

## **Information Sharing on Teaching and Research in Tertiary Institutions in Katsina State.**

by  
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### **Abstract**

The focus of this study is on information sharing on teaching and research in tertiary institutions in Katsina State. A total of three (3) research questions were raised and answered, the questions sought to find out the type of information academics share and type of ICT's used among others. The study adopted survey research design. From a population of 780, a sample size of 30% (234) was subjected to the study using proportionate stratified random sampling. Questionnaire was used for data collection and data collected from the research questions were analyzed using frequencies and tables. The research discovered among other things that academics use information for teaching and research through conferences, workshops and seminars; academics share information on writing seminar, workshop and conference papers. The research conclude and recommended that, awareness and sensitization fora be formed between and among teachers and researchers on the importance of information sharing, academic institutions to gear up towards responding to the ever changing demands of the information age and for compliance on the latest trends in information sharing.

### **Introduction**

Academic environment is characterized by teaching and research among other attributes and it is believed that, research is a continuous process usually built upon earlier discoveries and findings aimed at achieving positive results and reliable outcomes. Hence researchers do not always work in isolation. In order to avoid duplication of research effort, academics communicate and share information which allows professional scrutiny of every bit of data generated among them. This explains why information sharing is inevitable among academics in their quest for effective and efficient information access for enhanced teaching and research (Fari, 2010).

Information and communication technology (ICT) is a vital tool for effective and efficient information sharing as it oils the speedy, remote, and timely communication process. Online information sharing through the Internet provides the golden opportunity for academics and researchers to communicate and share result of their research findings. This in essence provides an environment for steady and accelerated flow of information among them.

The researcher observed that tertiary institutions in Nigeria do not adequately exploit the opportunities of information sharing including the study area in particular. By implication, they could be lagging behind in their quest for improved teaching and research, subsequently, slowing their professional growth and hamper effective teaching. It is against this background that this study is designed to examine the effect of information sharing on teaching and research in tertiary institutions in Katsina State.

### **Tertiary Institutions In Katsina State**

Katsina has been a learning centre since time immemorial, this led to the rapid development of the people economically and socially, the city is known for its Islamic and Western education. At the time for this research Katsina has the following tertiary institutions Viz; Umaru Musa Yar'adua University, Katsina Islamic University, Hassan Usman Katsina Polytechnic, Federal College of Education katsina, Isa Kaita College of Education Dutsinma and Yusufu Bala Usman College of Legal and General Studies Daura. These institutions as stated are the focus of this research.

### **Information Sharing On Teaching And Research**

Information is certainly a vital element for creativity and innovation, a basic resource for learning and human thought, a key resources in creating more knowledgeable citizens, a factor that enables citizens to achieve better results in their academic lives, and important resource for national socio-economic development (Byerly and Brodie, 1999). Information sharing is referred to as exchange of data between a sender and receiver. The four primary information sharing design patterns are sharing information one-to-one, one-to-many, many-to-many, and many-to-one.

The academics need information about current research and development activities and their socio-economic implications in their field of specialization and in peripheral fields. He needs particular item of information essential to his day-to-day work. He needs information which helps him to find and to check through all of the relevant information existing on a given subject to determine the current state of the art in that field or problem.

Academics stand to increase their productivity by intellectual intercourse, particularly with their colleagues within their specialised areas as well as by those outside it (Abalaka, 1991). Therefore research results communicated has the advantage of being accessible and assessable to objective findings of other colleagues. Fari (2010), asserted that, Academic activities, governance, public service, industry and commerce would not take place without regular flow of up-to-date, relevant and timely information. This is why academic institutions, with the required technological capability are developing systems for collecting, managing and sharing information through networking.

### **ICT's For Information Sharing On Teaching And Research**

Information and Communication Technology (ICT) facilities are described as all the facilities available for the identification, generation, processing, storage, packaging, preservation, conservation and transfer of information regardless of time and distance constraints, these facilities are very much available, accessible and usable in Nigeria especially in the tertiary institutions of learning for the purpose of teaching, learning and research (Fari, 2010). The availability of computers, internet facilities and services, telecommunication facilities information transfer is made easier and faster. The use of ICT has had profound effects on all sectors of life, more importantly education. Information and communication technology (ICT) is a vital tool for effective and efficient information sharing as it oils the speedy, remote, and timely communication process. Online information sharing through the Internet provides the golden opportunity for academics and researchers to communicate and share result of their research findings. This in essence provides an environment for steady and accelerated flow of information among them. Researchers establish relationships with other colleagues in order to avoid duplication of efforts and to checkmate publishing of works that shows ignorance of relevant facts or new discoveries.

### **Research Questions**

This study will answer the following research questions:

1. What type of information do academics in tertiary institutions in Katsina State share?
2. What type of information and communication technologies (ICTs) are used for information sharing in tertiary institutions in Katsina state?

3. What is the effect of information sharing on teaching and research in tertiary institutions in Katsina state?

### **Objectives of the Study**

1. Identify the type of information shared among academics in tertiary institutions in Katsina State
2. Identify the type of ICTs used for information sharing among academics in tertiary institutions in Katsina state.
3. Determine the effect of information sharing on the teaching and research in tertiary institutions in Katsina State.

### **Research Methodology**

Survey research design was used for this study. Population of the study comprises of 1,041 academic staff in all the tertiary institutions within the boundaries of Katsina state. Proportionate stratified random sampling was used to select the required sample size of 234. The researcher used questionnaire to collect data and descriptive statistics such as tables, charts, percentages are used in analyzing the data that relates to the research questions. Out of the total number of two hundred and thirty four (234) copies of questionnaire distributed. Two hundred and twenty nine (229) were duly completed, returned and found usable for analysis, representing 97.86% response rate.

### **Type of Information Shared**

The researcher provided the respondents with a range of nineteen(19) types of information shared among academics to indicate the type they share among themselves. Their responses are presented in table 3 below.

Table 3: Type of Information Shared

ICT Device/Facility	Yes		No	
	Freq.	%	Freq.	%
Computers	161	70.3	68	29.7
Mobile Phones	112	48.9	117	51.1
Facebook/Twitter/Wiki/YouTube	114	49.8	115	50.2
Short Message Service (SMS)	117	51.1	112	48.9
Fax machine	28	12.2	201	87.8
Radio	124	54.1	105	45.9
Television	103	45.0	126	55.0
Digital Camera	90	39.3	139	60.7
Satellite	84	36.7	145	63.3
Internet facilities	110	48.0	119	52.0
Video player	125	54.6	104	45.4
CD-ROMs	119	52.0	110	48.0
Video Tape	112	48.9	117	51.1
Audio Tape	127	55.5	102	44.5
Flash Drive	174	76.0	55	24.0
Blog	174	76.0	55	24.0
Scanner	92	40.2	137	59.8

Table 3 above indicates that majority of the academics in the institutions do not share information on part-time, visiting and sabbatical jobs 123(53.7%) and Agricultural activities 115(50.2%). While it is clear that academics do share information on writing seminar, workshop and conference papers 176(76.9%), scholarship availability 177(77.3%), self development/improvement 162(70.7%), current/ongoing research 178(77.7%), this is in line with the statement made by Voigt (1979) that an academic needs information which helps him to find and to check through all of the relevant information existing on a given subject to determine the current state of the art in that field or problem. The academics also share information on recreation and entertainment 168(73.4%), politics 181(79%), search techniques 175(76.4%) and trade 162(70.7%) being the highest shared types of information of over seventy percent (70%) each of the total sample. It was also discovered that the academics in tertiary institutions in katsina state do share information on new technologies 117(51.1%).

**Information and Communication Technology (ICT) Usage**

The 21<sup>st</sup> century academics uses a wide range of electronic devices for identification, retrieval, processing, storage and dissemination of information widely known as ICTs, the use of these devices facilitates easier, quicker and timely information

transfer among and between individuals, groups and organizations regardless of their location or time constraints. A comprehensive list of these resources is provided for the academics to indicate their usage in information sharing among themselves. The data obtained is presented in table 4 below

Table 4: ICT Devices Usage

ICT Device/Facility	Yes		No	
	Freq.	%	Freq.	%
Computers	161	70.3	68	29.7
Mobile Phones	112	48.9	117	51.1
Facebook/Twitter/Wiki/YouTube	114	49.8	115	50.2
Short Message Service (SMS)	117	51.1	112	48.9
Fax machine	28	12.2	201	87.8
Radio	124	54.1	105	45.9
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Table 4 reveals the ICT usage for information sharing of the academics in tertiary institutions in Katsina state. Fari (2010) describes ICT as the technology required for information processing. In particular the use of computers and computer software to convert, store, protect, process, transmit and retrieve information from anywhere at any time. The table above shows that 117(51.1%) of the academics do not use mobile phones. Other ICT devices and facilities that majority of the academics do not use includes the social networks of Facebook/Twitter/Wiki/YouTube 115(50.2%), Television, Digital Camera, Satellite, Internet facilities, Video tapes and Scanner are also not used by majority of the academics with a frequency of 126(55.0%), 139(60.7%), 145(63.3%), 119(52.0%), 117(51.1%) and 137(59.8%) as revealed from the table. It was also discovered that 161(70.3%) of the academics in the tertiary institutions in katsina state use computers, Radio 124(54.1%), flash drives and Blogs 174(76.0%) of the total sample each.

**Effect of Information Sharing on Teaching and Research**

The research went further to determine the effect of information sharing on teaching and research of academics in tertiary institutions in Katsina state based on some aspect related to each of the activities which are provided in the following tables.

**Table 5 Effect of Information Sharing on Research**

Effect	Agree Freq(%)	Undecided Freq(%)	Disagree Freq(%)
Access to information relevant to my research work	107(44.4)	30(13.1)	82(35.8)
Awareness on other researches being conducted	90(39.4)	42(18.3)	97(42.3)
Obtaining relevant input on my research from other colleagues	87(38)	43(18.8)	99(43.2)
It is a motivating factor for my research	144(62.9)	31(13.5)	54(23.6)
An appropriate means of publicizing research findings	113(49.3)	44(19.2)	72(31.5)

**Effect of Information Sharing on Research**

One of the most crucial concerns of this research is on the way in which academics interact with their colleagues in the production and dissemination of research results. The academics were asked to indicate the effect of information sharing on their research activities based on some five areas as highlighted in table 5.

Table 5 above reveals that academics in tertiary institutions in Katsina state are motivated to undertake researches through information sharing as 144(62.9%) agreed to the statement, regarding this, Mohammed (2006) observed the unfavorable climate in which academics in Nigeria operate. These include inadequate funds, research facilities and ineffective dissemination of research results. In spite of these factors the Nigerian academics have made valuable contributions in the field of teaching and research. This is in line with the testimony by some of the respondents 107(44.4%) as reflected in the table on

the fact that they do access relevant information to their research work through information sharing.

**Effect of Information Sharing on Teaching**

Teaching is considered to be one of the core activity of academics and through information sharing effective teaching techniques, methods and facilities can be improved. It is in this regard that five(5) aspects towards attaining qualitative teaching activity are listed in table 6 for the respondents to indicate their opinion.

**Table 6 Effect of Information Sharing on Teaching**

Effect	Agree Freq(%)	Undecided Freq(%)	Disagree Freq(%)
A reliable source of input for preparing lectures and lecture notes	94(41.1)	41(17.9)	94(41)
I get relevant reference materials for my lecture	104(45.4)	35(15.3)	90(39.3)
Influences my method of teaching	81(35.4)	48(21.0)	100(43.6)
A source of guidance in assessing my students	95(41.6)	34(14.8)	100(43.6)
Allow others to evaluate my lectures	113(53.7)	35(15.3)	71(31)

Table 6 above shows that information sharing among academics in tertiary institutions in Katsina state has effect on their teaching in terms of getting relevant reference materials for their lectures 104(45.4%) while 90(39.3%) disagree on the effect. Also, 94(41.1%) agrees that it is a source of input for preparing lectures and lecture notes. From this finding it can be seen that majority of the academics do agree to allow others evaluate their lectures 113(53.7%) for possible criticisms and observations, while some 71(31%) disagree. While 81(35.4%) and 95(41.6%) have agreed that information sharing have effect in their teaching method and students assessment respectively.

**Summary of the Findings**

1. Information for teaching and research is acquired through conferences, workshops and seminars.

2. That the ICT facilities mostly used are computers, projectors, internet etc.
3. That information sharing is a motivating factor on teaching and research in tertiary institutions in Katsina state.

### Conclusion

Based on the findings of the study, it could be concluded that, information sharing in tertiary institutions in Katsina State is not largely participated upon, but academics are beginning to realize and to explore and employ a number of techniques for information sharing, this will basically bring about wider participation, wider collaboration, improved and enhanced research output, globalized classroom management techniques towards achieving effective teaching and research objectives in tune with the 21<sup>st</sup> century standards.

### Recommendations

1. More awareness and sensitization fora be formed between and among teachers and researchers on the advantages of information sharing
2. Introduction and Use of modern ICT facilities (computers, digital cameras, storage devices, telecommunication infrastructure, internet and online programmes) in teaching and research and in academic libraries.
3. Cooperative research and joint authorship with both local and international colleagues should be encouraged. This will facilitate intellectual intercourse between academics and enable them to share their expertise.
4. More funds should be allocated to academic institutions to enable them respond to the ever changing needs of the information age.

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