Repositioning abstracting, indexing and knowledge management in university libraries in Nigeria for the enhancement of library science students' academic achievement

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Abstract
This paper called for repositioning of indexing, abstracting and knowledge management in university libraries to enhance academic achievement of library and information science students in Nigeria. Conceptual clarification was made of the indices in the paper. The author buttressed that indexing, abstracting and proper knowledge management were key to university libraries. However, the paper observed that, university libraries in Nigeria were not doing enough in this regard and it called for reassessment of university libraries services in order that library and information science students attain high academic achievement in Nigeria. The paper provided catalogue of possible approaches that university libraries could adopt to attain the true status of university libraries so that students' academic achievement could be enhanced.

Introduction

With advances in information and communication technologies, the quest for knowledge for personal and organizational uses, the information ecosystem is spilling to the extent that information resources are published daily on all aspects of human endeavour in various formats. Libraries have, over time, acquired, organized, preserved and disseminated information resources at their disposal to intending users. Notwithstanding, with the aggressive spilling of information ecosystem, clients have become helpless in spite of all efforts put forward by libraries to select, acquire, organize, and preserve the gamut of information resources.

Though advances in information and communication technologies (digital technology) seem to address the problem of information explosion and accessibility of information resources to users, it remains to be seen in concrete terms. Nigerian universities are entrusted with the responsibilities of teaching, researching and providing community services, to accomplish these tasks. It is bestowed on their libraries to provide the enabling environment by acquiring current and relevant information resources, and process same for use. Such resources like journals are inclusive. Journals contain most current information and result of researches. However, with the growing number of information resources, the fact that academics are loaded, and the need for university libraries to redefine their roles especially the provision of information resources is imperative.

Adomi (2015) lamented that researchers are over depending on internet search engines instead of libraries to meet their research information needs. As information provider, university libraries have the capacity to synthesize information resources of various kinds into packageable formats such as abstracts; they also have the ability to provide other retrieval tools like indexes and catalogues. These roles are guarded towards saving time of the user as postulated by S.R. Ranganathan's five laws of library science.

It is on this basis that this paper perceived that university libraries are not doing enough in this direction and that urgent redress is required. Moreover, knowledge is dynamic and subject to change, if university libraries are performing their information role dutifully, the issue of abstracting and indexing of information resources and indeed knowledge management should be a thing of the past and academic achievement of students of library and information science

should not be on the front burner on education platform. This paper is therefore a call on university libraries in Nigeria to wake up and do the needful by engaging in indexing, abstracting and proper management of knowledge resources in their domain to enhance academic achievement of library and information science students in Nigeria.

Conceptual clarification

The cardinal problem of librarians, information scientists, documentalists, among others, is how to provide access to intellectual content of documents, bibliographical and physical recorded information resources that could facilitate the growth of knowledge. For now, there is a corresponding proliferation of secondary publications in advanced countries, such as indexes and abstracts. These have increased the problem of information overload in the universe of information and documentary space. As a result, the information industry and indeed information professionals are struggling with these phenomena, the need to clearly situate these constructs in this paper is obvious, since abstracts and indexes are increasingly becoming surrogate documents to most users of information resources in university libraries. The constructs to be clarified in this context include: index and indexing, abstract and abstracting, knowledge management and university libraries.

Index and Indexing

Indexing is the art of constructing an index, the ultimate objective of this "art" is to provide access to information, regardless of its beholders. Aguolu in Aju (2014) maintained that the future of organizing knowledge lies on recognizing the value of access and in the cooperation of all information agencies in achieving this objective. Indexing serves as pre-selection device which makes it possible for users to search only a tiny portion of information universe at a time; this is for

the fact that the universe information is so huge and complex that it is almost impossible to search it in its entity to obtain only a bit of information as the need arises for knowledge purpose. Index is a retrieval tool that provides access to documents through index term by using appropriate thesaurus such as sear's list of subject heading, this is matched by bibliographic reference of the document. The operational definition of an index in this paper is: a systemic guide to the items of information in a particular document or a collection of books and other publications.

Aguolu (2000) maintained that index is key to the world of information or a pointer to the terms using appropriate locators to obtain useful information in a document given that the indexer has provided relevant bibliographic details. Nwalo (2003) sees index as a retrieval tool that entails the systematic listing of essential contents of a document or a group of documents for the purpose of speedy retrieval. As standard practice, university libraries are required through their reference departments to compile indexes on important materials for which no index was provided at the time of publication. The ultimate aim of an index is to enable the user use the index and the document with minimum difficulties in a chaotic world of information resource (Aina, 2004). Indexers have provided parameters for evaluating an index as identified by Aina (2004), which are: the time it takes to retrieve relevant information in a document, the proportion of relevant information in the collection retrieved, precision of the relevant documents retrieved among others.

In spite of all these, it is worth noting that university libraries which should champion the idea of indexing materials in their domain for accessibility, retrieval and use by clients are not playing this fundamental role thereby frustrating their library users.

Abstract and abstracting

Abstracting is an "art" not a science; it is dependent on well informed judgment, experience and training disposition of the abstracter. Abstract is a precise, concise and an accurate representation of the intellectual content of a document or a group of documents highlighting the salient issues raised by the authors without addition or subtraction of the document's content. (The British Standard Institution, Fidel,1986; Lancaster, 2003).

In order to create access to the intellectual content of information resources abstracters have enumerated different types of abstracts such as informative, indicative and mission oriented abstracts. With the basic intension to enable busy users access the surrogate documents and to take an informed decision on whether they would still need the primary literature; the aim which is to enable "users" seeking information on conceptual, empirical, procedural or stimulatory literature gain knowledge.

Knowledge management

The concept of knowledge management cannot be clearly defined. It can best be described or explained for our understanding. Knowledge management is an interdisciplinary concept with multiple facets and status. Scholars such as Koening (2012), Anand and Singh (2011), Sutton (2007) and Ajifaruke (2003) have provided definitions of knowledge management based on their intellectual and disciplinary disposition. All their definitions suffered linguistics and content criticism by scholars in various fields such as psychology, business management, library and information science etc.

Trying to avoid criticism and contradiction suffered by other scholars, Ajiferuke (2015) described knowledge management as that which involves the management of tacit and explicit knowledge, that is knowledge which have been codified in documents, databases, web pages, etc. and the provision of an enabling environment for the development, nurturing, utilization, and sharing of employers' tacit knowledge.

According to Frost in Nwokocha, Unagha, Igwe and Ewah-Out (2015), knowledge management is all about managing the organization's knowledge through a systematically specified process of acquiring, organizing, sustaining, applying, sharing and renewing both tacit and explicit knowledge of employees to enhance organizational performance and create value. In other ways, knowledge management is the systematic management of an organization's knowledge assets for the purpose of creating value and meeting tactical and strategic requirements. It consists of the initiatives, process, strategies, and systems that sustain and enhance the storage, assessment, sharing, refinement, and creation of knowledge. In a learning environment such as the universities, knowledge management entails teaching learners how to create the right tools, provide right knowledge, structures, culture and environment to enhance learning outcome. Frost (2014) was positive that knowledge management involves certain activities such as strategic planning and implementation by management team of an organization to improve competitiveness of the organization for sustainability. The working definition of knowledge management in this paper is: the sustained efforts by a cooperate organization through its strategic plans to understudy and understand the unlined resources and people within her domain with the basic intension to realign issues for the purpose of improving services of the cooperate entity.

University libraries

University libraries are critical subsets of universities for the fact that libraries hold the intellectual and artistic resources of universities and are seen as information tanks of universities. That is while

universities are globally are ranked based on information resources capacity of their libraries. Ifidon (2007) and Edoka (2000) respectively defined university libraries as those libraries that exist in universities and are designed to support academic activities such as teaching, research and community services. Other functions performed by university libraries as buttressed by Nwachukwu and Asiegbu (2014) are:

(a) to provide information materials required for academic programmes of universities;

(b) to provide required information in connection with the needs of faculty and research students;

(c) to provide specialized information services to appropriate segments of the wider community;

(d) to provide information resources for personal self-development of users;

(e) to cooperate with other libraries at appropriate levels for improved information services.

From the above mentioned roles of university libraries, it is obvious that for the clientele to take maximum advantage of resources and services of university libraries, there is need for skills and competencies of intending users and the university libraries staff. Hence, the imperative for repositioning the present university libraries services for enhancement of library science students academic achievement.

Library science students' academic achievement

Academic achievement is a phrase that is common among academics, especially when evaluating students' performance outside a classroom situation. Simple as the phrase may seem, it is observed by the writer that quite a number of academics and students interchangeably or mistakenly use academic performance for it. It is therefore easy to probe into the reason why this concept should be

clarified. Academic achievement of students especially those in the tertiary institutions is – perfecting in the activities of one's discipline. In order ways, if a learner after schooling has been able to put into practice the theories, principles and skills learnt in school for his personal growth and for the improvement of his society, then it is referred to as academic achievement.

Discussing the students' academic achievement generally, Bossaert, Doumenand Buyse (2011) defined academic achievement as the extent which a student, teacher or institution has achieved educational aims. In order to determine parameters for the measurement of academic achievement, scholars such as Annie, Howard, Stoker and Ward (1996) maintained that parent's academic socialization influences students' academic achievement by structuring or shaping students skills, behaviour and attitudes towards school. The authors further buttressed that parents influence students through the environment and discourse with their children. In addition, the authors maintained, highly educated parents tend to have more stimulating learning environments for their children than children of the poor.

Looking at other parameters for measuring academic achievement, Von, Sophies, Benedikt, Premuzic, (2011) averred that physical infrastructures has significant positive influence on academic achievement of students. They further asserted that the general environment of schools, which include physical facilities such as good hostels, libraries, laboratories, roads etc normally can impinge on students' academic achievement. However in a situation where these very important infrastructures are limited, the attainment of high standard of academic achievement may not be met.

Repositioning abstracting, indexing and knowledge management for enhancement of student's academic achievement in universities will not only

make library science graduates culturally relevant but will also equip the learners with employable knowledge which will improve their life or living conditions. According to Ochogwu (2016) the essence of library science education is to train professionals with skills, who will be able to develop appropriate strategies in response to the information needs of the Nigerian society. Also to train information professionals who will appreciate the information challenges of Nigerians as users in the information society; these will only come true if university libraries live up to society's expectations by providing indexing and abstracting services to learners who will only take advantage of these services if adequate bibliographic instructions are provided to them.

Indexing, abstracting and knowledge management are critical roles of university libraries, since they are seen as pathways for empowerment of students for sustainable academic achievement. Thus, the seventh Sustainable Development Goal cannot be achieved without appreciable efforts of university libraries in this direction. University libraries should provide indexing, abstracting and do a proper management of their tacit and explicit knowledge.

Sadly, a society like Nigeria that needs to survive in the knowledge economy, does not simply need institutionalized framework of programmes or structures in university libraries, but aggressive information sourcing, gathering, processing, sharing and disseminating same to users. It is only in doing so that student's academic achievement can be attained.

The way forward
In developed countries of the world, indexing, abstracting and knowledge management generally has become an exciting enterprise in libraries and most especially the University libraries. This is so because universities are saddled with enormous task for research, teaching and community service and their users are heterogeneous and complex with different information needs. Unfortunately, university libraries in Nigeria are doing less than what is desired of them in this regard. This is evident in the paucity of access to bibliographic materials and information contained therein, as well as limited intellectual access. As such, students and staff, in most cases, are never aware of what is published and is available to access and use.

This is particularly true of materials that are issued in large quantity and are published in successive volumes such as journals and newspapers. Aguolu and Aguolu (2002) bitterly lamented on the physical, intellectual and bibliographic limited access to information resources in university libraries. The Aguolus maintained that physical, intellectual and bibliographic access to information resources in university libraries is the best option for scholarship. It is disheartening and frustrating for one to search volumes of information materials in a university library or any other kind of libraries only to access and retrieve an item of information resources. But if university libraries stocks are properly indexed and abstracted based on indexing and abstracting principles, the organization and management of knowledge will be much easier.

In the light of all these, there is a call for repositioning of indexing, abstracting and proper management of knowledge in university libraries in Nigeria in order that the seventh sustainable development goal (SDG 2030) will be achieved. For this to come true, university libraries need to resurrect or redefine their library policies towards indexing and abstracting operations. They are expected to do a lot of indexing and abstracting of their collections as over dependent on international retrieval tools may be dangerous and frustrating on the part of the user. Doing so, it is believed,

will be a good plan for quality service delivery.

In order to achieve this, university libraries need to embark on aggressive training programmes for indexers, abstracters and other subject specialists. The provision of short-term training courses is appropriate where basic principles and practice of indexing and abstracting are inculcated in participants. Studies leading to (Masters in Library and Information Science and Master in Information Record Management) are also highly recommended for the professional staff. It is expected that during course work, as suggested by Ochogwu (n.d) courses such as cataloguing and classification, indexing, abstracting, online searching, information storage and retrieval, information product and services, technical writing and proposals will be taught to participants. University libraries need to provide window of opportunities for interested staff to attend workshops, conferences to share ideas on current trends in indexing, cataloguing and classification, abstracting and other routine operations in university libraries in Nigeria. University libraries need to do a periodic evaluation of indexes and abstracts for quality service delivery. This calls for reassessment of evaluative measures in the areas of indexing and abstracting. Measures to adopt include:

(a) critique of various citations made;
(b) examination of the factual descriptions provided;
(c) a check on omissions of critical parts as found or recorded in the text or documents;
(d) conformity with indexing and abstracting policies;
(e) examine the degree of recall and precision of the indexing system in particular. This refers to the ability of the indexing system to minimize the retrieval of the relevant documents and to maximize the retrieval of non-relevant documents in answer to a given query.

Apart from that, there is need to encourage subject specialist to take up appointment with university libraries. This is one of the ways university libraries can ensure more effective, efficient and qualitative indexing and abstracting operations. It is also hoped that subject specialists who are interested in their job could go extra miles to scan the environment for adaptation of international best practices to the advantage of university libraries in Nigeria and their clients. Doing so will pave way for consortia agreements among university libraries in Nigeria and international ones. With the growing number of information resources in university libraries, the tedious and boring nature of indexing and abstracting activities and lack of subject expertise which results to inconsistencies, university libraries in developed countries have since employed computers to carryout indexing and abstracting of documents which have been found quite rewarding. University libraries in Nigeria can as well adopt this method for their libraries. Above all, these strategies, university libraries should ensure proper management of information resources, the staff, as well as managed the enabling environment for utilization and sharing of knowledge. If this is implemented, students stand to attain high academic achievement.

Conclusion

This paper discussed repositioning of indexing, abstracting and knowledge management in university libraries in order to improve library and information science students academic achievement in Nigeria.

Knowledge management has gained profound acceptance in many organizations in the western world. This is because these organizations have since realized the value of it and have taken advantage or have keyed into it with

obvious results, (competitive advantage). Unfortunately, in Nigeria, many organizations, university libraries inclusive are yet to understand or know the usefulness of knowledge management. This is for the fact that universities in Nigeria are preoccupied with the wave of ICT thereby undermining knowledge management which is the key in the competitive world today. Without proper management of university library's data, resources, tacit and explicit knowledge or intellectual properties, it will be hard to accomplish the mission and vision of universities in Nigeria. To achieve this, managers of university libraries should realize and take cognizance of the components and processes involved in knowledge management practices so that the value of their libraries is appreciated. Indexes and abstracts are vital in libraries but are more appreciated in university libraries because of the complex nature of their resources and users. The essence for these information tools is enormous, therefore, university libraries must put in place strategies to improve them in order to enhance the learning outcome of students especially, those of library and information science. This posture will go a long way in improving the academic achievement of the students in the competitive labour market.

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