

Library and Information Science Education (LIS) and the Gaps that Inhibit the Production of Professionals for Effective Management of Libraries in Ghana

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Abstract The study focuses on discussions on the fast-growing nature of tertiary institutions in Ghana with inadequate supply of high-quality Library and Information professionals to manage their libraries. In order to set the context for these concerns, the paper adds to the discussion a brief history of how libraries in Ghana began. The paper continues to underscore the development of these libraries and their current states. The challenges of LIS education as well as significant roles played by LIS education in the nation's development are also highlighted in the paper. It concludes by offering suggestions on how to improve LIS education in Ghana as well as the quality of curriculum used by the only LIS professionals provider in the country.

Keywords Library and information science, Librarianship, LIS education, Libraries, Ghana

1. Introduction

Library and Information Science (LIS) is a field that produces knowledge as well as utilization of knowledge. However, researchers in the field produce only a small amount of this knowledge. LIS is a professional discipline that attracts many forms of knowledge. The term Library Science can be traced as far back as 1807, in a book written by a German called Martin Schrettinger. It is referred to in German as "Bibliothekswissenschaft" [1]. The term is still in use and is most often replaced by "library and information science" (LIS).

Library and Information Science is defined by the American Society for Information Science (ASIS), as a body that seeks to generate, collect, organize, interpret, store, retrieve, disseminate, transform and use information, given special attention to the use and applications of modern technologies in the field. The body has two parts. The first part inquires into the discipline without considering the application, otherwise known as pure science or theoretical components. The other part develops services and products and is also known as applied science or practical component. As a branch of study, it is

concerned with the building and structuring of scientific systems and knowledge in technological advancement, which is linked to information transfer. The impact of Information and Communication Technologies (ICTs) and its usage is now felt in every aspect of human life. This also includes the Library and Information Science field [2]. Our today's society is evolving as a result of Information Technology with its increase in knowledge and information explosion. This has brought a massive revolution in the Library and Information Science profession [3].

People in Library and information science schools have differences in their philosophical approach as well as the kind of problems they try to solve. The term "information science" is much preferred by the group of people who focus on the use of ICT while the term "library studies" is often preferred by the people who engage in Library history.

"Library science" is studied in "Library schools". Library schools are institutions where librarians are schooled and trained in the capacity of librarians. Library schools train different categories of Librarians for different libraries. There are "general librarians" for public libraries, "special librarians" for libraries in places like the military, law firms, hospitals, museums, the government and private businesses and "academic librarians" for academic libraries. The education of these librarians has the tendency of being monopolized by such schools.

Most professional positions in research libraries are in most cases, occupied by people who have had their main education from library school, whereas subject specialists

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tend to occupy relatively less than half of such positions [4]. Subject specialist librarians mostly tend to have their first degree from a library school and their master's degree or doctoral degree in a field of subject such as medicine, law, history, music etc [4].

However, in Ghana and many parts of Africa, Professional positions in libraries are given based on academic qualification level. Librarians who have Master's degree from a library school are all qualified for professional positions.

Harvey [5] in his study, bemoaned the quality of Australian education for librarianship". He argued that something was wrong with Australia's university-based education for librarianship. He went further to suggest that 'the situation may even be so grave as to be fatal' [5].

In 2011, Harvey reiterated in an update of his article that, education for librarianship in Australia seemed to be in decline, although it had not proved fatal as he proposed in his earlier article. He stated that fewer doctorates were being produced by the Library schools, subsequently, affecting academic renewal. The LIS field is imprecise as there were fewer staff in the fewer library and information studies school [6].

The LIS education in Ghana is in shambles. There are many university institutions, colleges, and polytechnics sprang all over the country, with all of them equipped with highly sophisticated functioning libraries. Yet the production of LIS professionals to manage such libraries aren't enough, given that there is only one Library school in the country to train and produce all-round librarians, archivists or records managers who are competent and are equipped with a broad range of appropriate skills, to well position them to assist members of the client groups they serve, to adapt to the massive changes they will encounter.

It is against this backdrop that this study was carried out to address some of the issues and concerns.

2. Methodology

Data from only secondary sources were collected and used to obtain the findings of this paper. Journals, text books and works of other researchers became some of the useful sources of secondary data that were used to obtain information in order to ensure the research results were reliable and valid.

3. Literature Review

3.1. Professional Strategies in LIS

In a study she carried out, Olsson [7], reported on the different forms of professional strategies that exist in the main frame of LIS discipline. She stated that different professional strategies which have to do with development in computer science and information technology have been adopted by different professional groups within the confines

of Library and Information Science discipline.

There's a form-oriented strategy which have been adopted by general librarians in their quest to produce a fully satisfactory library catalogue through computer utilization. Research librarians on the other hand, have adopted a content-oriented strategy. This group of librarians obtain, apply and develop the bibliographical databases so as to get access to the information contained in published articles and report through distinct and more advanced means. Hence, the adoption of the name, content-oriented. Information Resources Management (IRM) or Information management is the last professional strategy that Olsson talked about. Library and Information Science schools have adopted this strategy as a continuous mechanism to develop the library profession, she pointed out. According to her, this is a favoured profession.

3.2. Competence in LIS

Competence is the consistent integration of one's required skills, knowledge and judgement required to ensure effective, safe and ethical work practices.

Competence can also be seen as the overall skills, knowledge and judgment which reforms and evolves over time. Such competencies, also known as continuing competencies, are inferred by demonstration in familiar and unfamiliar situations [8].

Olsson in her study, talked about two forms of competencies. These were generalist competence and specialist competence.

In her view, there are other group of librarians who are able to design and develop new library and information systems. Olsson holds the opinion that such group of librarians lack technical interest or if there is at all, it is insignificant. She adds that the success of this kind of strategy will require a good discussion of the profession. The professional roles developed by this group is called specialists on form. The other group are librarians such as bibliographical indexers and cataloguers whose work require certain form of formatting, particularly "the Anglo-American Cataloguing Rules" and "the MARC-formats". Such librarians develop professional roles called specialists on form.

According to Olsson, librarians who have tried to compete with their fellow researchers in a particular subject area have always failed to keep up with such researchers. The reason being that there is an increasing competition among the researchers and a continuous specialisation in their subject area. However, this strategy is destined to fail.

Content-oriented expertise have also become another focus of librarians. Subject-specialism has been seen as a natural way to gain an expert status because the Library and Information Science profession is an academic profession.

3.3. Specialization in the LIS Profession

Specialization has always been a question or subject that plunges the LIS profession into a state of uncertainty

anytime it arises. Small libraries especially that of public libraries are bound to rely on professionals who are able to work with many kinds of functions and are able to work in a wide subject area. The case of big libraries is slightly different as they can afford a vast selection of specialists who are well-versed in issues that pertain to technical, administrative, marketing and education (form specialists), as well.

Even though it is widely known that the professionalism in smaller libraries and information systems are less in comparison to bigger libraries, libraries and other information systems which are smaller in sizes can also be highly professional and specialized.

3.4. Competency-Based LIS Education

Competencies that are needed in the various library professions are very crucial and this is why it's not surprising to find lots of studies regarding competencies in almost all current Library and Information Science literature.

Trying to define what competency is has been challenging as there is no one way to go about it. In the time past, competence was characterised by one's personality attributes. Competence was assessed on the grounds of one's innate abilities, virtue, quality of character and underlying traits. However, in today's world, competence is defined when observable actions, and skills-oriented behaviour are measured against quantitative standards [9].

Many school of thoughts have tried to define competency. One school of thought explains competency as the evidence that one can produce desirable outcomes. Another defines it as the skills, knowledge and capacity that one possesses to function in a certain way. Still another defines competence as what a person knows. [10].

The definition of competency by the Council of Europe put it as, "the set of knowledge and skills that enable an employee to orient easily in a working field and to solve problems that are linked with his or her professional roles" [11].

In one of their studies, Buttlar and Du Mont [12] inquired from 736 alumni from different library schools concerning what they consider to be the competencies that are greatly valued in their professional career. The sample revealed the most five competencies that are highly rated by academic librarians. They include the art of conducting reference interview appropriately, having in-depth knowledge of sources in different formats, ability to effectively communicate in writing, utilization of oral presentation skills for presentations and solving library problems through the application of critical thinking.

In order for future academic librarians to function well in their professional roles, they must possess some core library skills and competencies. Morgan [13] in his study, put these competencies and skills into four categories. They include management skills, teaching and training, IT-related skills and dependability of academic staff.

In another study, Giesecke and McNeil [14], outlined core competencies needed by Librarians who work in universities.

The list includes competencies such as flexibility or adaptability skills, organizational understanding and global thinking, problem solving or analytical skills, decision making skills, creativity or innovation skills, communication skills, expertise and technical knowledge skills, global thinking, interpersonal or group skills, ownership or accountability, leadership skills, dependability, resource management of resources, attitude to service or user satisfaction and planning and organisational skills.

Finally, as part of regulations for their information educational programs for professional librarians, the International Federation of Library Associations and Institutions, IFLA [15], recommended a list of core elements or competencies that should be introduced and added to the curriculum used by LIS schools. This is to ensure that Librarians who go through LIS education acquire these competencies. In all, eleven core elements were recommended. These include;

- Information agencies management
- Applications of information and communication technologies to library and information products and services
- The data environment, information policy and ethics, the history of the field
- Conducting of research, analysing and interpretation of results
- Information generation, communication and use
- Qualitative and quantitative assessment of library usage and issues of information.
- The information transfer process
- Knowledge management and information resource management
- Organizing, retrieving, preserving and conserving of information
- Assessing information needs and designing responsive services

According to Reichel [16], the Association of College and Research Libraries also suggested some key components that is essential in LIS education for the training of graduates or Library professionals. The components include;

- Understanding and appreciation of diversity
- In-depth knowledge on issues concerning policy and legality
- Assessing library effectiveness
- History, theory and principles of librarianship
- Understanding technological issues
- In-depth understanding of the higher education environment
- Consideration of ethical issues
- Planning and management
- Conducting of information literacy programs
- Scholarly work preparation.

It is worth mentioning that, the above discussed competencies are also applicable in the LIS professional requirements of libraries in Ghana and many other African countries.

3.5. History of Ghanaian Libraries

Africa is said to be the birthplace of civilization. It is therefore not surprising that the world's oldest library is found on the continent. Saint Catherine's Monastery in Sinai Egypt, continues to be the safest place to hosts the world's oldest library still functioning. The Library which was founded sometimes in 6th AD between (548-565), houses outstanding collections of early Christian manuscripts and icons [17].

Ghanaian libraries also, have rich history. In Ghana, the Aglionby library of Accra was one of the early collections which contributed to the emergence of the Ghana Library Board. The Library was named after Right Reverend John Aglionby, who was then, the Anglican Lord Bishop of Accra who had set it up for his personal use with some 6,000 volumes. The library, which served as both the country's national bibliographic centre and a lending library was first opened to the public in 1928 and later taken over by the British Council. The Ghana Library Board, born in 1950 thus, 7 years before Ghana's independence became the first public library service in black Africa. The Library Board Act has been used as a model of public library legislation in many African countries [18].

The three libraries in the country's first three and oldest state-owned University institutions were spawned from a mother Library called Achimota College Library. Thus, they are direct descendants of Achimota College Library. The history of this Library is an honourable one. Conceived originally as a Teacher Training College Library, it developed into a multi-institutional library and by the nineteen- thirties (1930's) it had made a great impact on the reading public and educational institutions of the Gold Coast. But its influence was not confined to this country. For a brief period in the early forties the Achimota College Library served as a centre for library training for students from all the British West African Colonies. At its peak, the Achimota College Library comprised some 24,120 volumes made up of a main collection of 11,000 volumes, a Science School Library of about 12,000 and two other small collections for an Engineering School Library and an Art School Library (850 and 270 respectively). The Library was however, dismembered, after the establishment of the University College of the Gold Coast in 1948, to serve as a nucleus of the Libraries of the following University Colleges; the Specialist Teachers' Training College at Winneba, Achimota Teachers' Training College, and the School of Administration of the University of Ghana. The three libraries received 3,000 volumes. Achimota Teachers' Training College was later transferred to Kumasi to become a foundation for the faculty of Kumasi College of Technology; and from Kumasi some of the original Achimota stock went to form the basis of the University College of Cape Coast libraries. Achimota School, however, was left with a rich legacy and today it possesses one of the best School libraries in the country. [19].

The first University to be established in the country was

the University College of the Gold Coast, currently known as the University of Ghana, Legon. It was founded in 11th August, 1948 by an ordinance based on the approbation of the Asquith Commission on Higher Education which was under the then British Colonies. Dr. David Mowbray Balme became the first principal of the school and so the school Library was named after him. The library is the largest in the country and begun with a total stock of three and fifty thousand (350,000) volumes and five thousand (5,000) periodical titles [20].

The second university was established in the Ashanti Region. Called Kumasi College of Technology, the university was established in October, 1951. The university, now, Kwame Nkrumah University of Science and Technology attained the status of a full university on 22 August, 1961. The library started with a total stock of four thousand (4,000) volumes.

Established in 15 December, 1962, the University College of Cape Coast became the third university to be established in the country. It was formally inaugurated as University of Cape Coast in 1971. The university Library started with a total stock of two hundred and fifty (250) books [20]. The details of the start-up collections are shown in **table 1** below.

Table 1. Start-up Collections of the Three Oldest Universities in Ghana

Name of University	Total collection for start-up (Volumes)	Year Established
University of Ghana	350,000	1948
Kwame Nkrumah Univ of Science & Technology.	4,000	1951
University of Cape Coast	250	1962

It is worth mentioning that the above-named institutions are not the only institutions which have libraries in Ghana. Apart from these three, there are two more state-owned universities, namely, University of Education, Winneba in the Central region and University of Development Studies, Tamale located in the Northern part of the country respectively. This brings the total number of state-owned universities to five (5).

3.5.1. The Libraries' Development

The Libraries in Ghana had astronomical growth as the years went by. Since these libraries are there to serve not only the academic community but the public as whole, there was the need for melioration in terms of infrastructure, collection and services, in order to meet the heavy demand.

According to Anaba Alemna [21], an essential component of the university library is the information that it houses and as such a variety of carefully selected up-to-date materials, in various formats, is needed to match up the curriculum and variant interest needs of both faculty members and students. He believes that decisions concerning amounts of materials, formats, and quantities of supporting equipment needed should be made on the basis of programs of the school and user needs.

Beginning with the University of Ghana Balme Library,

which started with about three hundred and fifty thousand volumes, it grew in its stock from 350 to some 247,000 volumes and some 4,500 periodicals between the years 1967 and 1970. University of Science and Technology and University of Cape Coast on the other hand, had increased from 4,000 book-stock to 30,000 volumes and some 750 periodicals and Cape Coast from 250 book-stock to 35,000 volumes and 1,264 periodicals respectively, between the same year [19].

As demand increased, collection of libraries also increased over the years to meet it. From the year 1985 to 1988, the stock of these libraries took a great leap with the University of Ghana recording the highest of collections. In his study on Collection Development in University Libraries in Ghana, Anaba Alemna [21] told of how the collection of these universities increased between the years 1985 and 1988. According to him, the University of Ghana library increased its total collection of 291,840 to 309,186 volumes and 7,500 to 7552 titles. Kwame Nkrumah University of Science and Technology however, recorded a total book stock of 125,771 to 138,858 and 1,824 to 1,936 titles while University of Cape Coast recorded 144,290 to 150,118 volumes and 1,998 to 2,554 titles respectively, between the same years. It is worth noting that these libraries faced some challenges in the acquisition of materials at their early stages due to unfavourable economic situations and also, the fact that most of the materials had to be imported from abroad [21].

Over the years, the Ghana's first three and oldest libraries have seen significant development attracting both domestic and foreign users as well as public readers. All the libraries are now fully automated, bringing a shift from their traditional way of operation and service delivery to a more technical and developed one. Amekuedee [22], argues that it is not enough for integrated systems of today to only provide modules that connect the traditional library functions, but rather to remain relevant, integrated systems should be able to connect through local systems into systems of other suppliers, as database and internet

Currently, the Balme Library at the University of Ghana has a total holding of about 409, 622 volumes. Due to the global shift from print access to online access, subscription to print journals titles are not ideal, hence the library's decision to move from print to online journal subscription. The library also has access to 68 paid online journals in databases, 29 free online journals, 7 reference sources and over 5,000 e-books. It is worth mentioning that University of Ghana still remains the only University in Ghana that provides formal education in librarianship in Ghana. The library school offers undergraduate, postgraduate and diploma degrees.

Kwame Nkrumah University of Science and Technology Library likewise, has developed in terms of stock and infrastructure. The Library together with six other College libraries constitutes the University Library System. The six colleges are: Engineering, Science, Health Sciences, Agriculture and Natural Resources, Art and Social Sciences, Architecture and Planning. As at 2010, the library could

boast of collection holdings of over 230,000 volumes of printed books and about 3,500 journal titles. Of the journals, 360 were current titles [23]. Ahenkorah-Marfo and Borteye [23] stated in his study that, by virtue of the library's membership of the Consortium of Research and Academic Libraries in Ghana (CARLIGH), the Library at that time (2010), had access to over 15,000 online journals subscriptions in databases and access to about 9,000 free online journals in specific subject areas on CD-ROMS. Currently, the total collection of the University Library system is 293,164 volumes, of which 81,064 volumes of collection come from the six college libraries.

The collection development of University of Cape coast has rather seen a slow pace. As at the year 2015, the total volume of books including bound periodicals stood at 249,564 [24]. However, within two years, the library saw a significant growth in their collection. As at 2017, the total book volume of the library was 266,029, with 2400 old periodical titles, 10 new periodical titles and 50 online database subscriptions. Not much has changed since that year.

3.5.2. The Role of Libraries Towards National Development

The SDGs which include, transforming our world: the 2030 Agenda for Sustainable Development ("UN 2030 Agenda") [25] and the Africa we want ("AU 2063 Agenda") [26], have become the driving force for the development of nations around the world. The universality of these Sustainable Development Goals (SDGs), makes each and every country responsible for the development and implementation of national strategies to attain the SDGs, as well as monitor and evaluate the progress of achievement of these target agendas by Ghana, is dependent on the recognition of Libraries and librarians as an engine of access to well packaged, timely, inexpensive and readily available information. Libraries are important places to get access to information that has to do with personal development and have also shown to be cost-effective partners that foster and prioritize development. For this reason, many countries have chosen and attached importance to libraries to be repositories for essential information and knowledge [27].

The objective of goal 2 of the UN agenda and aspiration 1 of the AU agenda 2063 is to eradicate poverty at all levels, in all social classes. The Romanian government's strategy to achieve this objective, was to increase the supplies of small-scale farmers or food producers as well as their income. In an attempt to support the government's initiative, Public library staff who have received training under the Biblionet programme collaborated with the ministry of Culture, local and government, Association of Libraries of Romani (ANBPR) and all public libraries over the country to help train 100,000 farmers in use of new ICT [27].

Again, in Botswana, Public libraries contributed immensely to support the government to achieve its objectives under its National Vision 2016 which included enhancing computer literacy and skills of users of the library,

introduction of ICT access, equipping users to be lucrative in education, business and employment.

Furthermore, In 2010, Ulaanbaatar Public Library (UPL) and the Mongolia National Association of the Blind put up two magnificent recording studios to produce in a digital format, talking books that have introduced new opportunities and created new learning environment for the visually impaired as well as expanded the number of materials accessible to them [27].

Lastly, collection, processing, preservation, storage, retrieval and dissemination of information has been one of the core mandates of libraries. Ghana, had had four brutal coups by the year 1992. It was the same year the country passed its first and present constitution. Video and audio recordings of past human rights abuses and violations that had happened at the time of the coups, have been processed and converted from the VHF and cassette format to DVD's and CD's by the University of Ghana Library where they are being kept. These are very important and sensitive materials that have helped the country in its peace reconciliation process. It is worth noting, that the researcher is part of the team who worked on the conversion of these materials.

3.5.3. Needs of Libraries in Ghana

Libraries in Ghana play significant roles within institutions by supporting their objectives of teaching, learning, research and other services to their communities. They also serve as engines of local development and contribute towards national development by providing education and repackaging information in a way that can be consumed and understood better by a targeted group. However, they are faced with few problems that hamper their smooth operations. For instance, Alemna [28], mentioned the training of non-professional library staff, as one of the major issues that libraries in Ghana are faced with. According to him, non-professional staff of libraries need as much education as professionally trained staff if not more. Library services are bound to suffer or experience inefficiency and ineffectiveness if these group are not skilled in their jobs or denied of further training [28].

Also, in his Speech at the 8th Presidential inaugural lecture on May 4, 2017, on the theme: "National Development through the Sustainable Development Goals (SDGs) – The Role of Libraries," of the Ghana Library Association (GLA), the President of the association bemoaned the depletion in the existence and functioning of public libraries. This, he said, was as a result of failure in their expectation of increment in the staff strength of professional librarians from 35 to 500 before the year 2000. As at 2017, professional staff serving the country's public libraries were 12 [29].

In addition, the President made it known that the School libraries in the country had no professionally trained staff to manage them [29]. Libraries have needs. For Libraries to be able to provide efficient services to their institutions, users and communities, and to contribute to national development,

libraries should have professionally trained staff to manage them.

3.6. Ghana Library Association (GLA)

Established in 1963, the Ghana Library Association (GLA) is the main body responsible for running the affairs of librarians. They are the mouthpiece and the rallying point for all library and information professionals in the country. Their drive is to promote the highest quality of library and information practice. It also gives leadership support for professionals and libraries and continuous professional education to its members.

The Association's objectives are firstly, to foster and protect the professional agenda and interests of Ghanaian librarians. Secondly, to bring together all individuals and institutions in the country, who have developed interest for the librarianship profession. Thirdly, to help in fostering the creation and expansion of libraries nationwide and finally, to promote library cooperation and bibliographical work in Ghana [30]. The Association's membership includes professionally trained librarians as well as practicing librarians.

3.7. Tertiary Education in Ghana

Tertiary education in Ghana is composed of universities, polytechnics and other institutions like special colleges.

As at the year 2014, there were six known public universities in Ghana [31]. However, Ahenkorah-Marfo [32] reported in his study that there were nine national public universities in Ghana in the year 2014, whereas [33], as cited in Lamptey [34], put the number of private universities in the country at sixty-eight as at the 2016. At the time of writing this paper, the number of tertiary institutions in the country has risen to ninety-one (91), including ten public universities and 81 private universities [35].

In Ghana, the government or the state typically supervises the running of public universities and are funded whether partially or fully by the state's money. The state as well as other public institutions again, support public universities through subsidies. On the other hand, Private universities are managed by religious and corporate entities, individuals as well as organizations with private ownership. No private university had been established in the country up till the 1970's. Valley View University, now a full-fledged private university, was the first private university college that was established in the country in 1979.

Despite their primary role of augmenting the work of the public universities in the country, private universities generate their revenues internally and do not receive any support from the government to run their institutions [36,37].

Until an institution becomes a full-fledged university, she must obtain accreditation or license. The accreditation is given based on number of factors like standard of programmes, adequacy of infrastructure or facilities including libraries and also contents. The official body mandated to give the authorization for both public and

private tertiary institutions to operate in the country is the National Accreditation Board (NAB).

Notable among the universities owned and run by the state include, the University of Ghana, also known as the premier of the public universities. Established in 1948, the university is now the highly ranked university in the country and among the top 10 in Africa. The second university was Kwame Nkrumah University of Science & Technology, which was established in 1951. Then came the University of Cape Coast, also established in 1961. These are the first three and oldest universities established in the country. After the establishment of the University for Professional Studies in 1965, the country didn't see any other university establishment until the year 1992. Two more state-owned universities were added to the already existing ones in 1992. They were the University for Development Studies in Tamale and the University of Education in Winneba. The others were, the University of Mines and Technology, the University of Health and Allied Sciences and the University of Energy and Natural Resources, which were established in 2001, 2011 and 2012 respectively. All the public universities run different programmes and issue certificates in three main honours. That is, bachelor, masters, and doctorate.

Like the public universities, notable among the private universities is Regional Maritime University (RMU), which was established in 1982, when the Regional Maritime Law was made known in the same year. She had the accreditation to become a full-fledged university in the year 2007. Also is, the Wisconsin International University College. It was established in 1998 but received accreditation in January 2000, becoming one of the first private universities to do so. Established in the year 2000, Methodist University College Ghana is another prestigious private university in the Country. She received her accreditation to become a full-fledged private university in August 2000.

A functioning and well-resourced library facility is one of the criteria used for assessment and accreditation by the National Accreditation Board. As this a positive and commended tool for assessment, it should also give the LIS professional providers an idea of the kind of expectations their educational partners would be looking out for. That is, well-trained library professionals to manage these libraries. Not only well-trained library professionals but a good number of them, looking at the rate at which these higher institutions are expanding.

3.8. Library and Information Science (LIS) Education in Ghana

Institutions of Libraries and Information Science education in Africa, started in the continent as early as 1960. By 1980's, the continent could boast of only five main LIS education institutions, which were located in four of its countries- Ghana, Senegal, Nigeria and Uganda [38].

The department of Library and Archival Studies, now the Department of Information Studies, is the only department that trains and produces Librarians in Ghana. Established with the support of Ghana Library Board in 1961, the

department which was located in the capital city of the country, became the first Ghana Library School. In the middle of 1961-1964, the school rolled out its first associate ship-level programme from the British Library Association. In 1965, the Library School was relocated to the main campus of the University of Ghana. It was also re-designated to Department of Library Studies in the same year. It saw two transformations in the year 1976. Based on the partnership between the department and ICA/UNDP, the department's name was changed to Centre for archival education in English-speaking Africa. In order to acknowledge this partnership, the name was changed again to become the Department of Library and Archival Studies. As part of the initiative to redirect its programmes, the name was changed again from Department of Library and Archival Studies to Department of Information Studies in 2001. The major changes that occur as part of their curricula structuring was the inclusion of IT courses like Database Management Systems and Computer Literacy. As a result, LIS education in Ghana now has a computer component in their programs.

Currently, the school offers programmes such as Degree, MA and MPhil in Library studies. There are also two graduate diploma programmes in Library and Archival Studies and two sub-degree diploma programmes in Librarianship and Archives administration.

The school also has a strong relationship with the library. Over the years, senior Librarians from the library who have MPhil certificates have been employed as part-time lecturers to teach in the Library school.

In some cases, students are brought into the library to have practical sessions as part of their course structure. Among these courses are Information Sources and Information storage and retrieval, where we find most of the materials and resources needed in the library.

Undergraduate students from the school are given the opportunity to work in the library as interns during long vacations. Again, interested students from the school are given the opportunity to work with the library during their National Service term.

On the other hand, postgraduate students offering, MA and MPhil are made to spend one month with the library before they graduate. During this time, students go to every section of the library to understudy and work with staff. A project work or a report is submitted to the department at the end of their practical sessions. Through this, they acquire practical knowledge about the library profession.

For the past two decades, University librarians have always been selected from the Library School. Due to the professional and technical nature of library management, the university council considers it very appropriate to choose a university Librarian from the Library school rather than to outsource the position.

On-the-job training is at the core of the library's mission. As a result, the library occasionally sponsors library staff to undertake an MA program in the library school. There are however, some issues which have been found to be challenging the smooth running and performance of the

Library school.

3.8.1. Challenges of LIS Education in Ghana

There are various challenges confronting the LIS education and its practices in Ghana. According to Boamah [39], a conversation with a senior lecturer in the Information Studies department of University of Ghana, revealed that the LIS profession in Ghana is not popular. He bemoaned how the Library school has become the last option for students who failed to get admitted in other programmes. He added that many people are shy of the library profession.

Alemna [40], examines three major challenges facing the LIS education in Ghana. They include facilities, funding and staff. Throwing more light on the facility problem, he stated that the facilities in the Library school are not enough as a result of poor funding. He mentioned that, with a school that had an average students in-take of eighty (80) yearly, they could only boast of three functioning computers with most of other equipment broken down and not being attended to [40]. Thus, this has adverse effect on teaching and learning as students are given theoretical lessons with little or no training.

Secondly, Alemna indicated that even though the main source of fund for the library school is from the Ghana government, the funding is very small. He argued that nearly all the programmes in the library school, especially those that involve IT support, need large sums of money to run them.

Lastly, the Library school is confronted with staffing challenge due to retirement and continuing education. He expressed his sentiments about how library staff who are trained in IT quit the job to search for IT jobs for better salaries [40].

With all these challenges at hand, the Library school is not able to meet its objective of providing sufficient and well-trained library professionals to manage the numerous libraries in the country. The library school is not well equipped and resourced to position it to take up the mandate of efficiently preparing new generation of qualified librarians who can effectively use and apply new information technology to manage, process, store, retrieve and disseminate relevant information.

3.8.2. The relationship between LIS Education and National Development

Information is very crucial for knowledge acquisition, decision-making and national development. This is why the existence of Library and Information Science education is essential so as to manage the production of exceptional LIS professionals who will be able to take important positions in national development. In today's world, LIS professionals have become information managers and gatekeepers [41].

Information has turn up to be the "fourth resource" after land, labour, and capital in this fast-growing knowledge-based economy. And it is so because information is the bedrock of almost every sector of the society [42]. It is therefore very imperative that the importance of the

management of LIS be appreciated by administrators, policy makers and educators in Ghana. Okello-Obura [43], asserts that information management and sound records aids in the operations of government through the facilitation of fast decision making as well as transparency. In view of the arguments above, it is, thus, politic that government, policy makers, professional associations and educators begin to find ways by which human capacity can be broadly developed and used in the management of information for democratic governance, accountability, and full observance of human rights, transparency, political consciousness and freedom of association, along with other elements, in order to transform the society [38].

Until now, the most essential element in national development was considered to be science and technology and it was given priority in universities. The process of advancement hangs on self-confident, creative, responsible and knowledgeable people. Progress is dependent on the power of people. Librarians and information professionals are part of the human resource who provide useful, relevant and timely information for individuals and organizations who play critical roles in the nation's development [44]. To play their role in this developmental process, librarians and information managers must receive a fitting professional education. There should be a conformity between the structural changes in higher education and the ideals of national development. This is why the future of LIS profession in the country can not to be downplayed or marginalised. But rather taken as a priority and efforts being made to sustain the profession.

As [38] put it. It is widely known that in this our global village driven by knowledge and technology, every nation's social and economic strength rest on its potential to exploit its workforce through an innovative and constantly changing educational system that thrives on, and drives development in technology.

4. Recommendations

- The role that LIS play in national development cannot be underestimated. This is the reason why libraries, library associations and information systems must all play their individual roles in promotion, innovation and creativity so as to meet user's needs and expectations. Information is a vital component in national development, and the propensity to use it and other information tools is regarded as a source of power. Library Associations and LIS advocators should assess the challenges hampering national development and train experienced professionals to deal with these developmental issues. In fact, national development is inevitable when useful information is provided in social, cultural, economic and political context.
- Founded in 1876, the American Library Association (ALA) is recognised for her influence and authority in contributing to Library education and training in the

United States of America [45]. The Library Association of Ghana should therefore take a clue from their sister association and together with the government and other educational stakeholders introduce the LIS education in other tertiary institutions. They should subsequently provide funds, infrastructure and sophisticated LIS professional teachers to train future professional librarians.

- LIS educators must begin to investigate and teach about the expanding area within which information professionals can find themselves in positions of power.
- The constant evolution of technology and the wide-ranging changes that are taking place in the knowledge infrastructure have given birth to new modules in the field of LIS, such as collaborative network creators, system builders, organisational designers, disseminators and content producers. These new models of LIS education are needed by educational institutions to prepare the current LIS graduates to adapt new roles to aid them to meet the changing needs of students, teachers, scholars and researchers.

5. Conclusions

The qualification required for the position of a Librarian in most part of the world is LIS education at the tertiary level. The ever fast growing and dynamic environment of libraries in academic institutions requires LIS educators and advocators in the country to have a new outlook for the profession. This call is necessary since the only library school in the country has not been able to produce enough professional librarians who are needed in our libraries. Institutions of today, are no longer just looking for people with knowledge in information technology. Rather, a particular emphasis is sought for by most institutions who demand information technology competence from Librarians.

If schools that manage LIS education cannot organise themselves to match up with this new change, their products will be without value in the market. subsequently, the job market will be taken over by graduates of any other discipline. Adaptability, new conceptual thinking and openness to mindsets are some of the essential ingredients needed to obviate information professionals from becoming outmoded in this constantly changing information environment.

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