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ACADEMIC STAFF CONSCIOUSNESS AND CONSUMPTION OF THE ESSENTIAL ELECTRONIC AGRICULTURAL LIBRARY (TEEAL) DATABASE FOR TEACHING AND RESEARCH IN THE COLLEGE OF AGRICULTURAL SCIENCES, JOSEPH AYO BABALOLA UNIVERSITY, IKEJI-ARAKEJI, NIGERIA

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**ACADEMIC STAFF CONSCIOUSNESS AND CONSUMPTION OF THE
ESSENTIAL ELECTRONIC AGRICULTURAL LIBRARY (TEEAL) DATABASE
FOR TEACHING AND RESEARCH IN THE COLLEGE OF AGRICULTURAL
SCIENCES, JOSEPH AYO BABALOLA UNIVERSITY, IKEJI-ARAKEJI, NIGERIA**

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Abstract

This empirical study investigated the consciousness and consumption of the Essential Electronic Agricultural Library (TEEAL) database for teaching and research in the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji – Arakeji, Nigeria. The population of the study consisted of the teaching staff in the College of Agricultural Sciences, Joseph Ayo Babalola University. A survey research method was adopted for the study with the use of structured questionnaire as instrument for data gathering. The questionnaire was administered online through e-mail message to the academic staff of the college. The data collected was analyzed by simple frequency count and percentage. The study showed that majority of the academic staff (88.89%) was conscious of the existence of the database in the library. The study also established that the main purpose of TEEAL consumption was for the enrichment and sustenance of teaching and research, although the consumption rate was relatively low due to some hindrances like electricity power outage, lack of training in the use of TEEAL database, absence of an up-to-date version of the database, difficulty in finding information and computer system failure. The paper therefore recommended improvements in the areas of these identified hindrances,

Keywords: TEEAL Database, Consciousness, Consumption, Academic Staff, Joseph Ayo Babalola University, Ikeji - Arakeji

Introduction

The electronic and information revolutions have triggered the development and use of electronic database in academic institutions worldwide. This has caused a change in the landscape of information generation, storage, retrieval and dissemination. The paradigm has considerably improved access to information for teaching, learning and research beyond boundaries. The advent of electronic database has fostered a faster and easier access to current, rich and far-reaching information. Joseph Ayo Babalola University, Ikeji-Arakeji, Nigeria is not out of this global adventure to make available quick, current and timely access to electronic resources for the promotion of scholarship in teaching, learning and research among her members. The university has therefore provided electronic databases including TEEAL an offline database for use in the community. These electronic databases have a pronounced sway on the substance of research delivery in any academic accomplishment. The consumptions of database information resources have undoubtedly given institutions a phenomenal efficaciousness and removed constrictions of time and distance. According to Eden (2015), the use of electronic database in libraries has aided and added value to research activities in tertiary schools in Nigeria. This trend according to Ani, Esin and Eden (2005) has caused a shift from the traditional information environment to the landscape of electronic settings, such as the use of computer, internet, CD-ROM, online databases and offline databases. Nowadays information seeking pattern among the academics is being shifted to the consumption of electronic format resources than the traditional print resources. This is indispensable for the currency, ease of access and efficiency. However, the cost of subscription to these electronic resources, particularly the online database like EBSCO HOST is relatively high and not affordable for most institutions especially in this period of economic distress. This situation has informed universities to form consortium where many universities pull their resources together to subscribe to online database, while some have resorted to the

use of offline database on CD ROM such as the Essential Electronic Agricultural Library (TEEAL).

Objective of the study

The objective of this study is to investigate the consciousness as well as the extent and frequency of consumption of the Essential Electronic Agricultural Library (TEEAL) database for teaching and research among the academic staff in the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji-Arakeji, Nigeria. This is with the view of creating a wider orientation on academic staff familiarity and utilization of electronic resources for excellence in teaching and research in the university and other tertiary institutions. The specific objectives are:

- a) To find out whether the academic staff in the College of Agricultural sciences, Joseph Ayo Babalola University are conscious of the existence of the Essential Electronic Agricultural Library (TEEAL) database in the University Library.
- b) To unveil the extent and frequency of the consumption and use of TEEAL database by the academic staff of the college
- c) To find out the various reasons for using and consuming TEEAL database
- d) To find out the challenges and obstacles to the effective use and consumption of TEEAL database for teaching and research in the university

Research Questions

This study aims at answering the following questions:

- a) Are the academic staff of the College of Agricultural Sciences, Joseph Ayo Babalola University conscious of the existence of TEEAL databases in the university library?

- b) What is the extent and frequency of the consumption and use of TEEAL database among the study population
- c) . What are the reasons for consuming TEEAL database by the study population
- d) What are the challenges and obstacles associated with the consumption of TEEAL database in the university by the study population?

Description of the problem

The use of electronic databases as a source of information cannot be overestimated. This is because electronic databases do not only contain up-to-date information, but are often reliable and universally accessible. The use of databases offers educational institutions exceptional opportunities and removes time and distance constraints. Library patrons nowadays often choose to use electronic database resources. However, to effectively use these databases, users need to be conscious of their existence and the worth of these database resources. TEEAL is an offline electronic database on agriculture and related fields. It brings together scientific publications from different publishers around the world to low-income countries for access, research and exploitation. Many Nigerian universities and research institutions, including Joseph Ayo Babalola University, Ikeji Arakeji, Nigeria, have this database. The purpose of this study is therefore to find out the degree of the academic staff consciousness of TEEAL database and the extent and frequency of its consumption in the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji – Arakeji, Nigeria.

Literature Review

According to the New International Webster's Comprehensive Dictionary of the English Language (2013), consciousness is described as the state of being aware of, mentally recognizing to some degree and extent of one's own inner feeling and thought or their objective. Basiru and Okwilagwe (2018) posit that consciousness increases mindfulness and knowledge. This view is strengthened by research findings, which establish that

consciousness is a fundamental determining factor of user outlook and behavior. Several studies have been carried out particularly in universities on the provision of electronic databases to users for teaching and research purposes. Kwadzo (2015) posit that a large proportion of research has been conducted on electronic databases on the aspect of consciousness, consumption, relevance, search, preferences, orientation, training and evaluation. The literature has shown that there is sometimes a conflict between consciousness and consumption when it comes to the utilization of digital resources. Either users are conscious of these resources and consume them, or users are conscious of these resources but do not consume them, or users are not conscious of them and therefore do not consume them. Edem and Ani (2015) studied the development of electronic database in Nigerian university libraries and found that all the universities covered have established e-libraries and have access to a wide range of electronic resources; the most popular are e-journals and offline databases. According to them, the main factors affecting the effective development of e-libraries in Nigerian universities were frequent power cuts and poor attitudes towards funding on the part of university management. The study established that the development of university e-libraries around the world has provided users with wider access to information thereby improving their learning and research beyond their academic environment. The study also highlighted the need to rectify the identified problems on effective utilization of e-library. Yebowaah and Plockey (2017) studied the familiarity and use of electronic databases by the teaching staff in the University for Development Studies, Ghana. The results of the study showed that that majority 54 (67.5%) of the respondents do not use the electronic databases in the library while only 26 respondents (32.5%) specified that they use the electronic databases in the library. The results also showed the frequency of use of the electronic databases. The study revealed that only 2 (7.7%) of the respondents used the electronic databases on weekly basis, while 4 (15.4%) used them twice weekly. The survey also revealed that 11 respondents

(42.3%) used the electronic databases once a month and 9 respondents (34.6%) used them occasionally. Ibegwam, Ogunyade and Ajuwon (2013) in their study on the consciousness and consumption of electronic databases by academic staff of the Colleges of Medicine, University of Ibadan and University of Lagos, discovered that 80% of the teaching staff, were conversant with the existence of electronic databases in the institution libraries

Chukwusa (2015) investigated the factors that stimulate the use of e-resources in selected Nigerian university libraries. The outcome showed that there was no significant connotation between ample electricity supply and limited access to e-resources in libraries. Limited access to e-resources was mainly due to power cuts. The researcher also asserted that there is a substantial correlation between problems of resource availability and efficient and effective service delivery in libraries. The author therefore suggested that library institutions should stretch their precedence to information technology and guarantee that libraries have ample power supply particularly if they are to maintain their position as the frontrunner in the provision of information to the community and to endure as important access points for researchers, students and other users. Rana (2011) found that the use of electronic resources by the academics has improved their professional and academic capability. A study conducted by Bhatt and Rana (2011), analyzing and evaluating the use of electronic resources, showed that the use of electronic resources by academic staff improved their professional skills. Ani and Edem (2012) analyzed a survey conducted to see the magnitude of access and use of online databases among the teaching staff in University of Calabar, Nigeria. The results of the study revealed that although the overwhelming majority (96.3%) of the teaching staff access and use relevant online databases in their teaching and research, the frequency of use is low as only (48.1%) of the respondents use these databases intermittently. The results showed that the main factors preventing university academic staff from accessing and using online databases include lack of subscription to relevant online databases by the university library, cost of access and use, lack of access to relevant databases, and lack of

internet skills to access them properly in the university library. Bashorun, Tunji and Adisa (2011) explained that the reasons for low frequency of consumption of electronic resources by academic staff include lack of knowledge of electronic resources, inefficient communication channels, slow network and inadequate information and communication technology (ICT), lack of training and inadequate power supply.

Akpojotor (2016) argues that the knowledge of technological shift has now significantly modified the way information is gathered, stored and circulated. In the old days, the delivery and use of information in academic libraries was driven by the accumulation of physical library materials, whereas now academic libraries are shifting increasingly to the digital world. Perception is the acquaintance of what is available, or the comprehension of an existing state or subject matter, based on knowledge or experience. It is the knowledge or understanding of a situation, fact, awareness, recognition, possession and appreciation, or familiarity with a subject, and complete knowledge of a situation or development (Ani & Ahiauzu, 2008). According to Musa, Ahmad, Yunusa and Hamisu (2015) the explanations for using electronic databases by academic staff are for research, thesis writing, lecture notes, teaching and texts for publication, while self-development, note-taking and community development are the least used. However, many people use electronic databases specifically for research and thesis writing. Most universities offer their users electronic resources to support teaching, research and development. According to the findings of Adeniji, Babalola and Ajayi (2015) the main problems associated with the use of electronic databases in libraries are the intermittent power outages experienced by patrons when using electronic resources at the university, as well as limited bandwidth, lack of funding, inability to access downloading data and network problems. The above results confirm the following conclusions by Kwadzo (2015) in his study on graduate students' awareness and use of electronic databases at the University of Ghana, which included lack of awareness, search skills and ICT deficiencies. Infrastructure and poor download times. Baro, Endouware and

Ubogu (2011) show that while consciousness may lead to database consumption, the level of users' consciousness may be higher than the level of consumption. They found that the consciousness of respondents' of electronic database was higher than their level of consumption. According to Eiriemiokhale and Ibeun (2017), they argue that there is a relationship between consciousness, availability and consumption of library resources. They argue that what users are not conscious of is, unlikely to be looked-for, what is not looked-for is unlikely to be desirable, what is not desirable is unlikely to be required, and what is not required is unlikely to be consumed. However, notwithstanding the enormous advantages of electronic databases and the vast sums of money university libraries spend on providing them, pilot studies and investigations show that university teachers in Nigeria make little use of electronic databases. This situation is detrimental because it obstructs effective teaching and quality of research and productivity in the sector. The purpose of this study was therefore to investigate the consciousness and consumption of TEEAL database in the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji-Arakeji.

An overview of the College of Agricultural Sciences Joseph Ayo Babalola University

The College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji-Arakeji was one of the foundation Colleges in the University at inception in 2006. The College is sets out to produce very sound and well-articulated entrepreneurial graduates of agriculture. The ideology of the College is to develop human capabilities towards ensuring a well-articulated agricultural process that wil guarantee sustainable productivity in all agricultural products by transforming the rich and diverse agricultural natural resources of the University catchment area and the nature for sustainable socio-economic development and self-sufficiency in food, fabric and other natural resources. The vision of the College is to be a foremost College of Agriculture in the South West, Nigeria and a global reference point in agricultural studies. The objectives of the College are:

- To develop programmes covering all broad areas of agriculture
- To produce production- orientated agricultural graduates by using hands on approach system
- To train personnel who are capable of teaching, conducting research and employable in Nigeria in all aspect of agriculture and related fields
- To produce agricultural graduate who can put their skills into operation by establishing and operating their own farming businesses.
- To produce extension workers who will be able to communicate effectively with rural farmers.
- To develop a virile agricultural extension mechanism which will adequately cater for the needs of local farmers
- To conduct research in various fields of agriculture as food sciences

The college offers a comprehensive integrated practices, demonstration and sound theoretical teachings to promote academic and professional excellence in agricultural economics and extension services, animal science and production, soil science and management, crop science and product and food and science technology. The College has as also added the Hotel Management and Tourism.

The database provides offline access into excellent journals publications in the under listed subjects

- Agroforestry
- Entomology
- Crop science
- Agricultural economics
- Agricultural engineering
- Nutrition and food science
- Plant breeding
- Horticulture
- Physiopathology

- Microbiology
- Veterinary Medicine
- Plant physiology
- Soil Science
- Animal Science
- Rural development
- Natural resources
- Biotechnology

Research methodology

A quantitative survey research method with the use of simple frequency count and percentage was adopted for the study. A structured questionnaire titled ‘Academic Staff Consciousness and Consumption of the Essential Electronic Agricultural Library database for Teaching and Research in the College of Agricultural Sciences, Joseph Ayo Babalola University, Nigeria’ was designed and used as instrument for data collection. The questionnaire was administered online to the respondents through e-mail message. The respondents of the study consisted of the academic staff members of the College of Agricultural Sciences, Joseph Ayo Babalola. A total enumeration technique was adopted.

Findings and discussion

The data were extracted from the online questionnaire from the teaching staff of the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji – Arakeji.

Table 1

Demographic characteristics of the academic staff of the College of Agricultural Sciences, Joseph Ayo Babalola University, Nigeria.

Rank	Frequency	Percentage %
Assistant Lecturer	1	11.11%
Lecturer II	2	22.22%
Lecturer I	1	11.11%
Senior Lecturer	3	33.33%
Associate	1	11.11%

Professor		
Professor	1	11.11%
Total	9	100%
Gender		
Male	5	55.55%
Female	4	44.44%
Total	9	100%
Department		
Agricultural Economics & Extension	4	44.44%
Food Science & Technology	5	55.55%
Total	9	100%

Table 1 shows the demographical distribution of the academic staff in the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji - Arakeji by rank, gender and department. The results show that Assistant Lecturer, Lecturer I, Associate Professor and Professor rank (11.11%) each, Lecturer II (22.22%) and Senior Lecturer (33.33%). The male population is (55.56%) while the female constitutes (44.44 %.) The staff ratio of the college is department of Food Science & Technology (55.56%) while the department of Agricultural Economics & Extension Services takes (44.45%)

Table 2

Academic staff consciousness of TEEAL database among the teaching staff of the College of Agricultural Sciences, Joseph Ayo Babalola University, Nigeria

Variables Respondent	Frequency 9	Percentage %
Conscious	8	88.89%
Not Conscious	1	11.11%
Total	9	100%

The above table two shows the degree of consciousness of the respondents about the existence of TEEAL database in the university library, when they were asked whether they have ever heard about it. The results revealed that majority of the staff are conscious of the existence of

the database, as 88.89% responded affirmatively, while only 11.11% responded in the negative

Table 3

Source of knowledge about TEEAL database

Variables/Respondent	Frequency 9	Percentage %
From the library website	0	0%
From the university website	0	0%
From library and the library staff	5	55.56%
From the notice board	-	-
From colleague	1	11.11%
From workshop, seminar and conference	1	11.11%
From the internet	2	22.22%
Total	9	100%

The results on table 3 exemplify that majority of the respondents knew about TEEAL database from the library and the library staff (55.56%). This depicts the fact that librarians are the front-runners in providing awareness to library collections. The finding is followed by respondents who knew about TEEAL from the internet (22.22%) and (11.11%) each from workshops, seminars and fellow colleagues. The result shows a (0%) from respondents who knew about the database from the library website. This could be because of the lack of a library websites where library activities could be made available for all.

Table 4

Extent of consumption of TEEAL database

Variables	Frequency	Percentage %
Very large extent	-	-
Large extent	-	-
Small extent	9	100%
Total	9	100%

The respondents were requested to specify the extent of their consumption of TEEAL databases in the university library. Indication from table three above vindicated that the extent of consumption of the database is poor as it recorded (100%) small extent consumption among the respondents.

Table 5

Frequency of consumption of TEEAL database

Variables	Frequency	Percentage %
Daily	0	0%
Weekly	0	0%
Monthly	0	0%
Occasionally	8	88.89%
Never	1	11.11%
Total	9	100%

Table 5 shows the frequency of consumption of TEEAL database among the respondents. The result shows a poor frequency rate of consumption as (88.89%) of the respondent use the database occasionally despite (88.89%) awareness rate of the database among the respondents.

Table 6

Reason(s) for the consumption of TEEAL database

Reason (s)/ Variables	Frequency	Percentage %
For better research output of publications	8	88.89%
For preparing lectures & instructional course materials	8	88.89%
For updating knowledge	6	66.67%
For personal development	7	77.78%
General reading	3	33.33%

Class assignments	-	-
Examinations	-	-
Entertainment	-	-

The above table 6 indicates the various reasons for consuming TEEAL database among the respondents. The rating allows multiple choice of options. The findings show that most of the respondents attributed their reasons for the consumption of TEEAL database in the library to include, for better research outputs of publications (88.89%) and (88.89%) for preparation of lectures and instructional course materials. This is followed by the grading of (77.78%) for personal development, (66.67%) for updating knowledge and lastly (33.33%) for general reading. The study also unveiled a zero percentage for the reasons of class assignments, examinations and entertainments as none of the respondents use TEEAL for these reasons. The basis for the zero consumption of TEEAL for these reasons could be that the materials in the database are not allied to the focus of these subjects and the contents covered in them are not relevant to the respondents. Therefore, the study established that the central purpose for the consumption of TEEAL database among the academic members of the College is for the enrichment and sustenance of research, teaching and learning in the university

Table 7

Extent of satisfaction with the consumption of TEEAL database

Variables	Frequency	Percentage %
Satisfied	8	88.89%
Not satisfied	1	11.11%
Total	9	100%

In table seven above, the respondents were requested to indicate the extent of their contentment with the consumption of TEEAL database. The result on the table shows that 88.89% of the respondents were satisfied with its consumption while only 11.11% of the academic staff was not satisfied. The non-satisfaction of this group could be associated to its

non-awareness of the existence of the database in the library; as a result, the group could not take the advantage of it. The high rate of satisfaction can be attributed to the moderately well-equipped e-library in the university library.

Table 8

Challenges/ and obstacles in the consumption of TEEAL database

Challenges in the consumption of TEEAL (variables)	Frequency	Percentage
Library opening hours not suitable for the consultation of TEEAL	0	0%
Lack of necessary searching skills	6	66.67%
Lack of awareness of TEEAL availability in the university library	1	11.11%
Lack of assistance from library staff	3	33.33%
Computer System failure	6	66.67%
Electricity Power failure	8	88.89%
Lack of training in the use of TEEAL database	8	88.89%
Difficulty in finding information	8	88.89%
Lack of current version of database	7	77.78%

The table eight depicted the results recognized as key problems confronted by the respondents in consuming TEEAL database to include recurrent power outages, lack of training in the use of TEEAL database and difficulty in finding information with (88.89%) response rate. Lack of current version of database (70.78%), lack of search skills and computer system failure (66.67%) each, lack of assistance from the library (33.33%) and lack of awareness of the database (11.11%) . each. The above findings substantiate the study of Omeluzor, Akibu and Akinwoye (2016) where they identified similar difficulties faced by the academic staff in Federal University of Petroleum Resources Library Effurun, Nigeria with exemption of truncated internet bandwidth as TEEAL database is accessible offline on all the computers in the e-library.

Table 9**Strategies for improving the consumption of TEEAL**

Strategies	Frequency	Percentage %
Provision of current version of database	8	88.89%
Regular users training on how to search and use TEEAL database	7	77.78%
Provision of regular power supply throughout library opening hours	9	100%
Provision of more serviceable computer	8	88.89%

The table nine above contains multiple-choice responses to the question on strategies for improving the consumption of TEEAL database in the university. The results revealed that provision of regular power supply throughout library opening hours daily scored a (100%). Provision of current version of database and provision of more serviceable computer in the e-library (88.89%) each while organizing regular users training on how to search and use TEEAL database effectively ranked (77,78%)

Conclusion and Recommendations

This study investigated the degree of the consciousness and consumption of the Essential Electronic Agricultural Library (TEEAL) database for teaching and research among the academic staff of the College of Agricultural Sciences, Joseph Ayo Babalola University, Ikeji - Arakeji, Nigeria. The study established that TEEAL database contains up- to –date information on agriculture that is very useful for research and teaching, as a result, members of the academic staff of the college utilize the database majorly for the advancement of scholarship in the university. However, the consciousness level of TEEAL existence in the library was found to be generally greater than consumption due to some hindrances like lack

of search skills, difficulty in finding relevant information in the database, recurrent power outage, and lack of current version of database. This makes the consumption level very low. The paper therefore recommended the following options for expanding the consumption of TEEAL to its fullest in the university.

- Provision of current version of database
- Provision of regular users training on how to search and use TEEAL database
- Provision of regular power supply throughout library opening hours

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