9	13.6	11.1

Note: L= Lecturer while S= Students

Table 4 revealed the multimedia technology available in Osun State University. The results showed that majority of lecturer and student claimed that television, projector, radio, digital microphone, internet facilities, media player and computer are the multimedia technologies available in Osun State University.

Research Question 2: What are the perceptions of lecturers and students about the use of multimedia technology?

Table 5 Perceptions of lecturers and undergraduate students about the use of MMT

Statements	Agree		Disagree	
	L	S	L	S
MMT is easy to use	89.7	93.2	10.3	6.8
MMT saves my energy	99.3	88.9	0.7	11.1
MMT saves my time	78.9	94.7	21.1	5.3
It enabled me to develop interest in teaching and learning content	83.2	69.9	16.8	30.1
No benefit in using MMT for teaching and learning	48.9	40.7	51.1	59.3
MMT provides communication medium for information	99.4	98.5	0.6	1.5
MMT is expensive for teaching and learning	79.6	87.4	20.4	12.6
MMT promotes active teaching and learning	98.8	77.9	1.2	22.1
It has no effect on the quality of teaching and learning	2.9	3.8	97.1	96.2

Note: L= Lecturer while S=Students

The results in table 4 reveal the perception of the respondents on the use of MMT. The result showed that majority of the lecturer and students had positive perception about the use of multimedia technologies. This is because majority of lecturers and students appreciated the benefits accrued by the use of MMT such as it is easy to use; saving their energy; promotes active teaching and learning; MMT has effect on the quality of teaching and learning.

Research Question 3: What is the frequency of use of multimedia technologies by lecturers and students of Osun State University

Table 6: Frequency use of MMT by lecturers and students in Osun State university

I used:	Daily		Weekly		Monthly		Never	
	L	S	L	S	L	S	L	S
Television	15.0	9.6	38.7	42.8	16.8	21.1	29.5	26.5
Projector	9.8	7.7	5.2	23.0	37.6	28.8	47.4	40.6
Computer	57.8	41.6	39.3	15.7	8.7	7.3	10.4	19.2
Interactive Board	7.5	14.1	21.4	45.0	16.8	9.3	54.3	31.6
Digital Microphone	8.7	8.0	20.8	33.2	46.2	29.7	24.3	29.1
Media Player	37.6	42.5	16.8	3.2	29.5	26.8	16.2	27.5
Digital Camera	19.1	21.4	17.3	8.9	31.2	13.7	32.4	55.9
MMT Software	33.5	24.9	7.5	2.2	30.1	32.6	28.9	40.3
Internet Facilities	67.6	75.1	16.8	3.2	6.9	2.2	8.7	19.5

Note: L=Lecturer and S=Student

Table 6 presents the distribution and frequency of use of MMT by the lecturers and undergraduate students. In general, the table shows that majority of the lecturers do not use some of the MMT daily except Internet facilities and computer. This is because the results showed that majority of the lecturers do not use interactive board; digital microphone; projector, and media player daily. Only internet facilities and computer were indicated that lecturers used daily. on the

part of student, the result revealed that large number of undergraduate students use Internet facilities, media player and computer daily for learning.

Research Question 4: What are the challenges that lecturers and students encountered while using multimedia technologies?

Table 7: Challenges Lecturers and Students Encountered while using MMT

Statements	Agree		Disagree	
	L	S	L	S
There is not enough time to use MMT for teaching and learning	67.3	55.7	32.7	44.3
Owning to logistics I have to travel using MMT for teaching and learning	79.4	89.6	20.6	10.4
MMT software is not readily available for teaching and learning	89.4	67.9	10.6	32.1
Teaching and learning schedule do not allow for using MMT	64.3	85.9	35.7	14.1
MMT is too expensive for teaching and learning	69.2	67.9	30.8	32.1
Integrating MMT into the curriculum is rather cumbersome in teaching	84.6	54.2	15.4	45.8
Insufficient Internet bandwidth or speed hinders the use of MMT for teaching and learning	53.1	99.6	46.9	0.4
Using MMT is not a requirement for teaching and learning	21.6	13.8	78.4	86.2
Insufficient number of MMT discourages their use for teaching and learning	78.9	88.3	21.1	11.7

Insufficient technical support from information communication and technology department deters their use for teaching and learning	84.5	74.9	15.5	25.1
Obsolete MMT hinders their use for teaching and learning	56.8	84.7	43.2	15.3

Note: L=Lecturer while S=Student

Table 7 showed the challenges that lecturers and students encountered while using MMT. The result in the table indicated that there are so many challenges faced by the lecturers and students in actualizing the use of MMT such that majority of the respondents identified insufficient technical support; integrating MMT into the curriculum is cumbersome; insufficient internet bandwidth and obsolete MMT hinders them from using it for the pedagogic purpose; and they need to travel between walls in other to make use of MMT.

Hypothesis Testing

H₀₁: There is no significant difference in the perceptions of lecturers and undergraduate students about the use of MMT in Osun State University.

Table 8: Significant difference in the perceptions of lecturers and undergraduate students about the use of MMT

Variable	N	M	SD	T-cal	Df	P
Lecturers	173	27.965	2.81			
Students	313	28.060	3.36	73.318	484	.000**

The results in table 8 revealed the differences in the perception of lecturers and students about the use of multimedia technologies. The result showed that there is a significant difference in the perception of lecturers and students about the use of MMT. This is because t-cal=73.318 is greater than the associated p-value which is 0.000. Furthermore, the result showed that there is a difference in the mean score of lecturers and undergraduate students because the mean score of undergraduate students which is 28.060 is found to be significantly higher than the mean score of the lecturers which is 27.965. Therefore, the null hypothesis is rejected. This in turn means that there is a significance difference in the perception of lecturers and undergraduate students towards the use of MMT.

8. Discussion of Findings

The importance of MMT in institution of learning cannot be overemphasized; this is because it has contributed immensely to the teaching and learning. This is confirmed in the work

of Abilimi, Amoako, Ayembillah and Yeboah (2016) who postulated that the need to use MMT in education has attracted worldwide grounds because it is a significant means of refining the quality and standard of teaching and learning. This concurrence is subjected to the fact that the use of MMT in education has an enthusiastic advantage on lecturers and undergraduate student's inspirations to teach and learn respectively. Based on the multimedia technologies available in Osun State University, the finding revealed that television, projector, radio, digital microphone, internet facilities, media player and computer are major MMT available in the institution. This finding is in agreement with the work of Aramide and Bolarinwa (2010) who conducted a study on the availability and use of multimedia and electronic resources by distance learning students in Nigerian universities. The study revealed that video recordings, posters, charts, electronic databases, email, audio recordings, pictures, radio, television, multimedia projectors, e-documents, CD-ROMs, computers, telephones, printers, and digital cameras are the major MMT available in the institutions understudy. Furthermore, on the perception of lecturers and students about the use of MMT, the study found that both lecturers and students had positive perception about the use of MMT. This finding is in line with the work of Diatmika, Irianto and Baridwan (2016) who reported that lecturers and undergraduate students are perceive a technology as easier to use and useful if they have direct experience in using it. The implication of this finding is that the positive perception that lecturers and students had about the use of MMT will make them to continuing using the technology.

In the same vein, the result revealed the frequency of use of MMT by the lecturers and students in Osun State University, the results showed that majority of the lecturers and students use internet facilities, computers and media players daily while they do not use other multimedia technologies daily. This finding supported the work of Oshinaike and Adekunmisi (2012) who revealed that internet and its facilities have the highest frequency of use, followed by computer as well as radio, projector and graphics were regularly being used in the teaching, and learning processes. However, the findings show that digital camera; projector; interactive board were never used by lecturers and students. The reasons for this may be subjected to the challenges that lecturers and students encountered while using those technologies. Based on the challenges that lecturers and students encountered while using MMT, the study reported that there are so many challenges faced by the lecturers and students in actualizing the use of MMT such insufficient technical support; integrating MMT into the curriculum is cumbersome; insufficient internet bandwidth and obsolete MMT hinders them from using it for the pedagogic purpose; and they need to travel between walls in other to make use of MMT. This findings corroborate the work of Onasanya, Shehu, Oduwaiye, and Shehu (2010) who noted that the problems which prevent lecturers and undergraduate students from using MMT revolves around lack of electricity supply, internet service providers (ISP) fees, insufficient and irregular funding of multimedia initiatives, absence of enabling environment, unsatisfactory performance of internet service providers, not a requirement for teaching and learning, high costs of MMT and obsolete multimedia equipment. Lastly, the only tested hypothesis revealed that there is a significant difference in the perception of lecturers and students about the use of MMT. This is because $t_{cal}=73.318$ is greater than the associated p-value which is 0.000. Furthermore, the result showed that there is a difference in the mean score of lecturers and undergraduate students because the mean score of undergraduate students which is 28.060 is found to be significantly higher than the mean score of the lecturers which is 27.965. Therefore, the null hypothesis is rejected. This in turn means that there is a significance difference in the perception of lecturers and undergraduate students towards the use of MMT.

9. Conclusions

This study emphasizes that MMT has the potential to offer an outstanding teaching and learning experience in Osun State University. Majority of the lecturers and students claimed that limited MMT available in their institution. Furthermore, majority of the lecturers and undergraduate students in Osun State University hold positive perception about the use of MMT. The use of MMT in a traditional informative environment requires listening to the perceptions of lecturers and undergraduate students to enhance the teaching and learning process. In addition, the study concluded that majority of the lecturers and students in Osun State University averagely use MMT and faced a lot of challenges while using the MMT. Finally, the study concluded that there is significance difference in the perception of lecturers and students about the use of MMT.

10. Recommendations

The following recommendations are made based on the findings of this study;

1. Adequate multimedia facilities should be made available in centralized sections or units of the university so as to enhance effective and easy pedagogic service delivery.
2. Lecturers need to have the motivation and encouragement to teach using MMT in order to ensure a successful experience for themselves and their students.
3. Training has to be offered to students who lack the level of required skills.
4. Workshops training and retraining, conferences and symposium should be organized for lecturers, students and administrators to enlighten them on the need for MMT education.
5. A well-organized yearly evaluation that investigates lecturers and students perceptions of MMT for teaching and learning has to be implemented for the development.
6. Lecturers should consider how to integrate MMT as part of their teaching plan pursuit in order to sustain the interest of their students all through the lecture period.

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