## Media Resources utilisation and Polytechnic Lecturers Productivity in South-West Nigeria

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#### Abstract

The study was carried out to investigate the influence of media resources utilisation on productivity of polytechnic lecturers in south-west, Nigeria. The survey research design was adopted for the study while close-ended questionnaire was used for data collection. A total of 735 copies of questionnaire were administered to the polytechnic lecturers, out of which only 711 (96.7%) were returned with useful responses and were considered adequate and appropriate for the data analysis. Findings from the study revealed availability of media resources to polytechnic lecturers in the South-west, Nigeria and that printed resources and non-print resources topped the list of media resources available to the polytechnic lecturers surveyed. Also, the study established regular use media resources by the polytechnic lecturers in South-west, Nigeria made use of media resources on regular basis and majorly for the purposes of preparing lecture notes, research and publications, obtaining general knowledge, paper presentation and writing papers and proposals. High level of productivity as well as positive significant relationship between media resource utilisation and job productivity of polytechnic lecturers in the South-west, Nigeria were established. The study recommended that modern and relevant media resources should be provided for the lecturers so as to improve their academic productivity and that the polytechnic lecturers should put in more effort into attending and participating in seminars, workshops and conferences by presenting more papers and writing more journal articles to enhance their productivity level.

**Keywords:** Media resources utilisation, Productivity, Polytechnic lecturers in Southwest Nigeria

#### Introduction

The productivity of lecturers is key to the attainment and achievement of the goals and vision of tertiary institutions. Productivity has to do with the knowledge, skills and attitudes required to enable an individual perform the expected activities in the job description, and may be high or low depending on the input of the employee (Nakpodia, 2011). Unfortunately, there has been a decline in lecturers productivity in many educational institutions in Nigeria, of recent, since many of the lecturers exhibit low level of productivity due to inadequate supply of institutional materials cum financial resources that can bring about the desired productivity in their institutions. According to Vipinosa, (2015), productivity is to measure effectiveness and competence of teachers in their teaching profession which reveals how much an individual can produce in a certain period of time with available resources. Naturally, productive individual contributes greatly to the growth of institution, establishment or society to which he belongs. Every establishment or institution definitely looks up to her staff for effective service delivery which will assist in achieving the goal of the institution which usually has to do with attaining high level of productivity.

In academic institutions, productivity of lecturers is considered in terms of teaching, preparing for class, research and scholarly activities, students research supervision,

interacting with students outside classroom, working with students other than course works, innovation and conducting community service activities (Sullivan, Mackie, Massy and Sinha, 2012). In addition, the extent to which an institution such as polytechnic would become productive depends principally on the effectiveness of the work force or staff, which is made up of different individual whose perception of his or her ability can be closely linked to how he or she learns or behaves.

Generally, there are several factors that influence the productivity level of lecturers. Most institutions do not support their learning and research activities with adequate equipment and instructional materials such as computer and other technical aids. Lack of relevant and adequate skills on the part of some lecturers to gaining access to the content of media resources could also undermine the productivity of lecturers (Aina and Adekanye, 2013).

Media resources are information bearing materials which can be regarded as essential part of educational process and stimulating tools in education, which facilitate teaching and learning. Haliso and Laja-Ademola (2013) asserted that, the quality of teaching, research and community service of lecturers coupled with their publications, depend on the quality of information sources and services used by them. They added that a lecturers role in the working environment and in the world of scholarly communication depends on the quality of information used. Information provided in most media resources is pivotal to achieving successful work performance and increased job productivity among lecturers. The lecturers work involve creating, using, manipulating and disseminating information to others, who will in turn use and manipulate the information to create more information and knowledge (Haliso and Laja-Ademola, 2013). Lecturers are group of workers, classified as knowledge workers whose work involves using mental faculty and using information (Mohanta, 2010). The importance of media resources to lecturers cannot be over emphasised as there is need for them to access information sources from the different formats, ranging from the prints to electronic formats in which information is recorded and from which it is retrieved. These resources provide them with diverse information needed to help them improve in the areas of teaching and research.

Media resources include all kinds of materials which can be used to store and transmit information and they come in numerous formats, such as, print and non-print materials (Egunjobi, 2012). The print materials are paper based information materials such as textbooks, reference books, monograph and so on. The non-print materials are however, often referred to as audio-visual resources, a product of advanced technology, some of which require special equipment to operate (Adeoye and Popoola, 2011). Meawhile, studies have revealed that media resources are not being integrated as classroom tools especially in developing countries. The extent of usage in some places is not only varied but also not consistent. Also, some institutions experience inadequate media resources (Nyika, 2015). The importance of these media resources cannot be over-emphasised as it is opined that lecturers access to them would go a long way in exposing them to diverse information needed especially in the areas of teaching and research. They are tools that could be used to enhance teaching effectiveness, stimulate the lecturers` interest to work, and consequently stimulate the lecturers overall productivity in tertiary institutions.

The polytechnic is an institution that helps in the quest for technological and economic growth. It is an institution of higher learning, providing manpower needs to advance education sector and national development just as it is specifically charged with the

primary responsibility of producing technical manpower needed for industrial growth in Nigeria. Polytechnic education places a strong emphasis on practical based learning and attachment of requisite skill acquisition in every facet of course delivery. Polytechnics in Nigeria are set up to impart knowledge and necessary skills for provision of competent and well skilled labour force for industrial and technological development in Nigeria. Polytechnic lecturers, in addition to their academic knowledge, are to acquire interpersonal skills, communication and presentation, skills as well as problem solving skills to enhance their productivity and also assist their students to be able to compete with their mates globally. The lecturers are always under the great pressure to conduct research, publish scholarly articles, teach classes, advise their students and also serve in various committees, hence there is need for lecturers in polytechnics to embrace the full use of diverse media resources in the implementation of curriculum and their research activities.

The productivity of polytechnic lecturers is often defined in terms of teaching effectiveness, research output or publications and community service. Unfortunately, there is a serious decline in polytechnic lecturers productivity due to several factors including media resources utilisation. There is evidence of low utilisation of media resources in institutions where they are provided. There is poor utilisation of many available electronic media resources due to lack of digital skills, low level of competence and resistance to adopting new digital technology to effectively teach in the classroom. When teaching is not effectively carried out, it has a negative effect on the quality of students that are produced. Thus, this study surveyed media resource utilisation and polytechnic lecturers' productivity in Southwestern Nigeria.

The findings of the study could shed light on the need by the polytechnic library to provide maximum support to the polytechnic lecturers by providing them with the necessary media resources which could help them improve on their job. The management of the institutions would realise the importance of media resources to learning, thereby making funds available to libraries to provide more of these resources to assist both the staff and students. It is expected that the study could be of great significance to the polytechnic students, as the teaching and learning would be made better and easier, when these resources are being integrated into their learning activities. Also, they would experience changes in the way lectures are delivered to them. Relevant research questions were posed and answered in the study.

#### **Research questions**

The following questions were answered in the study:

- 1. What types of media resources are available to polytechnic lecturers in Southwest, Nigeria?
- 2. What is the frequency of media resource utilisation by polytechnic lecturers in South-west, Nigeria?
- 3. For what purpose do polytechnic lecturers in South-west, Nigeria utilise media resources?
- 4. What is the level of productivity of polytechnic lecturers in South-west, Nigeria?
- 5. What relationship exists between media resource utilisation and productivity of polytechnic lecturers in South-west, Nigeria?

## Literature Review

Media resources are information bearing materials which appear in various formats. They include not only the paper media such as books, journals, newspapers but also

comes in form of audiovisual media and electronic resources such as charts, radio, models, television, audio cassettes, video cassettes, CDs, computer, computer software, internet, e-journals, e-books, projectors and other media. Fakunle (2008) classified the media resources into print, visual, audio, audio-visual, static (flip chart, board) and electronic resources. These media resources are regarded as essential part of educational process and a stimulating factor which facilitates learning and also aid the promotion of continuing development of individuals. According to Fayose (2000), the media resources can be categorized based on their functions, level of scholarship and functions. In tertiary institutions, they are mainly categorized into the level of scholarship and function which include study/teaching and research materials. The study/teaching materials consist of recommended textbooks, journals, reference books monographs and so on which are used for study, while the research materials are used by higher degree students and lecturers. These research materials include periodicals, government publications, conference proceedings and papers (Fayose, 1995).

As important as the media resources are, their usage in the classroom teaching and research is determined by the way they are perceived by the lecturers who are to use them. The importance of instructional media for both the teachers and students cannot be over-emphasised, as they are used to improve the quality of instruction and also enrich the research output of lecturers. The media resources play very important role in the process of teaching, learning and other contemporary scholarly achievements. Teachers need various kinds of information for teaching and research for the purpose of impacting in students and for self development (Adeoye and Popoola, 2011). Likewise, the use of media resources for classroom instruction enables the growth of specific learning abilities and enhances intellectual skills. A productive lecturer would utilise available media resources to enhance students learning and also use them to support his teaching and research activities.

Fletcher (2006) observed that lecturers who use the media technologies effectively will inevitably raise their quality of teaching experience. Media resources are information carriers that play important role in enhancing teaching and learning in tertiary institutions. Crittenden (2009) argued that technical and vocational teachers use information communication technologies to store, create, share and exchange information. They use modeling, diagrams and other interactive examples for teaching. Unwin (2014) affirmed that the quality of teaching and learning has been enhanced through the provision of a variety of media resources and participatory methodologies. Al-Ansari (2006) studied the use of internet by the faculty staff. It was found out that majority of them have been using the internet and computer for more than five years and the internet has helped them to save time and find up-to-date information. Opeke and Odunlade (2011) described media resources as variety of information bearing materials which teachers (lecturers) use to teach, present, illustrate and elucidate teaching activities which include journals, textbooks, theses, online databases and so on. Media resource utilisation is a means through which subject mastery and authority is exercised by the teacher or lecturer.

Media resources can be seen as communication and educational tools which could be inform of equipment, software and facilities that are used to collect, process, preserve, store and deliver information or data. Media resources can be used to enhance learning in any discipline, in the classroom and also, for out of classroom assignments. The non print media, most of which are the product of advanced technology and require special equipment to operate, are usually categorized into visual, audio and audio-visual media. Vakkari (2008) studied the influence of media resource use on scholarly work

and publication productivity at university of Finland where the university scholars agreed that the use of media resources has improved their work. According to Thanuskodi (2012) revealed in his study that a significant percentage (32.78%) of respondents for his study used printed journals and (19.44%) respondents used both the printed and electronic resources. The study of Opeke and Odunlade (2011) confirmed that the highest percentage of polytechnic lecturers mostly utilise textbooks (93.5%). This is followed by journals (80.4%), conference proceedings (56.5%) and encyclopedia (52.2%). In the study conducted by Haliso and Laja-Ademola (2013), the findings revealed that journals were rated as highest in having influence on lecturers academic productivities.

The use of electronic information resources enhances innovation in teaching and it also allows research to be carried out within the shortest possible time. Many studies have revealed that despite the challenges facing higher education in Nigeria, electronic information resources have become an asset to the members of academic community, helping them in performing their academic activities and promoting teaching and learning (Aregbesola and Oguntayo, 2014; Okiko,, 2012). Electronic information resources have been identified as important research tools, which are available to complement the print-based resources. Sivathaasan, Murngathas and Chandraseka (2014) gave a list of electronic information resources to include e-books, online journal, e-magazing, e-news and so on. In the study carried out by Otu, Asante and Martin (2015) on awareness and utilisation of e-journals by faculty of Koforidua Polytechnic, Ghana, it was reported that most of the faculty members were aware of the existence of e-journals in the polytechnic. Meanwhile, the strong positive correlation which was revealed between awareness and utilisation of e-journals was not statistically significant. The implication of this is that awareness of the existence of e-journals do not imply that the e-journals are adequately utilised by the faculty members. Nevertheless, the finding further revealed that e-journals were having significant impact on the academics teaching and research activities.

Onasanya et al., (2010) noted that lecturers in tertiary institutions are basically involved in two things which are teaching and research. The ICTs have the potentials of ensuring effectiveness and efficacy in the areas of teaching and research. Olaofe (2005) opined that when teaching and learning process is critically accessed in Nigerian tertiary institutions, one would observe that the challenges facing the lecturers in their institutions are no longer the covering of course contents or in adopting appropriate teaching pedagogy but having access to ICT and using it to improve teaching and learning.

Internet is another medium that carries relevant and current information to assist lecturers in the areas of teaching and research and it has been identified as an invaluable tool for teaching, learning and research (Yumba 1997; Ojedokun and Owolabi 2003; Adomi, Omodeko and Otolo 2004). The internet as part of media resources has been found useful to higher education institutions both in the developed and developing nations of the world Oghenevwogaga and Oghenevwogaga (2006) studied the impact of internet on academic staff research and it was revealed that majority of the respondents, 68 (97.1%) attested to the fact that internet has contributed significantly to the ease of their research work. It allows them to download related information materials for research and also ease the sending and receiving of research materials. Likewise, a survey conducted by Bjork and Turk (2000) among authors and readers of scholarly articles revealed that individuals within the middle age group used

the internet more than the younger or older groups. The survey also revealed that the professors/teachers and researchers used internet as one of the media resources.

Several studies have been carried out on the use of e-resources by lecturers, students and research scholars in tertiary institutions and research organisations. Okello-Obura and Magara (2008) studied on the access and utilisation of electronic information at the Makerere University having a response rate of 76%, the study revealed that the respondents derived a lot of benefits from electronic information resources, as it allows them to have access to wider range of information and their academic performance improved as a result of their access to quality information. Jagboro (2003) also conducted a study among some Nigerian Universities and found out that s significant number, 45.2% of respondents accessed electronic resources through cybercafes. This, according to her was as a result of proximity of cybercafés to user facilities. Kaur and Vernia (2006) in their study found that users of e-resources use all sources available to them regularly such as the CD ROMS, on-line databases, Web resources and audio/video tapes. Seventy-eight percent (78%) of the respondents from another study felt that the use of e-journals has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

In the study carried out by Egberongbe (2011), it was revealed that most lecturers (90.6%) use electronic resources such as e-journals, e-mails among others. The study revealed that both the lecturers and scholars acknowledged the usefulness and importance of e-resources to their research and productivity. It was revealed that the use of e-resources are very common among the lecturers and research scholars of the university, as majority of them are dependent on electronic resources to get desired and relevant information. The internet enables the lecturers to acquire new knowledge about teaching practices, research findings and also affords them the opportunities of sharing news about the profession can be shared much more easily and quickly among scholars.

Creamer (2004) in her assessment of faculty publication productivity acknowledged that individual lecturers reputation, visibility and advancement in the academic reward structure depends on the utilisation of the new technologies. In the same study, she empirically established the fact that academics of all ranks that do not actively use the Internet are significantly less likely to be among the top producers of research publications in their fields. In other words, a small group of scholars of all ranks with innovative skills are adjudged by this study to account for a large proportion of the research publications produced in their fields due to their versatility with the internet environment.

#### **Research Methodology**

The research design adopted for this study is the survey design. The population for the study comprised all the 2751 lecturers in the state owned polytechnics in South-west, Nigeria. The sample for the study was selected through a multi-stage sampling procedure. Stage one involved the use of purposive sampling technique to select the oldest polytechnic from each state considered for the study. Thus, Lagos State Polytechnic, Lagos State, The Polytechnic Ibadan, Oyo State, Rufus Giwa Polytechnic, Owo, Ondo State, Osun State Polytechnic, Iree, Osun State and Moshood Abiola Polytechnic, Abeokuta, Ogun State were selected for the study. At the second stage purposive sampling technique to select 3 out of the commonly available schools/faculties in the polytechnics chosen for this study. These are schools of

Engineering, Sciences and Environmental Studies. The third stage involved the use of total enumeration to include all the lecturers within the three chosen faculties. This was in view of the fact that the total population of the lecturers was not too large.

The research instrument for this study was a structured questionnaire named Media Resource Utilisation and Productivity of Polytechnic Lecturers Questionnaire (MRUPPLQ) which consists of three sections (A-C). Section A is on demographic variables of the respondents such as the institution, school, age, gender, academic qualification, and rank. Section B is tagged Media Resource Utilisation by Polytechnic Lecturers (MRUPL). Five main items were developed to identify the types of print and non-print media resources that are available and accessible to polytechnic lecturers. It was also designed to elicit data on purpose and frequency of usage of media resources by polytechnic lecturers. It was developed by the researcher. Section C consists the Productivity Scale for Polytechnic Lecturers (PSPL) and it consists of thirty items that measure polytechnic lecturers' productivity in the areas of teaching, research and publication output. It is a 4-point likert scale of Strongly Agree (SA) = 4, Agree(A) = 3, Disagree(D) = 2, and Strongly Disagree (SD) = 1. (See Appendix 1, Section E). It was developed by the researcher. The questionnaire was given to the supervisor and experts in library and information science for their inputs on the adequacy and appropriateness of the items in the instruments. The questionnaire was trial-tested on 30 lecturers from College of Technology, Esa Oke which was not part of the Polytechnics used for the main study in Osun State, to determine their reliability coefficients. The data obtained were analysed using Cronbach Alpha Coefficient. The reliability coefficients of each the Media Resource Utilisation ( $\alpha = 0.95$ ) and Productivity ( $\alpha = 0.77$ ). Data collected for research questions 1 to 5 were analysed using descriptive statistics such as frequency counts, percentages, means and standard deviations while research question 5 was answered using Pearsons product moment correlation.

#### **Interpretation of Results and Discussion of findings**

Out of 735 copies of questionnaire administered to the lecturers, only 711 (96.7%) were returned with useful responses and were considered adequate and appropriate for the data analysis.

#### Demographic characteristics of the respondents

The demographic characteristics of respondents and the results show that majority of the respondents 481 (67%) were males while 230 (32.4%) were females. Majority of the respondents were within the age ranges of 25-44 (52.1%) and 45-54 (21.1%). Most respondents had Masters degree 362 (50.9%) which implies that most of the polytechnic lecturers are highly educated. Majority of the respondents surveyed were lecturers in the senior categories ranging from Lecturer II to Chief Lecturer with response rate of 413 (58.2%).

Research question 1: What types of media resources are available to polytechnic lecturers in the South-west, Nigeria?

S/N	Statements	HA	А	FA	NA	Mean	Std.Dev		
Print	Print Resources								
Α	Textbooks	445	218	44	5	3.55	0.64		
		62.6%	30.6%	6.2%	0.7%				
В	Encyclopedias and	387	262	48	14	3.44	0.71		
	Dictionary	54.4%	36.8%	6.8%	2.0%				
С	Journals	358	238	101	15	3.32	0.79		

#### Table 1: Media resources available to polytechnic lecturers

		50.20/	22.50/	1417	0.10/		
		50.3%	33.5%	14.15	2.1%		
D	Newspapers	349	250	90	22	3.30	0.81
		49.1%	35.1%	12.7%	3.1%		
E	Newsletters	323	167	70	50	3.22	0.89
		45.5%	37.6%	9.9%	7.0%		
F	Book of Abstract	303	272	121	16	3.21	0.80
		42.6%	38.2%	17.0%	2.2%		
G	Conference	247	350	100	14	3.17	0.74
	proceedings	34.8%	49.2%	14.0%	2.0%		
Η	Bulletins	278	280	141	11	3.16	0.79
		39.1%	39.4%	19.9%	1.6%		
Ι	Posters	283	252	139	37	3.10	0.89
		39.8%	35.5%	19.5%	5.2%		
J	Theses and	206	281	193	30	2.93	0.85
	Dissertations	29.0%	39.5%	27.2%	4.2%		
Wei	ghted mean $= 3.24$						1
	print resources						
A	Illustrations and	279	274	124	35	3.12	0.87
A	Drawings and	279 39.2%	274 38.5%	124 17.4%	35 4.9%	3.12	0.07
D	Realia (real objects)	282		17.4%	4.9%	3.04	0.05
В	Realia (real objects)		223			3.04	0.95
0	Charte	39.6%	31.35	22.1%	6.9%	2.04	0.00
С	Charts	261	256	158	36	3.04	0.89
<b>D</b>		36.7%	36.0%	22.25	5.1%	2.02	0.067
D	Pictures	282	226	142	60	3.03	0.967
		39.6%	31.8%	20.0%	8.5%		
E	Maps	249	250	179	33	3.01	0.89
		35.0%	35.2%	25.2%	4.7%		
F	Models	147	353	164	46	2.85	0.82
		20.7%	49.7%	23.1%	6.5%		
G	Posters	131	382	150	49	2.84	0.80
		18.4%	53.7%	21.1%	6.9%		
Weig	ghted mean $= 2.99$						
Elec	tronic media resources						
А	Computer	431	210	61	9	3.49	0.71
11	Computer	60.6%	29.5%	8.6%	1.3%	5.19	0.71
В	Printers	392	233	66	21	3.40	0.78
D	1 milers	55.1%	32.75	9.3%	2.9%	5.40	0.78
С	Laptops	385	237	65	2.370	3.39	0.79
C	Laptops	54.2%	33.4%	9.1%	3.3%	5.59	0.79
D	Notaboolya	34.270	235	9.1% 79	53	2.22	0.92
D	Notebooks					3.22	0.92
Б		48.5%	33.0%	11.1%	7.5%	216	0.02
Е	Multimedia projector	285	274	128	23	3.16	0.83
-		40.1%	38.6%	18.05	3.3%	0.10	
F	Scanner	291	270	101	49	3.13	0.90
		40.9%	38.0%	14.2%	6.9%		
G	Internet	309	228	119	56	3.11	0.95
		43.4%	32.0%	16.7%	7.9%		
Н	Electronic mail	277	234	130	70	3.01	0.98
		38.9%	32.9%	18.3%	9.8%		
Ι	E-books	272	238	134	68	3.00	0.98
		38.2%	33.5%	18.8%	9.6%		
J	E-journals	250	247	137	77	2.94	0.99
		35.2%	34.7%	19.2%	10.9%		
Κ	Radio	260	231	137	84	2.94	1.01
		36.5%	32.5%	19.2%	11.8%		
	1			1		1	

Nigerian School Library Journal, Vol 21, March 2022

L	Digital camera	271	215	137	88	2.94	1.03
L	Digital califord	38.1%	30.2%	19.3%	12.4%	2.71	1.05
М	CD ROMS	232	256	139	84	2.90	0.99
		32.7%	36.0%	19.6%	11.8%		
Ν	Television	210	281	162	59	2.90	0.92
		29.5%	39.5%	22.8%	8.3%		
0	Online Public Access	256	197	160	97	2.86	1.06
	Catalogue (OPAC)	36.0%	27.7%	22.5%	13.7%		
Р	Audio cassette	246	188	150	128	2.78	1.11
		34.6%	26.4%	21.1%	18.0%		
Q	Ipads	173	268	146	124	2.69	1.03
		24.4%	37.65	20.6%	17.4%		
R	Teleconferencing	92	194	239	186	2.27	0.99
		13.0%	27.3%	33.6%	26.1%		
S	Video cassette	57	204	290	160	2.22	0.89
		8.0%	28.7%	40.8%	22.5%		
Т	Photocopiers						
Weig	ghted mean $= 2.97$					•	
Data	bases						
А	Science Direct	232	154	167	159	2.65	1.15
		32.6%	21.6%	23.5%	22.3%		
В	EBSCOHOST	232	131	182	166	2.60	1.17
		32.6%	18.4%	25.6%	23.3%		
С	AGORA	39	162	331	179	2.09	0.83
		5.5%	22.8%	46.6%	25.2%		
Weig	ghted mean $= 2.45$						
Gran	nd weighted mean $= 2.91$						
	U U						

Nigerian School Library Journal, Vol 21, March 2022

Table 1 reveals the responses of the respondents to types of media resources are available to polytechnic lecturers in the South-west, Nigeria. The rating is as follows: Printed resources (3.24) is ranked highest by the mean scores rating, followed by Non print resources (2.99), Electronic media resources (2.97), while Databases (2.45) is ranked lowest. Overall, the results revealed availability of media resources to the respondents since the overall weighted mean of 2.91 is higher than the criterion mean of 2.50 set as benchmark for availability of media resources. This implies that media resources were available to polytechnic lecturers in the South-west, Nigeria. The results further revealed printed resources (3.24) and non-print resources (2.99) as topping the list of media resources available to the lecturers surveyed.

Research question 2: What is the frequency of media resources utilisation by polytechnic lecturers in the South-west, Nigeria?

1 a.01	Table 2. Frequency of media resources utilisation by polyteenine recturers									
S/N	Statements	Daily	Weekly	Fortnigh	Never	Mea	STD.			
				tly		n	D			
Print	Resources									
Α	Textbooks	452	144	101	14	3.45	0.81	Regular use		
		63.6%	20.25	14.2%	2.0%					
В	Journals	284	236	149	43	3.07	0.92	Regular use		
		39.9%	33.2%	20.9%	6.1%					
С	Encyclopedias and	269	250	125	68	3.01	0.97	Ocassional		
	Dictionary	37.8%	35.1%	17.6%	9.5%			use		
D	Newsletters	287	215	109	100	2.97	1.06	Ocassional		
		40.3%	30.3%	15.3%	14.1%			use		
E	Newspapers	311	167	102	130	2.93	1.15	Ocassional		

 Table 2: Frequency of media resources utilisation by polytechnic lecturers

		12.00/	00.50	1.4.40/	10.00/	T			
		43.8%	23.5%	14.4%	18.3%			use	
F	Book of Abstract	212	240	186	74	2.83	0.97	Ocassional	
		29.75	33.8%	26.1%	10.4%			use	
G	Conference	196	234	207	75	2.77	0.97	Ocassional	
	proceedings	27.5%	32.85	29.1%	10.6%			use	
Η	Theses and	134	281	218	79	2.66	0.91	Ocassional	
	Dissertations	18.8%	39.5%	30.6%	11.1%			use	
Ι	Posters	205	188	165	152	2.63	1.11	Ocassional	
		28.9%	26.5%	23.2%	21.4%			use	
J	Bulletins	154	231	215	112	2.60	1.00	Ocassional	
		21.6%	32.45	30.2%	15.8%			use	
Weig	the mean $= 2.89$								
•	print resources								
A	Illustrations and	313	205	131	63	3.08	0.99	Regular use	
Л	Drawings	44.0%	28.8%	18.4%	8.8%	5.00	0.77	Regulai use	
В	Charts	287	167	18.470	69	2.95	1.03	Ocassional	
Б	Charts	40.4%	23.5%	26.4%	9.7%	2.95	1.05		
С	Pictures	263	189	144	117	2.84	1.10	use Ocassional	
C	Fictures	203 37.0%	26.55	20.25	16.4%	2.04	1.10		
D	Dealia	37.0% 297				2.02	1 1 0	use Occasional	
D	Realia (real objects)	297 41.8%	143 20.05	124 17.5%	147 20.7%	2.83	1.18	Ocassional	
Б						2.70	1.00	use	
Е	Maps	251 25.20/	167	187	107	2.79	1.08	Ocassional	
Г	N 11	35.3%	23.5%	26.25	15.0%	2.60	0.00	use	
F	Models	94 12 20/	343	171	103	2.60	0.89	Ocassional	
G		13.2%	48.3%	24.0%	14.5%	0.45	1.10	use	
G	Posters	190	149	159	213	2.45	1.18	Ocassional	
***	1 . 1	26.7%	21.0%	22.4%	29.9%			use	
-	Weighted mean = 2.79								
	ronic media resources				T	T			
А	Internet	427	182	54	48	3.39	0.89	Regular use	
		60.1%	25.6%	7.6%	6.7%				
В	Laptops	397	193	63	51	3.32	0.92	Regular use	
		55.9%	27.1%	9.7%	7.2%				
С	E-books	369	230	68		3.30	0.88	Regular use	
		51.9%	32.3%	9.6%	6.2%				
D	Computer	370	218	78	45	3.28	0.90	Regular use	
		52.0%	30.6%	11.0%	6.3%				
E	Printers	357	228	82	43	3.26	0.89	Regular use	
		50.2%	32.0%	11.6%	6.1%				
F	Electronic mail	363	185	87	75	3.18	1.02	Regular use	
		51.1%	26.0%	12.2%	10.6%				
G	E-journals	316	216	100	77	3.09	1.01	Regular use	
		44.5%	30.5%	14.1%	10.9%				
Н	Photocopiers	328	197	96	90	3.07	1.05	Regular use	
		46.2%	27.7%	13.5%	12.6%				
Ι	Notebooks	299	236	103	73	3.07	0.99	Regular use	
		42.1%	33.25	14.45	10.3%				
J	Scanner	235	240	144	92	2.87	1.02	Ocassional	
5	Souther	33.1%	33.8%	20.2%	12.9%	2.07	1.02	use	
K	Radio	254	179	132	146	2.76	1.15	Ocassional	
17	1.auto	2 <i>3</i> 4 35.7%	25.2%	132	20.6%	2.70	1.15	use	
L	Digital camera	196	267	134	115	2.76	1.03	Ocassional	
L	Digital Califera	196 27.5%	37.5%	134 18.8%	16.2%	2.70	1.05	use	
М	CD ROMS	160	31.5%	130	10.2%	2.74	0.97	Ocassional	
141		22.5%			108	2.74	0.77		
		LL.J%	44.1%	18.4%	14.7%	1	1	use	

Nigerian School Library Journal, Vol 21, March 2022

N	Television	239	202	118	152	2.74	1.14	Ocassional	
		33.6%	28.4%	16.6%	21.4%			use	
0	Multimedia	147	311	164	90	2.72	0.93	Ocassional	
	projector	20.7%	43.75	23.0%	12.6%			use	
Р	Ipads	194	256	113	148	2.70	1.08	Ocassional	
		27.3%	36.0%	15.9%	20.8%			use	
Q	Online Public	152	312	112	135	2.68	1.01	Ocassional	
	Access Catalogue	21.4%	43.9%	15.7%	19.0%			use	
	(OPAC)								
R	Audio cassette	192	211	129	178	2.59	1.14	Ocassional	
		27.0%	29.7%	18.2%	25.1%			use	
S	Video cassette	187	167	161	196	2.48	1.15	Ocassional	
		26.3%	23.5%	22.6%	27.6%			use	
Т	Teleconferencing	106	276	135	194	2.41	1.04	Ocassional	
		14.9%	38.8%	19.0%	27.3%			use	
Weig	ghted mean $= 2.92$								
Data	bases								
А	Science Direct	257	257	166	166	2.47	1.03	Ocassional	
		36.2%	36.2%	23.4%	23.4%			use	
В	EBSCOHOST	119	237	136	218	2.36	1.09	Ocassional	
		16.8%	33.3%	19.1%	30.7%			use	
С	AGORA	51	267	183	209	2.23	0.96	Ocassional	
		7.2%	37.6%	25.7%	29.4%			use	
Weig	ghted mean $= 2.35$								
Gran	Grand weighted mean = 2.74								
	Decision rule: $0.1.1.0 - N_0$ use: $1.1.2.0 - revelu use: 2.1.2.0 - O_0$								

Nigerian School Library Journal, Vol 21, March 2022

Decision rule: 0.1-1.0 = No use; 1.1-2.0 = rarely use; 2.1-3.0 = Ocassional use; 3.1-4.0 = Regular use

Table 2 presents results on the frequency of use of media resources by the respondents. The results revealed regular use of only textbooks (3.45) and journals (3.07) among the print resources while other print resources were found to be on ocassional use by the lecturers. Also, only Illustrations and Drawings (3.08) of the non-print resources was found to be on regular use by the respondents while most of the electronic resources are on regular use. Furthermore, all the databases available to the respondents were found to be occasionally use by the respondents. Electronic media resources (2.92) is ranked highest by the mean scores rating, followed by Printed resources (2.89), Non print resources (2.79), while Databases (2.35) is ranked lowest. Findings indicate the overall weighted mean of 2.74 which is higher than the criterion mean of 2.50. This means that media resources (2.92), printed resources (2.89) and non-print resources (2.79) were the major resources used on regular basis by polytechnic lecturers in South-west, Nigeria.

In determining the frequency of utilisation of media resources by polytechnic lecturers in South-west, Nigeria, the test norm method was used

Test norm of frequency of media resources utilization by lecturers in state-owned polytechnic lecturers in South, Nigeria. Maximum Scores for a respondent on the 40th item access scale  $(40 \times 4) = 160$ Level of use (regular, occasionally and never) = 3 To establish an interval score (160 / 3) = 53

Therefore, an interval score of 53 is used to chart the norm table. Thus, the overall mean score of the polytechnic lecturers in South-west, Nigeria on their frequency of media resource utilisation of 113.93 falls within the range of 108-160 which is considered as regular use. This clearly reveals that polytechnic lecturers in South-west, Nigeria made use of media resources on regular basis.

Interval	Total mean score	Remark
1-53		Never
54-107		Occasional
108-160	113.93	Regular

# Table 3: Test norm Table of frequency of media resource utilisation by polytechnic lecturers in the South-west, Nigeria

Research question 3: For what purposes do polytechnic lecturers in the South-west, Nigeria utilise media resources?

 Table 4: Purposes of media resources utilisation by polytechnic lecturers in the

 South-west, Nigeria

	Frequency	Percent of Cases
Preparing lecture notes	609	92.5%
Research and publication	604	91.8%
Obtaining general knowledge	566	85.9%
Paper presentations	547	83.1%
Writing papers/proposals	304	71.4%
Writing book reviews	323	49.1%

Table 4 indicates that the respondents utilised media resources mostly for preparing lecture notes 92.5%, research and publications 91.8%, obtaining general knowledge 85.9%, paper presentation 83.1% and writing papers and proposals 71.4%. Writing book reviews ranked least among the purposes for which lecturers utilise media resources 49.1%. The implication of this result is that the major purposes for which polytechnic lecturers in south-west Nigeria used media resources are preparing lecture notes, research and publications, obtaining general knowledge, paper presentation and writing papers and proposals.

Research question 4: What is the level of productivity of polytechnic lecturers in the South-west, Nigeria

S/N	Statements	SA	А	D	SD	Mean	STD.
							D
Teach	ning						
1	I allow students participation in	601	100	11	-	3.83	0.42
	all my teaching sessions	84.5%	14.0%	1.6%	-		
2	I keep up to date and revise	582	128	1	-	3.82	0.39
	lecture materials	81.8%	18.0%	0.2%	-		
3	I use variety of assessment	570	134	6	-	3.79	0.43
	strategies	80.2%	18.9%	0.9%	-		
4	In every course 1 take, I instruct	549	153	9	-	3.76	0.46
	and give my students adequate	77.2%	21.5%	1.3%	-		

Table 5: Productivity of polytechnic lecturers in the South-west, Nigeria

		1					1
	course works						
5	I spend considerable part of my	472	193	21	11	3.62	0.62
	work time with students	66.4%	27.1%	2.9%	1.6%		
6	I avoid teaching courses that	79	148	297	188	2.84	0.94
	appear too difficult to me	11.1%	20.8%	41.8%	26.4%		
7	I avoid facilitating students'	138	134	277	162	2.65	1.04
	discussion in class	19.4%	18.9%	39.0%	22.8%		
8	I rarely make course outlines	141	156	247	166	2.62	1.05
	available to students	19.9%	21.9%	34.8%	23.4%		
9	I mark students assignments at	136	163	277	136	2.58	1.01
	random	19.1%	22.9%	38.9%	19.1%		
10	I seldom explore new teaching	366	174	102	69	1.82	1.01
	strategies	51.5%	24.5%	14.4%	9.7%		
Weig	the mean $= 3.13$		•			•	
	arch/Publications						
11	I have participated in one or	559	127	26	-	3.75	0.51
11	more research project in the past	78.6%	17.9%	3.6%		5.75	0.51
	three years	70.070	17.770	5.070	-		
12	I have collaborated with	545	130	28	6	3.71	0.58
14	colleagues about research within	545 76.7%	130	28 4.0%	0.9%	5./1	0.38
	the last three years	/0./%	10.3%	4.0%	0.9%		
13	I have supervised not less than	521	149	21	21	3.65	0.68
15						3.05	0.08
	five students research projects in	73.3%	20.9%	2.9%	2.9%		
1.4	the last three years	4.61	210	00	1.4	2.40	0.70
14	I have published not less than	461	219	89	14	3.48	0.79
	three journal articles in local	64.8%	30.7%	12.5%	2.0%		
	peer reviewed and accredited						
	scientific journals in the last						
1.7	three years	0.61	1.62	100	<i>c</i> 0	0.1.6	1.00
15	I have published three or more-	361	162	129	60	3.16	1.00
	chapter contributions in the last	50.8%	22.8%	18.1%	8.4%		
	three years						
16	I have reviewed one or more	348	173	129	61	3.14	0.99
	proposals for funding agencies	48.9%	24.3%	18.2%	8.6%		
	in the past three years						
17	I have attended international	336	166	137	72	3.08	1.03
	conference(s) at least once in	47.3%	23.3%	19.3%	10.1%		
	the last three years						
18	I have not published any	70	116	278	247	2.99	0.95
	research studies in the last three	9.8%	16.3%	39.1%	34.8%		
	years						
19	I have hardly published an	73	128	277	232	2.94	0.96
	article in a local journal in the	10.2%	18.0%	39.0%	32.7%		
	last three year						
20	I have not participated in any	73	131	279	227	2.93	0.96
	local or international conference	10.3%	18.4%	39.3%	31.9%		
	in the last three years						
21	I have not participated in any	86	114	299	213	2.90	0.97
	workshop/exhibition in the last	12.1%	16.1%	42.0%	29.9%	-	-
	three years						
22	I have no international	114	147	212	237	2.81	1.07
	publication in the last three	16.1%	20.7%	29.8%	33.4%	2.01	1.07
	years	10.170	_0.770		55.170		
23	I have served on an editorial	251	175	148	137	2.76	1.13
45	board of an academic journal in	35.3%	24.6%	20.8%	19.2%	2.70	1.13
	the last three years	55.570	2-7.070	20.070	17.270		
	the last three years	1		1		1	

24 25	I have not presented any international conference papers in the last three years I have not co-authored nor published a textbook in my discipline in the last three years	120 16.9% 109 15.4%	142 20.0% 191 26.8%	258 36.3% 255 35.9%	191 26.8% 156 21.9%	2.73 2.64	0.99
Weig	hted mean = $3.11$						
			Servic	es			
26	I usually participate in school/departmental activities	556 78.3%	130 18.3%	19 2.7%	5 0.7%	3.74	0.53
27	I often advice prospective students	504 70.9%	166 23.3%	33 4.7%	8 1.1%	3.64	0.63
28	I communicate my research outputs by answering public enquiries	333 46.9%	244 33.9%	110 15.5%	26 3.7%	3.24	0.85
29	I rarely serve as adviser to clubs, societies and associations	134 18.9%	131 18.4%	283 39.8%	163 22.9%	2.67	1.03
30	I seldom participate in polytechnic wide committees	243 34.2%	197 27.7%	127 17.8%	144 20.3%	2.24	1.13
Weig	hted mean $= 3.11$				·	·	·
Gran	d weighted mean = 3.12						

Nigerian School Library Journal, Vol 21, March 2022

Table 5 shows the overall weighted mean of 3.12 which is higher than the standard mean of 2.50. This indicates that the productivity of polytechnic lecturers in Southwest, Nigeria is high. It was also observed that the respondents rated 14 items above the weighted mean as the contributing items to their productivity. In the area of teaching, they were rated as follows: I allow students participation in all my teaching sessions (3.83) is ranked highest by the mean scores rating, followed by I keep up to date and revise lecture materials (3.82), I use variety of assessment strategies (3.79), In every course I take, I instruct and give my students adequate course works (3.76).

In research, I have participated in one or more research project in the past three years (3.75), I have collaborated with colleagues about research within the last three years (3.71), I have supervised not less than five students research projects in the last three years (3.65), and I have published not less than three journal articles in local peer reviewed and accredited scientific journals in the last three years (3.48) were ranked as the highest among other items. In service, I usually participate in school/departmental activities (3.74), I often advice prospective students (3.64), I communicate my research outputs by answering public enquiries (3.24) were ranked the highest.

In determining the level of productivity among state —owned polytechnic lecturers Maximum Scores for a respondent on the 30 item scale  $(30 \times 4) = 120$ 

Level of use (high, average and low)= 3

To establish an interval score (120/3) = 40

Therefore, an interval score of 40 is used to chart the norm table.

Thus, the overall mean score of the polytechnic lecturers productivity 93.53 falls within the range of 81-120 which is considered high. This clearly reveals that productivity level of polytechnic lecturers is high.

Interval	Total mean score	Remark	
1-40		Low	
41-80		Average	
81-120	93.53	High	

Table 6: Test norm	Table of productivity	level of polytechnic	lecturers in the
South-west, Nigeria			

Research question 5: What relationship exists between media resource utilisation and productivity of polytechnic lecturers in the South-west, Nigeria.

Table 7: Relationship	between	media	resource	utilisation	and job	productivity of	of
polytechnic lecturers					-		

Variables	Ν	Mean	SD.	R	p value	Remark
	ce 711	108.62	32.96	0.401		~ .
utilization				0.40*	0.00	Sig.
Job productivity	711	90.77	17.08			

Table 7 shows that there is a positive, significant relationship between media resource utilisation and job productivity of polytechnic lecturers in the South-west, Nigeria (r = 0.403, p<0.05). Thus, hypothesis was rejected. This implies that as polytechnic lecturers utilised media resources to boost their teaching presentation, their job productivity was also improved.

# **Discussion of the Findings**

Background information of polytechnic lecturers in South-west Nigeria revealed that there were more male lecturers than female while most of the lecturers were found within the age range of 35-44 years. Furthermore, the majority of the lecturers were found to have qualifications ranging from H.N.D. to Ph.D. The findings showed that the highest no of respondents possessed Masters Degree. Findings on the rank of the lecturers revealed that the majority of the lecturers were senior lecturers. This implies that majority of the respondents have Masters Degree as their highest qualification.

Findings on media resources available to the polytechnic lecturers revealed availability of media resources to polytechnic lecturers in South-west, Nigeria though the availability of print resources were higher than other types of media resources. Textbooks, dictionaries, journals, newsletters, newspapers are majorly, the print resources available to the lecturers in their institutions. The findings corroborate that of Thanuskodi (2012) who revealed print resources as the mostly available media resources. A similar study carried out by Anhwere, Paulina and Manu (2018) on use of media resources by lecturers in Cape Coast revealed textbook as the media resource with highest level of availability, followed by internet.

The findings further revealed that media resources were used on daily and weekly basis. The mostly utilised media resources are textbooks (print), illustrations and drawings (non-print) and internet (electronic). This study is similar to previous studies of Opeke and Odunlade (2011) and Rugut and Makowa (2016) where it was affirmed that print resources especially the textbooks are frequently used by polytechnic lecturers. However, computers and internet are found to be the most frequently used among the electronic media resources. It is not surprising that printed books topped the list probably, due to the fact that print materials are easily accessible. Findings showed

that most of the respondents rely mainly on printed books. Under the category of nonprint resources, illustration and drawings were found to be frequently used by polytechnic lecturers. This may not be far from expectation, because by virtue of polytechnic education, especially in the fields of engineering and environmental studies, these particular media resources are meant to be part of the major teaching instruments. Print materials are easily accessible and more available. The findings showed that most of the respondents frequently utilize textbooks that is, on daily basis. This may be due to the fact that textbooks as a type of print resources, is readily available and accessible to a large number of users and could be accessed by the polytechnic lecturers. The textbooks could also contain the required information for the lecturers teaching and research activities.

Findings showed that the specific purposes for utilising media resources are identified as for research and publication, paper presentations, preparing lecture notes, writing papers, writing book reviews, and obtaining general knowledge. Findings revealed that preparing lecture notes was the most frequent reasons for using media resources, research and publication and obtaining general knowledge. This finding is in line with that of Ukih (2012) and Haliso and Laja-Ademola (2013) that reported lecturers use of media resources to prepare lecture notes.

Also, the findings revealed that a significant percentage of polytechnic lecturers utilise media resources for research and publication purpose. However, this is in contrast with Anhwere, Paulina and Manu (2018), study which reported that vast majority of lecturers utilise media resources for reference purpose. The lecturers may need to be kept abreast of current happenings in their various fields. Furthermore, results from this study also showed that another significant percentage of the respondents utilise media resources for the purpose of obtaining general knowledge. The study revealed that there was moderate significant relationship between media resource utilisation and productivity of state-owned polytechnic lecturers in the South-west, Nigeria. The null hypothesis was rejected. This implies that an increase in use of media resources can lead to a corresponding increase in lecturers' productivity.

#### **Summary and Conclusion**

The study investigated the relationship between media resource utilization productivity of lecturers in polytechnics in South-west, Nigeria. The study showed that the polytechnic lecturers in South-west, Nigeria frequently utilised media resources especially the print resources and electronic resources (such as textbooks and internet). The frequency of utilisation on media resources by the respondents revealed daily and weekly usage of the media resources by the polytechnic lecturers. The study indicated that print media resources were mostly available to the polytechnic lecturers in the South-west, Nigeria. Lecturers' purposes of using media resources were mainly for preparation of lecture notes and for research and publications. There was moderate positive significant relationship between media resource utilisation and lecturers' productivity. The study concluded that there might be a need to give priority to media resources provision for polytechnic lecturers in order to improve their productivity.

#### Recommendations

Based on the findings of this study, the following recommendations were proffered.

- 1. All polytechnic libraries and polytechnic librarians should make deliberate effort to provide adequate media resources for teaching and learning in their various institutions. This will facilitate increased utilisation.
- 2. All polytechnic lecturers should be kept abreast of the various digital devices and electronic information resources, especially in this world of information technology. This will help them to keep up with their counterparts in other parts of the world. The lecturers should engage their students in the use of digital tools and their electronic information resources, so as to facilitate their academic activities.
- 3. The management of polytechnics should come up with policies that would encourage and improve lecturers productivity. Their productivity should not only be rewarded with promotion.
- 4. The state governments should create an enabling environment and make more funds available for the polytechnics to have access to facilities that would improve the lecturers productivity in the areas of teaching, research and publications.
- 5. Modern and relevant media resources should be provided for lecturers so as to improve their academic productivity.
- 6. The polytechnic lecturers should put more effort into attending and participating in seminars, workshops and conferences by presenting more papers and writing more journal articles thus enhancing their productivity.

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