**Digitization Of Library Materials For Learners With Special Needs And Use Of Information Communications Technology Towards Restructuring Teacher Education In Nigeria**

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**Abstract**

*The paper examined the concept of a library in relation to the Digitization of Library Materials for learners with special needs education. The paper emphasized the possibility of using digitized library material to enhance teacher education, aligning with the goals of the 2030 agenda. When examining the restructuring of teacher education, the paper highlighted areas for improvement and achieving a balanced educational system. In conclusion, the researcher emphasized the importance of digitizing library materials and highlighted that libraries, as major stakeholders, have significant roles in all processes involved. Some recommendations were made at the end of the research, where the researcher identified the library as having a germane role in Digitization of Library Materials.*

**Keywords:** Library, Digitization, Library System, Teacher, Education, Educational Agenda, Special Needs Education.,

**Introduction**

The libraries have been known and defined by different types of idea, knowledge, and concept by several authors over time. Libraries are no doubt an information based system which ensures selective acquisition of library material, systematic organization of information, storage facility provision and preservation of information resources. It is a collection of resources, such as books, journals, databases and other materials that are organized and maintained to provide access to information and knowledge. Libraries can be physical or digital, and they often serve specific community, such as a university, school, or public library. Physical collections include books, audiobooks, DVD, and other materials, while digital collections could be e-books, articles, databases, and online resources. It offers services like cataloguing, classification, reference, research assistance, and programming, the spaces are mostly quiet areas, study rooms, meeting spaces, and collaborative workspaces where it ensures open access, borrowing privileges and remote access to digital resources. Libraries as educational agency remain information hub, community centres, learning spaces, cultural repositories and gateways to knowledge with evolving concepts as digital libraries, virtual libraries, hybrid libraries, as and makerspace for collaboration and innovation.

Therefore, the current technological breakthrough had opened up the libraries with greater opportunities to serve the users better, hence the need to digitize library resources and take the library to users at any point in time within and around it geographical location. This is the more reasons why Agbato and Akindehin (2014), citing Iyanda and Sakiru (2006) defined library as a building, an instructional and self-development centre, which operates an integral part of the school environment Robertson 2005) in Agbato and Akindehin (2014) defines library as an institution that manages the intellectual products, providing individuals with access to knowledge In the same vein, Adebayo (2020) maintained that a library is primarily set up to acquire, organize, store and make accessible to the users, within the quickest possible time all forms of information materials which they acquire. The systematic acquisition, organization and dissemination of books, not mere labeling them, distinguish a library from a reading room or a storehouse of books. It is pertinent to also know that Libraries provide the following services; acquisition, recreation, personal interest and inter-personal relationships for the all categories of users” (Agbato & Akindehin, 2014). The daunting task of a library includes collection development, reference, service management, document delivery access to organized collections held by the library and assist users in information search and retrieval (Husain & Nazin 2015; Cholon 2015; Mallahn 2006 in Bhoi 2017). Inadvertently, with the sequence of events and the upsurge of new technologies improving library activities, it is now a common knowledge that the library cannot be left out of this new movement.

According to Thomas and McDonald (2005), in Bhoi (2017) it is now very much “indispensable to engage the use of modern technologies to make libraries information delivery faster. Libraries are now facing a new generation of value to users who are technologically savvy to integrate information access and use in all spheres of their lives in an unprecedented degree”.

In the recent past, the quest for technology in the library is now at higher level compared to what it has been before internet usage and the World Wide Web have now made the Library system very interesting, making it more engaging (Berners-Lee, Cailliau, Groff and Pollerman (1992) in Bhoi (2017).

**The Special Needs Category**

The term Special Needs is a short form of Special Education Needs and is a way to refer to students with disabilities. The term Special Needs in the education setting comes into play whenever a child's education program is officially altered from what would normally be provided to students through an Individual Education Plan which is sometimes referred to as an Individual Program plan. (Unogwu, 2015). People with special needs are recognized as people with disabilities or handicapping condition. Nwolise (2004) maintained that they are those who on account of injury, disease or congenital deformity became disabled. This accounts for the reason why Unogwu (2015) observed that people with special needs are persons who are unable to ensure by themselves wholly or partly the necessities of life as a result of deficiency in their physical or mental capability.

Formal education of a general nature can be given in public schools run by the government and society. However, the type of special education for citizens with special needs, such as persons with disabilities requires the implementation, which involved many parties, including government, private and non-governmental organizations.

The term includes a group of people with disabilities with physical, mental and intellectual deficiencies. In providing educational services, groups of people with disabilities or who have special needs require a specialized educational model for their special needs, which is known as special needs education. Individuals with physical, mental, or behavioral differences that deviate significantly from the norm are considered to have special needs. From this perspective, the concept of special needs education has shifted not only in principle of deficiency but in substances or deviations.

One type of special needs, for example are children with autism who have pervasive development disorder that causes the difficulty in communication and social interaction with others. There are also children with motor coordination disorders in balance, hand-eye coordination, and locomotion. Another expert states that children who are identified as having autism will have a lower ability to move compared with a normal child of their age, measured by the ability of static and dynamic motion, strength, coordination, balance and agility.

Each child with special needs is unique and has different symptoms in quality or quantity different from each other. Diversity barriers were owned by the child, requiring a response that can accommodate the services and provide a solution to overcome the existing barriers. Characteristics of children with special needs such as autism are a form of natural barriers that often make it difficult for them to access public services, such as facilities in public places that are not accessible to them, thus the growth and development services and education requires relatively extra effort and cost, hence the need for digitization of library resources (Unogwu, 2015)

**Major Laws or Principles Guiding the Operations of the Library**

Ranganathan, a famous Indian Librarian, an information scientist and the father of library science, in his Five Laws of Library Science made the following postulates: Ranganathan (1931) in Bhoi (2017) and (Adebayo, 2020)

1. Books are for use
2. Every user his/her book
3. Every book its user
4. Do not waste the time of the library user
5. Library is a growing organism

Therefore, it is on these postulates that the systematic organization of relevant acquired information resources and services that characterize libraries hinge

**Major Functions of the Library as Information Based System**

The roles or functions of the library are dependent on the type or nature of such library in any given establishment, as we have different types of libraries, which include Academic, School, Public, Special, Private, National and virtual or digital libraries. The general role of the library ranges from informational roles, educational roles, research roles, cultural roles among others, meanwhile, the specific role or function of any library is to select, acquire, organize, store and preserve information resources for posterity ensuring continuous information dissemination within the quickest possible time. The following, therefore, represents the basic and major functions of the Library. It is pertinent to know that for an institution to be productive with a functional library, it needs of vital facilities that should have been put in place. Nampoya (1986) in Agbato and Akindehin (2014);

1. Lending Services: This is a very important activity of the library. Such loan transaction involves charging, which is the act of loaning information materials to users: and discharging, which is an act of receiving consulted materials back from users.
2. User education: User education in the library is making the users aware of some rudimentary knowledge about the library and its modus operandi. Users are exposed to specific areas and conceptual understanding about the basic library operations like the use of catalogue cards if the traditional system is still in use in the library or the use of OPAC (Online Processing Catalogue). It is very germane and pertinent that every user is made to know all these, thereby assisting them in knowing their ways around the library.
3. Access provision of Materials for Consultation: This include the materials in the library that cannot be loaned out but can only be made use of within the library e.g. slides, filmstrips, audio cassettes, radio cassettes pamphlets, periodicals, journals, etc.
4. Current Awareness Services Provision (CAS): This keeps the users abreast of the happenings in the library. The information can be disseminated through emails, periodical routines, library awareness (Display Racks) etc.
5. Selective Dissemination of Information (SDI): This entails selective dissemination of relevant and specific information to library users with the knowledge of the information profile of such user(s). This is one of the areas of strength of the librarians to keep their users abreast of germane information within their chosen field as it unfolds from the source.
6. Information Literacy Programme: Information literacy programme is stemmed more on user education. This helps users locate and retrieve information in time without wasting time. It is a programme that teaches users how to locate information on the shelf.
7. Internet Access Provision: Digitization and Information Technology has taken charge of the library today through the advent of different networking tools. In this variance, automation (digitization) of the library is now the new trend developed in the library.
8. Information Repackaging: This is simply the transformation of information materials into local languages or in a more concise and meaningful form in order to make users have a deeper understanding.
9. E-library Facilities Provision: Under the Librarians Registration Council (LRCN), different modalities have been fashioned to foster training of librarians. In order to achieve this under stringent policy of the minimum standard, the National Information Technology and Development Agency (NITDA) was enlisted to establish e-libraries (Agbato & Akindehin, 2014).
10. Review of Curriculum of Library and Information Science Programme: The Librarians Registration Council of Nigeria (LRCN) has begun an in-depth review of the curriculum of library and information science programmes in Nigerian Universities ‘(Agbato & Akindehin, 2014).
11. Preservation of Library Materials: This is an important factor in the library operations, materials are meant to be kept safe and secure at all cost. This means that the library materials ought to be preserved well because of humidity so as guard against wear and tear.

**Digital Library Services**

Digital or virtual library services can be defined as libraries in which connected computers and telecommunication technologies make access to wide range of information resources possible (Adebayo,2020. This is often variously referred to as digital library, electronic library, a community network, or simply as library without walls. The digital library extends the breadth and scale of scholarly and cultural evidence and support innovation research and lifelong learning. In this capacity, it establishes a digital library service environment that is a networked online information space where users can discover, locate, access and increasingly use information.

The digital library environment makes no distinction among information formats; books, journal, paper-based etc. archives, videos, film and others are also visible in the virtual library. What is most important is the networking to the internet. Hence, with the presence of these facilities, users are able to access all sorts of information with no regards to format, in a quick and easy process. Thus, according to Darries (2013) digital libraries offer a wealth of opportunities to improve access to information resources in both traditional on-campus instruction and distance independent learning. Digital library contains digital representation of the object found in it. Most understanding of digital library also assumes that it will be accessible via the internet.

Digitization and the use of Information Communication Technology (ICT) in Libraries

According to Darries (2013) recent advantages of digitization and information technology have not only increased tremendously the ability to access, store and process information within the library, but also have brought significant changes in the concept, organization, functioning and management of library and information systems”. This movement has hastened information searching process viz a viz the retrieval system, thereby improving the importance of “organization management processes and provides new ways of improving the capacity of users” (Lopez, Peon, and Orders, 2009, then in Bhoi, 2017)

Digitization and ICT usage can assist in creation, storing, transferring also using the concept of tacit and explicit knowledge, Okumus (2013). Alemu (2015) carried out a study in line with “Information Communication Technology (ICT) skills and employability needs of the LIS Programme Kuwait; a literature review from the study authors reviewed on enormous numbers of ICT related literature concentrating on information and communication skills of library and information science students in global LIS education and compare them with those skills needed by the job market in Kuwait. In their research they found out that ICT skills have been recognized as essentials for LIS graduates employments”.

**The Use of Digitized ICT Tools**

The globalization of information which has been interlinked; with digitization and information communication technology, has given libraries opportunity for improving on her delivery skills, Igwe (2010). Here are some of the deliverables which are peculiar to the library

1. Communication Technology: In communication technology, this defines various forms of information exchange done electronically, for example, voicemail, telephone, intercom, fax, video conferencing and the internet.
2. Social Media: The use social media like the Facebook, Twitter, Blogs, Weblogs, which are Web 2.0 tools (Library 2.0) are the surest forms of information dissemination today. Most libraries today use social media for promotion of e-resources. Facebook is being used more as a means of disseminating information.
3. Library Security: Technology has contributed immensely to library security through the installation of Closed Circuit Television (CCTV), Kumar and Svensson, (2015) reports that through these new technological discoveries, it is also possible to insert Radio Frequency Identification (RFID) inside library materials, in an attempt to steal the material, the alarm goes off, alerting the library authority that a theft is about to be committed.
4. Digital Library: The digital library (also referred to as electronic library or digital repository is a focused collection of digital objects that can include text, visual materials etc., users make use of the system more in sending queries of information need. In a digitized library, there are audio materials, information giving materials in compact discs and even the internet, (Bharat, 2020)
5. Library Automation Software: Library automation is the application of computers and utilization of computer based product and services in the performance of different library operations and functions in provision of various services and production of output products. Today, Library Automation is by far the most commonly used terms to describe the mechanization of library activities using the computer. (Siddique, Ur Rehman, Ahmad, Abbas, and Khan, 2023). There are different types of automation software in the library today. This automation software is designed to make library activities run smoothly, examples are Libsys, Koha, Slm2i, Bhoi, (2017)

**The Concept of Teacher Education**

Teacher education is a program related to teacher proficiency and competence that would make them competent enough to face new challenges in the education sector (Gajpal, 2014). A teacher plays a central role in the implementation of educational process. Hence, the level of achievement of learners is determined by teacher competence. Generally, the education of teacher is usually related to the recurring problem of trained manpower needs to handle the educational programme in the society (Ighalo, 2018).

According to the National Policy on Education (1993), the purpose of teacher education in Nigeria includes:

a. To produce highly motivated, conscientious and efficient classroom teachers for all levels of our education system.

b. To encourage further the spirit of enquiry and creativity in teachers

c. To help teachers fit into the social life of the community and society at large and to enhance their commitment to national objectives

d. To produce teachers with intellectual and professional backgrounds adequate for their assignment and to make them adaptable to any changing situation not only in the life of their country but in the wider world

e. To enhance teachers commitments to teaching professional learners with relevant capacities to operate with rapidly changing societies.

According to Kolawole (2018), “a teacher is one that is properly prepared to handle the very complex act of teaching through a teacher education programme”. He opined that teacher education became a major feature of education in Nigeria with the advent of western education to improve teacher quality, where Osokoya (2016) saw teachers as untrained and unqualified. Kolawole (2018), in his work stressed that; the western form of education laid emphasis so much on the formal type of education system, where qualified teachers, with good educational curriculum cum, assessments and components of education, were given highest priority.

Furthermore, he opinionated that, western education made it very important to have well trained teachers with good teaching qualities, hence the establishment of;

1. The Training Institution by Church Missionary Society in 1859
2. Saint Andrews College in Oyo in 1896
3. Teacher Training College at Ogbomoso by Baptist Mission in 1875
4. Wesley College, Ibadan 1905

Teacher education or teacher training refers to programs, policies, procedures, and provision designed to equip teachers with the knowledge, attitudes, behaviors, approaches, methodologies and skills they require to perform their tasks effectively in the classroom, school, and wider community. Teachers play an essential role when it comes to having meaningful education. It was based on this premise that, the missionaries who wanted to learn different subjects were giving the ample opportunity with their possession of the first leaving school certificates (Krathwohl & Anderson, 2009)

**Objectives of Teacher Education in Nigeria**

The National Policy on Education (1981) also re-emphasized its focus in Kolawole (2019) and laid out the following objectives:

1. Production of highly motivated, conscientious and efficient classroom teachers for all levels of our educational system
2. Encouragement of the spirit of enquiry and creativity in teachers
3. Help teachers to fit into social life of community and society at large and enhance their commitment to national objectives, where it is known
4. Provision of teachers with intellectual and professional background adequate for their assignment
5. Enhancement of teachers’ commitment to the teaching profession

The Objectives of the SDG Goal 4c (Education 2030) and Teacher Education in Nigeria

Education 2030 is foisted on the following;

1. Ensuring that all girls and boys complete free, equitable and quality primary and secondary education
2. Creating quality early childhood development, care and pre-primary education that will lead to primary education for both boys and girls
3. Enabling education to promote the acquisition of relevant skills for employment, decent jobs and entrepreneurship for both youths and adults
4. Promotion of inclusive education for all
5. Using education to promote sustainable development for all including boys, girls and children with varying forms of challenges
6. Substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states

**Restructuring Teacher Education towards Achieving the 2030 Educational Agenda**

Taking a critical look at teacher education and the term restructuring, a few things come to mind. Kolawole (2019) asserted this by drawing attention to some questions, which might stair up the mind towards what restructuring of teacher education could be referring to;

1. Changing the mode of recruitment?
2. Changing the nomenclature of some institutions and the programmes they run?
3. Or can it mean cancelling any programme(s) or a merger where duplication of programmes, resources and structure?
4. Can it also mean being more specific in terms of which institution should produce what teachers for a specific level of education such that NCE is for primary, B.Ed./B.A.Ed./B.Sc. Ed for junior secondary, M.Ed. for senior secondary and Ph.D. for colleges and universities?

The major impeding factor is provision of teachers with a good knowledge base that would be to fit into these qualifications with good mastery and skills in teaching. To overcome this; the Teachers Registration Council of Nigeria (TRCN), should come into full sweep to ensure that the right teacher with competence is licensed to teach. This can be regulated either by examination or through interview and also through the possession of relevant teaching qualification like the possession of National Certificate in Education (NCE) or the equivalent Post Graduate Diploma in Education (PGDE).

**Conclusion**

It has become pertinent and germane for libraries, teachers to engage the use of digitized library materials and information communication technology in order to become very vast in a world that has become so technologically inclined. This is also to forestall and endear teachers and teaching professionals, in becoming prepared for the 2030 educational agenda. More so, the library forms an integral part of this new innovation and move. Every necessary facility and equipment should be deployed towards digitization of library resources in order to ensure quality teacher education which is capable of developing even the special needs category with adequate access provision for information in a digitized format

**Recommendations**

The following recommendations were made, during the course of writing this paper:

1. Libraries should be designed in such a way that information communication technology (ICT) takes a leading role
2. New innovations into modern day library practices as it involves information technology should also be imbibed
3. Librarians, Library Officers and teachers, should be trained in such a way that they can manipulate ICT in libraries to perform daily tasks
4. New library software’s like KOHA, Readable and others should be introduced and deployed into the library system for ease and fast tracking daily library routines
5. The teachers should be encouraged to become self-developed such that they can foist improvement in the educational sector
6. Teaching qualifications like TRCN or PGDE should also be encouraged to bring out quality and well skilled professionals in the teaching sector

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