

## **AWARENESS AND UTILISATION OF E – JOURNALS BY FACULTY: EVIDENCE FROM KOFORIDUA POLYTECHNIC, GHANA**

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### **ABSTRACT**

Advances in information communication and technology have revolutionised the way in which information for academic research is accessed and disseminated. This study presents the results of a survey on the awareness and utilisation of electronic journal among faculty at the Koforidua Polytechnic. The study employed a descriptive survey with the use of questionnaires as the main instruments to elicit information from respondents. The major finding of the study revealed that there is a strong correlation between awareness and utilisation but it was not statistically significant ( $p>0.05$ ). The study recommends that there should be an increase in awareness of electronic journals among faculty through regular workshops, use of newsletters, flyers and brochures. The study further recommends that the polytechnic should fashion the possibility to introduce remote access to electronic journals it has subscribed to.

**Key Words:** Awareness, utilisation, electronic journals, tertiary institution, west africa.

### **INTRODUCTION**

Successive governments over the years in Ghana have made effort at improving the educational system in the country more especially polytechnic education. Polytechnic education has being crucial in producing middle level manpower to ensure the growth of the country and has therefore seen a constant metamorphosis in terms of the status or policies that established them.

From technical schools offering craft courses in 1960 to polytechnics upgraded to tertiary status offering higher national diploma programme in 1993 and currently conversion of polytechnics into technical universities in 2016. A change in such appeal in the polytechnic mandate requires a total overhaul of the system from infrastructure to human resource capacity issues to enhance the core business of the polytechnic which is research, teaching and learning (Ministry of Education, 2003).

Over the years, research, teaching and learning has been dominated in tertiary institutions by the use of printed materials such as textbooks, magazines, among others as a primary source of information stocked in the library. In the view of Ndinoshisho (2010) advances in information communication and technology has revolutionised the way in which information for academic research is accessed and disseminated.

Kling (2003) in a survey pointed out that scholars highly value electronic journals and most of the scholars preferred electronic journals over print. In alluding to this, Msagati (2014) reiterated succinctly that in higher

education, scholarly electronic journals have become essential tools for research, teaching and learning as they provide access to timely, high quality and scientific information to scholars and researchers with a view to keep abreast with new discoveries and developments. In this regard the current study assesses the awareness and utilisation of e – journals by faculty, drawing on evidence from Koforidua Polytechnic, Ghana.

### Statement Of Problem

The evolution of electronic journal according to Lancaster (1995) begun in the 1960s and today it has managed to proclaim itself as one of the various academic tools available on the internet. The question then is, to what extent has this technological advancement of electronic journal been assimilated, incorporated and used among academics or faculty at Koforidua Polytechnic institution of higher learning. It is against this backdrop that has necessitated a research of this kind to assess the awareness and utilization of e- journals by faculty of Koforidua Polytechnic.

### Objectives Of The Study

Generally, the study seeks to examine the extent to which faculty of Koforidua Polytechnic are aware of and utilise electronic journals in their teaching and research process.

The specific objectives are to:

- i. Find out the level of awareness of e – journal among faculty at Koforidua Polytechnic
- ii. Evaluate the impact of e- journal on teaching and research at Koforidua Polytechnic
- iii. Establish the relationship between awareness and utilisation of e-journals at Koforidua Polytechnic.
- iv. Establish an association between awareness and perceived usage of electronic journals among faculty at Koforidua Polytechnic

### Research Questions/Hypothesis

- i. What is the level of awareness of e – journals among faculty at Koforidua Polytechnic?
- ii.  $H_1$  there is an impact of e- journal on teaching and research among faculty at Koforidua Polytechnic.
- iii.  $H_2$  there a relationship between awareness and utilisation of e-journals among faculty at Koforidua Polytechnic.
- iv.  $H_3$  there is an association between awareness and perceived usage of electronic journals among faculty at Koforidua Polytechnic

### LITERATURE REVIEW

One of the most frequently used electronic resources is the electronic journal. Most people have diverse perceptions as well as impressions of what electronic journals are. According to Chan (1999) the term is often referred to as electronic publishing, electronic serials, online journals or electronic periodicals. Electronic journals play a significant part in any academician's scholarly work and are the most preferential tools of the trade apart from books. Tenopir et al (2003) described the trend of electronic journals as " evolutionary process" as there has been a gradual increase in the use of electronic journals. He further posited that e – journals have become an important information format as they are published, distributed and accessed electronically.

In a study undertaken by Tenopir (2003), he analysed the results of over 200 studies of the use of electronic resources in libraries published between 1995 and 2000. The findings of the study revealed that electronic journals have been rapidly adopted in academic spheres, though the behaviour varies according to the discipline. In a similar research conducted by Naughan (2003) at the Duke University chemistry library between 1991 and 2001 showed the use of print journals by academic researchers was very low as compared to electronic journals. Faizul and Naushed (2013) in their research revealed that most of the users are aware of electronic journals and are not only using them for building and updating their knowledge but also for collecting relevant materials for their study and research purpose.

Other studies conducted by Gardner et al (2008) and Olle and Borrego (2010) revealed that the quality of circulation and the ability to support teaching and research have been improved tremendously as a result of the use of electronic journal as well as an appreciation of 75% of survey respondents stating they consult and read more journal articles than they did in the past.

It is of no doubt that the rise in the popularity of use of electronic journals among academics can be attributed to the perceived advantages in its usage. Stressing on the essential benefit of electronic journals, Linda (1999) and Wiles (1998) posits that "It will no longer be necessary for users to browse through the paper journal contents page hoping to find an article of interest. Instead users will be able to register their areas of interest and the electronic publishing system will deliver articles which match those requirements to the readers desktop".

However, a research conducted by Baro et al (2011) at the Delta State University, revealed that electronic scholarly journal databases were underutilised. The users in the study cited the lack of awareness of the existing resources as the primary constraint they had. Similarly, Ajegbomogun (2007) posits that, while electronic journals have become essential tools for learning, teaching and research, most of the scholars and researchers are not fully utilising them.

Okolo and Magara (2008) posit that the major obstacle to the underutilisation in the use of electronic journals in higher learning institutions was the lack of awareness about the resources. In the study by Oyedapo and Ojo (2013) on the use of electronic resources in Obafemi Awolowo University observed very low usage of electronic resources. They outlined that the major reason that contributed to low utilisation of electronic resources was limited searching skills. Other factors leading to underutilisation of electronic resources according to Manda (2015) included lack of accessibility to computers connected to internet, low internet bandwidth and unrealisable supply of power.

## RESEARCH METHODOLOGY

This study is a descriptive survey with the use of questionnaire as the main instrument to elicit data and information. Convenient sampling method was used to sample the participants of the study. This consisted of 251 respondents drawn from academic staff of the polytechnic. The participants included an associate professor, senior lecturers and lecturers. A 13-item questionnaire consisting of open and closed ended were administered by the researchers on the campus of Koforidua Polytechnic.

Ethical consent was obtained from the Registrar of the study setting before the administration of questionnaires. Out of 251 questionnaires distributed, 201 were completed and retrieved. This represented 80% of the sample size and valid for analysis. The study was conducted during the latter part of the second semester of 2014/2015 in June. With the aid of Statistical Package for Social Science (SPSS) version 16.0 computer software the data obtained were analyzed.

## FINDINGS AND DISCUSSIONS

### Biographical Data

Table 1: Gender of Respondents

Gender	Frequency	Percentage
Male	171	85.1
Female	30	14.9
Total	201	100

Source: survey data, June, 2015

From Table 1, out of total respondents of 201 captured for the study, 171(85.1%) were male while 30(14.9%) were female. The implication was that most of the respondents were male.

Table 2: Title/ Rank of Respondents

Title	Frequency	Percentage
Professor	-	-
Associate Professor	1	0.5
Senior lecturer	15	7.5
Lecturer	185	92.0
Total	201	100

Source: survey data, June, 2015

From Table 2, out of the total respondents of 201, captured for the study, 1(0.5%) was an associated professor, 15(7.5%) were senior lecturers and 185(92.0%) were lectures. This meant that, most of the faculty members are lectures in terms of ranks.

Table 3: Type of Employment of Respondents

Types of employment	Frequency	Percentage
Permanent	195	97
Part time	5	2.5
Others	1	0.5
Total	201	100

Source: survey data, June, 2015

From Table 3, out of the total respondents of 201 captured for the study, 195(97%) were permanent staff, 5(2.5%) were part time staff, 1(0.5%) were on other form of employment. This meant that, most of the faculty members are permanent staff of the polytechnic.

Table 4: Length of Employment of Respondents

Length of Employment	Frequency	Percentage
Between 1-5years	65	32.3
6-10years	90	44.8
11-15years	41	20.4
16-20years	5	2.5
Total	201	100

Source: survey data, June, 2015

From Table 4, out of the total respondents of 201 captured for the study, 65(32.3%) had served the institution between 1-5years, 90(44.8%) had worked for between 6-10years, 41(20.4%) had been in the job for between 11-15years while 5(2.5%) had worked for between 16-20years. This meant that, most of the faculty members had worked for a considerable number of years in the polytechnic.

Table 5: Awareness level of e- journals of Respondents

Awareness Level	Percentage	Frequency
Yes	165	82
No	36	18
Total	201	100

Source: survey data, June, 2015

From Table 5, out of the total respondents of 201 captured for the study, 165(82%) were aware of e-journals in the institution, whereas 36(18%) were not aware of the existence of e-journal in the institution. This meant

that, most of the faculty members were aware of the existence of the e-journal in the polytechnic. This study concur with that of Ali (2005) whose research at the Indian Institute of Technology on the use of electronic information services (EIS) revealed that 95% of the users are aware of EIS provided by the library. Other studies such as that of Kindilchie and Samarraie (2008) also came up with similar results confirming the findings of this current study.

### Testing of hypothesis

#### Relationship between awareness and utilization of e-journals

Table 6: Relationship between awareness and utilisation of e-journals

	Chi – Square	Correlation	Df	Sig.
Pearson	1.02	0.89	6	.065

Source: fieldwork (June, 2015)

Although, a strong positive correlation (.89) was found between awareness and utilisation, it was not statistically significant ( $P > 0.05$ ).

#### Impact of e- journal on teaching and research

Table 7: Impact of e- journal on teaching and research

	Chi – Square	Correlation	Df	Sig.
Pearson	1.08	0.91	3	0.00

Source: fieldwork (June, 2015)

A strong positive correlation (.91) was found between e- journal on teaching and research, it was statistically significant ( $P > 0.05$ ). The findings on the impact of e – journal on teaching and research reflects the results of Rowlands (2007) and Eason et al (2000) whose work showed that electronic journals have significant impact on researchers and scholars.

#### Association between awareness and perceived usage

Table 8: Association between awareness and perceived usage

		awareness	perceived usage
awareness	Pearson Correlation	1	0.13(**).
	Sig. (2-tailed)	.	0.001
	201	201	201
perceived usage	Pearson Correlation	0.13(**).	1
	Sig. (2-tailed)	0.001	.
	201	201	201

\*\* Correlation is significant at the 0.01 level (2-tailed).

(Source: survey data, June 2015)

In Table 8, the correlation coefficient between awareness and perceived usage is 0.013 which is significant at 1%. The results indicate significant positive relationship between awareness and perceived usage; therefore the null hypothesis is rejected.

### CONCLUSION AND RECOMMENDATIONS

From the research outcome it is clear that, most of the faculty members are aware of the existence of the e-journal in the polytechnic. However, the hypothesis test on the relationship between awareness and utilization of e-journals, reveals a strong positive correlation (.89) but it was not statistically significant ( $P > 0.05$ ). This meant that, been aware of the existence of e-journals in the institution do not mean that faculty members make use of it.

Again, testing the hypothesis on impact of e- journal on teaching and research confirmed a strong positive correlation (.91) found between e- journal on teaching and research, which was statistically significant ( $P>0.05$ ). This meant that the use of the e-journal by faculty contributes 91% to research and teaching in the polytechnic. Besides, there was a correlation between awareness and perceived usage at 0.013 which is significant at 1%.

Based on the findings, the study recommends the following as a way of increasing awareness and utilisation of e – journals among faculty at the Koforidua Polytechnic in Ghana.

There is the need for the library to carry out massive publicity to the user community on the availability and use of e – journals. Such awareness and support can be enhanced through regular information literacy programme and regular workshops to promote usage of e – journals. Other strategies such as the use of newsletters, posters, flyers and brochures can also be deployed widely in staff offices and also during exhibitions, conferences and other academic fairs.

The polytechnic should fashion the possibility to introduce remote access to e – journals it has subscribed to. Remote access allows for off campus access to e – journals which can increase use and capitalise on faculty's time as they can read appropriate articles anywhere.

Again, frequent capacity building workshops should be organised for users on how to access electronic journals effectively. Apart from the above, the polytechnic authorities should expand and maintain subscription to print journal subscription.

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