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ICT skills of Staff and Students in E-resource Utilization in Supporting Teaching and Learning in Kampala International University Western Campus

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ABSTRACT

The study was to find out ICT skills of staff and students in e-resource utilization in supporting teaching and learning in KIU western campus and objective three was to identify the effects of e-resource use by staff and students for teaching and learning. A descriptive survey research design was adopted. The target population included Academic Staff and Students from three selected faculties, Faculty of Education, Faculty of Business and Management and Faculty of Biomedical sciences, and library administrators of KIU western campus, totaling 5223. The data obtained from the field were analyzed using descriptive statistics (mean) and presented in frequency tables and inferential statistics. In conclusion, awareness and availability are paramount and because of the positive usefulness of e-resources when applied in teaching and learning by staff and students, it is therefore necessary that the school administration should provide these e-resources to be readily available for use, in large volumes and in all discipline. To this effect, teaching and learning will be carried on effectively and efficiently. All teaching rooms should have functioning internet access to enable demonstration of e-resources for teaching and learning.
Keywords: ICT, Staff, Students, e-resource, teaching, learning.

INTRODUCTION

The advent of information and communication technology (ICT) and electronic information resources has brought about the shift of information from print to electronic format, information that can be accessed with the use of a computer is referred to as an electronic resource [1,2,3,4,5,6]. Advancement in technology has led to the development of computer networks that allow access to numerous amounts of e-resources such as e-books, e-journals, online databases, multimedia, OPAC (online public access catalogue), which effectively and efficiently support teaching and learning in universities [2,7,8,9,10]. The emergence of e-resources has in so many ways transform information handling and management in universities [11,12,13].This dramatic change includes the way information is being provided to students through teaching and learning. Computers and related e-resources have come to play a vital role in teaching and learning. Dadzie [3] writes that electronic resources are resources of great value and are replacing the print resources in a traditional library setting. These e-resources have complemented the traditional means of teaching and learning. Stone and Emery, [4] defines e-resource as being resources in electronic form and library's electronic resource. This study is to assess the level of e-resource utilization in supporting and learning in Kampala international university western campus.

Aim of the study

The study was done to find out ICT skills of staff and students in e-resource utilization in supporting teaching and learning in Kampala International University Western Campus.

METHODOLOGY

Study Design

A descriptive research design was used because it required gathering, analyzing and presenting collected data from a large number of respondents.

Study Area

This study was carried out in Kampala International University Western Campus Ishaka, where developments in the use of e-resource and ICTs has been a major concerned.

Target Population

The population consisted of all academic staff and all students of three faculties' that is Faculty of Education, Faculty of Business and Management and Faculty of Biomedical Sciences and library administrators (library admins) of KIU western campus. A total number of 5223 academic staff, students and library admins was the population for the study. The number of Academic staff in the faculty of education is 66, total number of academic staff in the faculty of business and management is 47 and total number of academic staff in faculty of biomedical is 93 and total number of library admins is 5, making a total of 211 academic staff from the three faculties and library administrators. Total number of students in the faculty of education is 2260, total number of students in the faculty of business and management is 689 and total number of students in faculty of biomedical is 2063, making a total of 5012 students from the three faculties. See table 3.1 below for distribution of Population for the study as at May 2018). KIU western campus had close to 8 faculties but due to limited resources, the researcher could not cover all the faculties and thus selected only three faculties for the study.

Sampling Method

Sample size was arrived at using a multi-stage sampling technique. Multi stage sampling technique entails the process of applying two or more sampling technique for the purpose of selecting an adequate representative sample size. The researcher for the purpose of this study applied the purposive, and probability sampling technique in selecting the sample for the study. Purposive sampling allows for a selection of sample from an entire population using pre-determined criteria relevant or of interest to the study. Purposive sampling was used to select library administrators because they are directly involved with e-resource utilization. Faculty of biomedical sciences was purposely selected because they are to some extent science oriented and most of their course units are taught using e-resources. Again, faculties of business and management and education were purposely selected because they may to some extent have little knowledge about e-resource utilization and so the researcher was interested in finding out why. Probability sampling was also used and was based on the fact that every member of the population (staff and students) had a known and equal chance of being selected. This method of sampling gave the probability that our sample was representative of the population.

Sample Size and Sampling Technique

The total number of academic staff from the three faculties was 206 and that gave us a sample size of 136 for the study. The number of library administrators purposely selected was 5 and thus no sample size. The total number of students from the three faculties was 5012 and that gave sample size of 361 students from the faculties of Education, Business and management and Biomedical in KIU western campus making the total sample size of 502 respondent for the study. This was determined using the [5] sample size determination table that is attached as appendix C.

Data Collection Methods

For the purpose of this study, the researcher contacted sampled respondents for reliable information using observation/resource inspection checklist for academic staff, and a structured questionnaire for the student respondents.

Observation/Resource Inspection Checklist

The researcher used the observation/resource inspection checklist for academic staff and library admins in order to have a near one on one interaction with them, to record observations as in Yes/No options in order to establish observable items such as e-books, e-journals, online data bases, multimedia resources, online public access catalogues (OPACS) and emails, if and when available.

Questionnaire

Questionnaires were administered on the student respondents. The questions were made up of close ended, which required respondents to give a yes or no answer, open ended which were questions that had

unlimited responses. Respondents were to provide a free-form answer which were not restricted to a word or two, and multiple choice questions, which respondents had several option from which to choose. These questionnaires were administered to the respondents in their various study rooms by the researcher. Similarly, the questionnaire allowed for independence in responses from respondents even with the researcher's presence.

Data Processing

Data collected from observation/resource inspection checklist were edited, categorized according to themes and then summarized into percentages in a computer spreadsheet. Data collected from the SAQS were also edited, categorized, coded and entered into the computer using the Statistical Package for Social Sciences (SPSS) to generate summary frequency tables, charts and graphics.

Data Analysis

Data were analyze according to each objective. Objective one and two were analyzed using the descriptive statistics, where the mean and standard deviations were obtained. The researcher used descriptive statistics to generate data and find out the prevalence rate at which these e-resources were available for teaching and learning and whether or not staff and students are aware of them and possess the necessary skills to be able to access them. Objective three was also analyzed using descriptive statistics using a four linkart scale. Lastly, inferential statistics was done in order to correlate the DV (teaching and learning), and IV (e-resources) and find out their significance.

Ethical Considerations

This research study was carried out subject to approval by the Research Ethics Committee of Kampala International University Western Campus, Uganda. To ensure ethical treatment of participants in this research study, certain guidelines were followed according to [6], inform consent, confidentiality, risks and benefits and integrity. Full consent was obtained from the participants prior to the study and informed of their rights and protections. The researcher informed the participants about the study which was to assess the level of e-resource utilization in supporting teaching and learning in KIU western campus. The researcher selected academic staff and students to participate in this study because they need e-resources in the teaching and learning process to enhance academic performance of students and quality of teaching for staff

Informed consent: The principle of informed consent involved the researcher providing sufficient information and assuring the participant about taking part in the research to allow participants to understand the implications of participating in the research and to reach a fully informed, considered and freely given decision about whether or not to do so, without the exercise of any pressure. Voluntary participation of respondents in the research is important. Moreover, participants had the right to withdraw from the study at any stage if they wish to do so.

RESULTS

Table 1: Required Skills to Access E-Resources

VARIABLE	FREQUENCY	PERCENTAGE (%)
	N=361	
Yes	107	29.6
No	254	70.4

Source: *Field data, February, 2019*

Table 4.6 shows that, a high response rate 254 (70.4%) was recorded from the three faculties in which they responded that they lack the required skills to access e-resources, while 107 (29.6%) said they have the required skills to use e-resources which leads us to the problem of non-

utilization of these e-resources as a result of lack of skills.

Table 2: Skills Possessed

VARIABLE	FREQUENCY	PERCENTAGE (%)
	N=107	
Computing skills	53	49.6
Surfing/Information search skills	35	32.7
Networking skills	12	11.2
Technical (mechanical) skills	1	0.9
Retrieval skills	2	1.9
All of the above	4	3.7

Source: *Field data, February, 2019*

In the above table, those who responded were those who said they possess the necessary skills to access e-resources. A high response rate of 53 (49.6%) from the three faculties had computing skills, 35 (32.7%) said they had surfing/networking skills, 12 (11.2%) said they had networking skills, 1 (0.9%) said they had technical/mechanical skills, 2 (1.9%) said they had retrieval skills and lastly 4 (3.7%) said they had all the skills. In this light, we can agree on the above results that having computing skills does not mean that you can access e-resources. You must also possess searching and retrieval skills in order to access to these e-resources.

Table 3: Frequency of Using E-Resources

	Daily		Weekly		Monthly		Rarely		Mean	Std. D
	N=107									
	FREQ	%	FREQ	%	FREQ	%	FREQ	%		
e-books	17	15.9	42	39.3	41	38.3	7	6.5	2.63	0.827
e-journals	13	12.1	59	55.1	29	27.1	6	5.7	2.26	0.744
Online databases	03	2.8	09	8.4	18	16.8	77	72.0	3.58	6.765
Multimedia resources	07	6.5	03	2.8	12	11.2	85	79.5	3.64	0.829
OPAC	19	17.8	13	12.1	33	30.8	42	39.3	2.96	1.108
e-mails	47	43.9	49	45.8	6	5.6	5	4.8	1.71	0.77
e-Music	51	47.7	55	51.4	1	(0.9)	0	0.0	1.53	0.520

Source: *Field data, February, 2019*

From the above table, respondents from the three faculties with a response rate of 17 (15.9%) said they use e-books daily, 42 (39.3%) said they use e-books weekly, 41(35.3%) said they use e-books monthly, 7 (6.5%) said they rarely use e-resources with a mean of 2.63 and standard deviation of 0.827. Also, 13 (12.1%) of the respondents said they use e-journals daily, 59(55.1%) said they use e-journals weekly, 29 (27.1%) said they use e-journals monthly 6 (5.7%) said they rarely use e-journals with a mean of 2.26 and standard deviation of 0.744. Again, 01 (2.8%) of the respondents said they use online databases daily, 19(8.4%) said they use online databases weekly, 18 (16.8%) said they use online databases monthly, 77 (72.0%) said they rarely use online databases with a mean of 3.58 and standard deviation of 6.765. In addition, 07 (6.5%) said they use multimedia resources daily, 03(2.8%) said they use multimedia resources weekly, 12 (11.2%) said they use multimedia resources monthly, 85 (79.5%) said they rarely use multimedia resources. The mean of 3.64 and standard deviation of 0.829 were obtained. In the same light, 19 (17.8%) said they use OPACS daily, 13 (12.1%) said they use OPACS weekly, 33 (30.8%) said they use OPACS monthly, 42 (39.3%) said they rarely use OPACS with a mean of 2.96 and standard deviation of 1.108 obtained. Also, 47 (43.9%) respondents said they use emails daily, 49 (45.8%) said they use emails weekly, 6(5.6%) said they use emails monthly, 5 (5.8%) said they rarely use emails with a mean of 1.71 and standard deviation of 0.77. Lastly, 49 (45.8%) said they use e-music daily, 55 (51.4%) said they use e-music weekly, 1 (0.9%) said they use e-music monthly, 0 (0.0%) said they rarely use e-music. A mean of 1.53 and standard deviation of 0.520 were obtained. The above findings indicates that the percentage of the respondents that possess ICT kills is low which explain why the means were all negative.

Table 4: Required Skills to Access E-Resources

VARIABLE	FREQUENCY	PERCENTAGE (%)
	N=141	
Yes	1401	100
No	0	0

Source: *Field data, February, 2019*

From the table above, a high response rate 140(100%) was recorded as the staff from the three faculties including library admins said they had the necessary skills required to access these e-resources.

Table 5: Skills Possessed

VARIABLE	FREQUENCY	PERCENTAGE (%)
	N=165	
Computing skills	40	24.4
Surfing/information search skills	102	62.2
Networking skills	15	9.1
Technical skills/mechanical repairs	2	1.2
All the above	6	3.0

Source: *Field data, February, 2019*

From the above table respondents were allowed to select more than one option, and that explains the reason for a high frequency of 165. It indicated that staff from the three faculties including library admins possess computing skills with a response rate of 40(24.4%), and a majority of staff possess surfing/information search skills with a high response rate of 102(62.2%), also a percentage of the staff 15(9.1%) said they possess networking skills, 2 (1.2%) staff possess technical/mechanical skill and a response rate of 6(3.0%) was recorded for staff who said they possess all the skills.. This shows that staff can search for a variety of information for students since they possess surfing/information search skills.

DISCUSSION

This study was to find out ICT skills of staff and students in e-resource utilization in supporting teaching and learning in Kampala International University Western Campus. Staff responded that they had the required skills necessary to access these e-resources. Sufficient ICT skills is very essential for the successful use of e-resources. Staff with high ICT skills are more likely to use the electronic information resources more than those with inadequate ICT skills [7], as the case maybe for students who said they lack the necessary skills to access e-resources. Inferential analysis showed that availability of e-resources was more significant, followed by awareness, use and lastly by required skills, agreeing on the fact that if e-resources are used for teaching and learning, it will lead to effective and efficient dissemination of knowledge value added functionality and skill acquisition. This is in line with a study a conducted by [7], on Availability and Utilization of Electronic Resources by Undergraduate students in private Universities in Ogun State Nigeria, who said one of the challenges of utilization of e-resources was lack of skills.

CONCLUSION

It was also found out that the staff population from the three faculties were not satisfied with their use of e-resources because these e-resources were not available in their large numbers which was contrary to the inferential statistics which indicated strong availability of e-resources.

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