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Building Library and Information Science (LIS) Educators' Competencies in the Digital Era for Sustainable Development In Nigeria

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Abstract

This paper examines LIS educators' competencies as catalyst for sustainable national development. LIS educators occupy a pivotal position in the onerous task of training information professionals. The information professionals form the manpower who are expected to apply skills and knowledge gained for effective management of information in all sectors of the government. It is inarguable that information remains the most valued vehicle that drives national development and the management of same depends squarely on competencies of the one who imparts the knowledge. Consequently, the paper presents emerging trends in LIS, competencies for LIS educators, and different approaches to be adopted for building the competencies in them. The paper further examines the place of LIS education in sustainable development and also identifies some challenges facing LIS education in Nigeria to include traditional method of teaching, poor research orientation, inadequacy of LIS educators and others. It is recommended, among others, that LIS educators should be trained and re-trained to acquire the right skills and competencies; LIS educators should adopt modern teaching methods; cutting-edge courses should be included in LIS curriculum; education should be adequately funded to make for recruitment of more LIS educators, access to research grants, and provision of adequate technology-driven facilities.

Keywords: LIS educators, Competencies, Sustainable development

t1.1   Introduction

Educators are unarguably and inevitable facilitators of sustainable development in both the developed and developing countries. Traditionally, educators as teachers are expected to carry out the functions of teaching and development of the citizenry in various aspects of life to be able to contribute meaningfully towards the national growth. These functions could be performed directly or indirectly, scientifically or technologically to bring about the acquisition of knowledge, skills, values, and appreciation towards all-round development of the

learners. LIS educators are not left out in this clarion call. They are required to display high level of competence towards the preparation and production of skilful information professionals capable of performing roles to facilitate the achievement of the set national goals and objectives.

LIS educators as teachers belong to the profession which has the potential of determining the social, economic, political, cultural, and moral developments in any society. That means, they are saddled with the responsibility of producing high and respected information professionals who will function effectively in all types of libraries and other information systems to bring about sustainable development. It is of necessity that they must identify the needs of the students and the society; understand and interpret the goals and objectives of LIS school and its curriculum; and prepare learning experiences as well as strategies through which the learning experiences are to be communicated. To this end, LIS educators are expected to acquire competencies in developing dependable course contents, determining the desired learning outcome, identifying and using the right teaching tools and teaching methods, managing the teaching environment among others.

Be that as it may, sustainable development could be achievable when LIS educators are capable of providing students the opportunity to develop the right attitude associated with contemporary library practices and information management. Sustainable development, according to Ekpe (2016), emphasizes the creation of sustainable improvement in all spheres of life of all people through increases, not only in real income per capita, but sectorial discipline as education, health, and librarianship. It is therefore, obvious to imply that meeting the present and future information needs as well as the basic needs of the citizenry remain the essential tenets of sustainable development. This is on the grounds that information remains the driving force for societal growth which could guarantee physical and social, healthy and continuous expansion of the productive capabilities of the citizenry.

Consequently, LIS education becomes an inevitable tool for sustainable development and a vehicle for advancing the frontier of knowledge through effective generation, organization, dissemination of information. It occupies a pivotal position in the onerous task of making public government programmes and activities as well as level of economic growth and sustainable development. To guarantee this operational function, the competencies of LIS educators must be looked at holistically. Hence, this paper presents emerging trends in LIS and competencies for LIS educators. The paper further examines approaches to building the competencies and contributions of LIS education to sustainable development. Subsequently, the paper identifies and discusses the challenges facing LIS education in Nigeria and gives recommendations towards building competencies of LIS educators for sustainable development.

2.1 Review of Related Literature

2.2 Emerging Trends in LIS Education

The changes brought about by ICT in teaching and learning process has challenged LIS educators to imbibe change and learn to be proactive rather than reactive. There is need to examine the emerging trends both within the classroom and within the world and find ways to adjust and pivot depending on what is in the best interest of students and learning. Some of the emerging trends include:

i. **Electronic Resources**: There has been a paradigm shift in the methodology of reading with the advent of e-resources. E-resources have also recently impacted

tremendously on education process. With the help of electronic-based packages like consortia, e-publications, web 2.0 tools, libraries 2.0, Internet and intranet growth, library gateways, etc, revolutionary changes in information generation and utilization become possible. LIS educators can exploit the various features available and be versatile in the use of e-resources for learning, teaching, and research.

ii.   Learning Portals: Learning portals are knowledge repositories, online gateways, or websites that contain links to all different types of learning and training materials. Unlike traditional learning where training is "pushed", the learning portals are designed to be learner-centric, giving them the control on how to "pull" the information and learn in order to enhance knowledge and performance. In other words, learning portal allows learners to have control over content, learning sequence, pace of learning, time, and often media to meet their personal learning objectives. Web based e-learning portals are interactive in nature and allow the instructor and learner either as individual or group to interact with each other simultaneously or at different time gaps by picking up the thread of discussion.

iii.   Blended Learning Environment: The concept of learning environment has been shifting in recent years with dedication to purposely designed spaces and seamless integrations of technologies which bring about blended learning facilities. Blended learning combines two archetypal learning environments which uses both hard and soft technologies. It is the integration of classroom face-to-face learning with online or technology-supported learning, including a range of pedagogical approaches and delivery systems. The advantages of blended learning include effective pedagogy, increased convenience and access, and increased cost effectiveness. The phrase most commonly used by advocates of blended learning environments is that they allow one to have the "best of both worlds" which is face-to-face learning and computer mediated instruction.

iv.   Participatory Learning for Teachers: Participatory learning, otherwise known as collaborative learning is becoming prevalent. The participatory learning methods such as Edcamps and Twitter Chats have challenged traditional professional development structures and teachers are now empowered to customise learning and professional growth based on their interest and learning goals. Digital badging, and Open Educational Resources (OERs), among others are taking the centre stage for participatory learning. Sharing of information through social media e.g. blogging, social media, and innovative forms of content curation are fast becoming popular among teachers (Williams, 2017).

v.   Formative Assessment: Formative assessment is a process used for monitoring students learning as it happens in the classroom. It gives room for qualitative feedback systems (rather than scores) and self-assessments which assist both teacher and students in better understanding of learning goals. Formative assessment in LIS education could be paired with emphasis on intrinsic motivation to shift from focus on students' grades to focus on what the students can practically do as learning experiences.

vi.   Collaboration for Digital Resources and Training: LIS educators need to collaborate with information and data providers for information, insights, strategies,

expertise, and resources across related disciplines. Through collaboration with local and international communities, governments, and experts, digital platform designing, manpower training and retraining, and process monitoring and evaluation are possible. This principle facilitates the sharing of documents, results, processes, and best practices in librarianship among LIS educators. Collaboration gives room for training and retraining through participation in digital conferences and other fora where experiences and relevant skills can be shared among partners.

vii.   Website Management: Website management is becoming critical for LIS educators to meet the demands of the changing application technologies and architectures. They need to acquire relevant competency in creating and managing websites for knowledge acquisition and transfer. LIS educators are expected to understand the web-related applications in order to develop and manage personal websites or teaching web pages with contents that support librarianship.

viii.   Database Management: Databases are collection of data items organised for easy retrieval. They are meant to create effectively working relationship as well as boost job productivity. A database is designed around major subjects and activities within an organization. LIS educators need to create, manage, and maintain databases in order to keep track of their students and monitor major activities within the department.

ix.   E-mail Management: LIS educators need to be able to maintain relevant and multiple e-mail addresses. These will be used to correspond with their students for follow up on assignments, continuous assessments and other academic tasks.

x.   Alternative Credentialing: According to Sandeen (2013), alternative credentialing could be described as alternate methods of assessment for learning and recognition of that learning in credentials other than the traditional higher education degrees. These credentials play an increasing role in providing opportunities for LIS educators to acquire additional skills and knowledge needed to boost their teaching competency. There are Massive Open Online Course (MOOC) providers such as Udacity with its non-degrees, Coursera with its specialisations, and edX's professional certificates, etc.

xi.   Experimentation Models for Teaching Methods and Learning Spaces: The traditional education model is transforming in response to digital technology and culture. As a result, there are varieties of new models which aim at adapting to the changing culture and improving a system that is not serving the students adequately. Examples of such models include Sal Khan's lab school established to investigate and explore new methods of learning and teaching; Purdue University's IMPACT programme which includes new classrooms and active learning spaces that support blended learning; University of Florida's large-scale programme that is increasing the number of students it serves while lowering costs by offering students face-to-face courses along with an ever-widening menu of online and blended courses.

xii.   Student-Driven Personalised Learning: This suggests a host of different learning methods that are typically institution and student-driven. This type of learning enables learners (students and educators) to control their learning and become not just consumers of content but active creators of

content, building knowledge through collaboration and connectivity via smart phone apps.

2.3 Competencies for Library and Information Science (LIS) Educators

Competencies connote the abilities, skills, knowledge, and attitudes required to perform some specified tasks. To Eric (2006), competencies refer to the optimum level of awareness, understanding, and perfection which a teacher must achieve in order to be rated as effective and competent teacher. Competencies for LIS educators could be discussed as follows:

i. **Content Organization and Delivery Competency**

This type of competency is concerned with the subject-matter knowledge and how it can be designed and implemented. LIS educators need to have a clear understanding of the curriculum content and how a particular topic and issues related to the topic are organised, presented, and adapted to the diverse interests and abilities of the students. A good theoretical and practical knowledge base of the course content, a sound command of language, and ability to adopt a variety of teaching methods and technologies are the essentials of content organization and delivery competency. It also includes LIS educators' ability to collaborate with colleagues to continuously develop learning activities which correspond to students specific learning needs in content areas plus monitoring and devaluating each curriculum unit. Content organization and delivery stimulates and facilitates students learning process and learning outcome.

ii. **Management Competency**

Management competency entails the ability of LIS educators to carefully harmonize the material and human resources within the learning environment to create a good learning and teaching situation. LIS educators are expected to manage the physical conditions of the learning environment such as security, ventilation, lighting, and seating arrangement to guarantee meaningful interactions between students and lecturers. According to Ibia (2017), management competency includes teachers' ability to assign responsibilities to class members, organize and use instructional materials, manage allocated time for lecture and exercise some level of control over the students to curb disorders and distractions during classes. Management competency creates an environment that fosters effective teaching and learning for optimum benefit.

iii. **Communication Competency**

One of the targets of LIS educators is the ability to communicate effectively to others at their level of comprehension. This competency requires the ability to assess the learning growth involving students, programme, and institution and ability to communicate appropriately the assessment results (feedback) to students, colleagues, parents, department, faculty, management, government and other constituencies. The assessment could be done through direct and indirect observation, one on one or group counselling, discussion, or any other data collection strategy. The communication process needs to be managed carefully devoid chaos for desired improvement. Hence, it is suggested that LIS educators make use of hierarchical and departmental structures, appropriate procedural arrangements, committees, electronic media, formal meetings, newsletters, etc in the communication process.

iv. **Technology (Manipulative) Competency**

LIS educators are expected to acquire technology or manipulative competency to be

able to decide why, when, where, and how ICT tools could contribute to the learning and teaching process. Technology competency facilitates the use of software packages, computers, bibliographic control tools, Computer Assisted Instruction (CAI), etc to create a more interesting learning experience. LIS educators should be able to use the right ICT tools in the teaching of specific courses and conduct simple and advanced searches using Internet and web search tools like search engines, meta search engines, web directories, library gateways, specialised databases, etc. The use of ICT facilities like bulletin boards, forums, conferencing facilitates effective collaboration among lecturers. Projectors and Public-Address Systems (PAS) and other audio-active equipment could be used to enhance visual and audio quality especially when teaching a large class size. Apart from enhancing teaching and learning abilities, ICTs increases educators' competitive value, boosts classroom management, promotes research and publications, and provides immediacy to education, among others.

2.4 Approaches to Building LIS Educators Competencies

Approaches could be regarded as ways or strategies of reaching out for solutions or improvements. In building LIS educators' competencies, there are some critical elements that must be taken into consideration by all stakeholders. This paper suggests the following approaches towards building LIS educators' competencies for desired development.

i. Education and Training Approach

Education and training of teachers remain the most critical ingredients for building competencies. Education is simply the process or art of imparting knowledge, skills, ability, and judgement on individuals to enable them function effectively. Training, on the other hand, is a continuous assistance or coaching given to teachers in other to make them have current knowledge associated with teaching process. LIS educators need to be given opportunities for further education training in order to inculcate proper values and intellectual capability through structured and even unstructured programmes. Such programmes could include study leave with or without pay; study fellowship; staff development award; in-service training; externally sponsored study; part-time studies/day release, short-term refresher courses; and sponsorship to attend local and international conferences, workshop, and seminars. It is believed that when LIS educators are given continual access to these programmes, their competences will be built towards imparting relevant knowledge and skills capable of sustaining national development.

ii. Research and Publication Approach

One of the ways to build LIS educators' competencies is through research and publication. This allows for systematic investigation into issues relating to teaching and learning process and information management and publishing the research results using various media. LIS educators could build their competencies by being involved in collaborative or individual researches to discover ideas that could bring about exhaustive knowledge on new or sometimes better learning environment, teaching strategies and supporting facilities as well as modern ways of information generation, organization and delivery. Akwang and Etim (2010) identify the NUC's Central Research Funds Scheme (CRFS), UNESCO Research Projects and other existing international research schemes as a welcome development. The authors are of the opinion that research results should not only be presented at conferences, workshops, etc and published in books, journals, etc but there should be concerted efforts for the results to be presented and discussed openly in LIS schools

where the researcher(s) belongs. This hopes to creates awareness and fasten implementation process. Be that as it may, LIS schools and their host institutions should fund viable research projects as well as encourage LIS educators to see research and publication as a survival strategy not only to individual lecturers but to a nation as a whole.

iii.   Collaboration Approach

Collaboration could be regarded as cooperation, partnership, alliance, or network aimed at mutually beneficial outcome. The issue of collaboration among LIS schools within and beyond Nigeria seems not to be given desired attention despite its relevance. LIS schools should adopt collaboration approach to jointly tackle the problems and challenges facing the teaching and learning of librarianship. Johnson (2012) explains that collaboration may be within defined national boundaries (local), within a particular region of the world (regional) or across national boundaries (international). For collaboration to be successful, the schools involved should ascertain their sustaining capacity; the existing influences - political, economic, and social realities; the facilitators; the areas of collaboration and any other aspect that could strengthen the collaboration. LIS schools and educators need to borrow a lift from other similar institutions and build their competencies in the areas of teaching, research, curriculum development, students' industrial training, exchange programmes, among others.

iv.   Value Integration Approach

Value implies the degree of importance given or placed on something. It is an unfortunate situation that librarianship seems not to be valued compared to other disciplines like Medicine, Law, Engineering, etc. within the same institution. This is evidenced on the employability, training and development of librarians. It is common to see non-professionals (non-librarians) being employed in various types of information environments instead of librarians. Again, the degree of importance placed on the training and development of librarians (LIS educator or library staff) by management of most academic institutions in Nigeria is undoubtedly below average. Rarely do librarians receive equal opportunities with their colleagues in other fields to be members or heads of committees within the institution. The situation could work against LIS educators' morale as well as competencies. At this point, there is dire need for value integration into librarianship as notable in other professions. This should be a collective responsibility of all the stakeholders – professional bodies, LIS schools, library management, librarians, students, etc.

2.5 LIS Education and Sustainable Development in Nigeria

The critical role of LIS education in sustainable development in Nigeria cannot be over emphasized. Be that as it may, the concern in LIS education is to instill in students the essential knowledge and skills needed for the generation, organisation, packaging, and delivery of the right information to the right people at the right time. It is often said that the level and quality of development in any society is driven by the amount and quality of information at its disposal. In support of this, Adebisi (2010) in Msheliza, Abdulgafar, & Muhammed (2015) states that there is no more important task for development than to create an informed, effective, and responsible citizenry. This places information as the life wire of any nation vis-à-vis development. In other words, information unlocks the door to modernization and sustainable development and the teacher that trains on the management of the information holds the key to that door.

LIS educators are responsible for the translation of educational and information policies into practice, and programmes into action. This role is quite challenging with the proliferation of information, user population explosion, emerging technologies, sophisticated information needs and expectations, competition in the labour market, and others. LIS educators need to reposition themselves to be effective, productive, and efficient towards the production of competent professionals who will function in various information systems. It is of necessity that LIS curriculum and methodology meet the needs of the present without compromising the ability of the future generation to meet their own needs. A curriculum that will allow students take decisions and be responsible for the outcomes of decisions made is necessary. Apart, hands-on activities must be encouraged as it makes learning more real and practical to the student, encouraging critical thinking and exploration, leading to a sustainable development.

Akwang (2013) highlights that LIS educators must recognise and accept the need to set and attain defined level of performance and scholastic achievement within the context of the programme's objectives. This, according to the author, could lead to desired learning outcome capable of developing and sustaining national growth through information management. People need to be aware of what is happening around them to be able to make meaningful decisions. Through information, citizens could develop knowledge, understanding, values and actions required to create a sustainable world, which ensures environmental protection and conservation, promotes social equity and encourages sustainable development (Nevin, 2008).

The concept of sustainable development can be interpreted in many different ways, but at its core is an approach to development that aims at balancing different and often competing needs against an awareness of the environmental, social and economic limitations in the society. For development to be sustainable, there is much greater complexity than merely providing resources to meet specific and competing needs. People must be involved and ultimately take over ownership of solutions to meeting their needs. This can only be visible if people have access to adequate, relevant, and timely information on areas of interest. Sustainable development, therefore, sufficiently lies on the level of information or knowledge acquisition and application among the citizenry. In this case, sustainable development could be regarded as a process of improving the range of opportunities (information) that will enable people to achieve their aspirations and full potential over a period of time while maintaining the resilience of economic, social and environmental systems.

There are some fundamental questions that could be used as framework to explain the unprecedented and critical roles which LIS education play in realizing sustainable development. How would Nigeria ensure sustainable development in a situation where reading culture is deteriorating? What happens in a state where libraries and information centres are not considered as important tools for achieving sustainable development? What happens in a situation where teachers (lecturers) are not motivated for higher productivity? What is expected in a state where bad governance, embezzlement, and other political problems are highly encouraged? Without doubt, the above descriptions need to be judiciously addressed within and beyond the confines of educational and political sectors to ensure meaningful and sustainable development in the country.

2.5 Challenges Faced by LIS Educators

LIS educators in Nigeria are faced

with a number of challenges which has hampered effective training of information professionals, vis-à-vis optimum contribution to national development. Some of the challenges include:
i.   Traditional Method of Teaching
ii. Poor Research Orientation
iii. Inadequacy of LIS Educators
iv. Poor Infrastructures and Facilities
v.   Insufficient Knowledge and Use of ICT
vi. Inadequate Funding
vii. Lack of Appreciation by Stakeholders

Conclusions and Recommendations

The functional position of LIS educators towards sustainable development cannot be undervalued. The reason is that the training of competent and dedicated professionals for the generation, organisation, repackaging, and delivery of information drives meaningful and sustainable development in any society. This, to a large extent, links to LIS educators' competency which is determined by their command and application of pedagogical content knowledge, language proficiency, and adoption of the right teaching strategies and skills. However, building LIS educators competencies to support sustainable development demands a more realistic and holistic approach by all education stakeholders. It is therefore recommended among others that:
i.   Education stakeholders should see to it that LIS educators are adequately trained and re-trained to acquire the right skills and competencies.
ii. Education should be adequately funded to allow the recruitment of more LIS educators, accessibility to research grant, and provision of technology-driven facilities.
iii. LIS schools should develop a model curriculum based on the cutting-edge courses to support sustainable development.

iv. LIS educators should be physically, morally, emotionally, and socially ready to bring the desired change required to achieve professional and national goals.
v.   Collaboration with LIS schools within and across national boundaries should be embraced to share relevant knowledge that could lead to sustainable development

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