Research Article

Promoting information literacy in public universities: role of librarians

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ABSTRACT

This study aimed to explore the extent of librarians' awareness and the roles they play in leveraging information literacy to improve scholarly work in public universities in Ghana. This is a multiple case study in which the qualitative research approach was used. A semi-structured interview guide was used to solicit the views of librarians from top universities in Ghana on their awareness of information literacy and the roles librarians play in its delivery. The findings of the study showed that librarians at public universities have a good knowledge of information literacy and are well aware of its importance in improving scholarly work. However, they lack institutional policies and collaboration from their faculty counterparts to streamline the delivery of information literacy in these institutions. The study provides lessons for an in-depth analysis of the new roles of librarians in information literacy in Ghanaian libraries that are lacking in the literature. Higher education policymakers in Ghana and elsewhere would find the results useful for implementing the information literacy agenda in universities and colleges.

Keywords: information literacy, library instruction, academic libraries, library roles, faculty collaboration, Ghana

1. INTRODUCTION

Academic libraries are key stakeholders in the integration of information literacy at universities. They are responsible not only for providing appropriate information resources, but also for guiding how they can be used to sufficiently meet the educational, recreational, and research needs of the university community. A successful approach to delivering this mandate begins with librarians' awareness of the significant roles that libraries play in advancing information literacy instructions.

The involvement of academic librarians in teaching and promoting information literacy is essential for an informed public in general and for college students in particular (Okpala et al., 2017). To meet the current challenges of the information age, academic librarians should also engage in students' learning experiences and equip them with critical information skills.

According to Lai (2012), academic libraries are equipped with resources for studying information literacy, including databases, information retrieval systems, and information specialists who can help with information literacy instruction. The academic library is therefore the most appropriate stakeholder to teach the use of information resources in this era of proliferation of information sources. This will ensure that students appreciate the need for the right sources of information, in

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order to locate, evaluate, and disseminate knowledge in an ethical, legal, and responsible manner (Israel, 2010).

The abundance of information (data smog) has the tendency to form a barrier in itself. To manage this rapidly expanding amount of information, society and students need a special skill (Brindha, 2016). Information literacy is therefore considered as a solution to data smog. Arya (2014) affirmed that information literacy gives us the ability to know where to find information and how to use it effectively and efficiently, which helps us to cope with data smog. Understanding information literacy skills in an academic context enables students to work effectively and efficiently during their academic years and become lifelong learners (Somi & Jager, 2015). As a result, society will have the advantage of benefiting from increased productivity and decision-making.

Okpala et al. (2017) recognized that today's world is an era of increasing prominence for the modern librarian to teach information literacy as part of their duties. The literature has identified new roles for library involvement in information literacy instruction, especially in universities in developing countries. Therefore, the purpose of this study was to explore the roles of librarians in teaching information literacy as a catalyst for students to achieve academic success and become lifelong learners.

2. LITERATURE REVIEW

Being aware of something means being able to recognize its existence and appreciate its significance. Librarians need to be aware of the importance of information literacy in order to appreciate it. This is largely because access to information has become necessary to meet the needs of modern information seekers due to the increasing growth of information resources. Therefore, it is crucial for librarians to be aware of the importance of information literacy skills as they play a core function in information provision (Lefalatsa, 2018). There is data smog – the idea that too much information creates a barrier in itself. For this reason, students and society in general require special skills in dealing with rapidly growing information resources, in order to effectively use information for educational, economic, and other purposes. Information literacy is considered as a solution to data smog (Brindha, 2016).

Thanuskodi (2019) explored the information literacy skills of library and information science professionals in India. The findings showed that the majority of librarians involved in the study were aware of the knowledge and significance of learning information literacy among students in Indian universities. The research findings also showed that librarians were able to use instructional tools in information literacy. This group of professionals are information-literate people who will survive in the knowledge society.

In a similar study on the perception of information literacy skills among librarians in Lagos, Durodolu and Adekanye (2017) found that library staff had a high level of perception about the need for information literacy. The study revealed that age, qualification, and gender had significant effects on the perception and delivery of information literacy.

Similarly, Lai (2012) examined information literacy, self-directed learning, and e-learning among Taiwanese academic librarians. The research findings showed that information literacy, self-directed learning, and e-learning were viewed positively by academic librarians. Concurrently, Demasson et al. (2019) conducted a study in Queensland, Australia, to find out how public university librarians handle information literacy. The study found that information literacy has not yet been addressed in libraries. However, the authors agreed on the importance of information literacy in academic libraries as it represented a core activity of the library. In their "Academic Library Manifesto", both IFLA and UNESCO emphasized the role of the academic library in education (Balapanidou, 2015; Dube, 2018). These scholars pointed out that IFLA and UNESCO have identified 12 key missions that highlight their views.

The work of Jiyane and Onyancha (2010) and Mackey and Jacobson (2011) also demonstrated that academic libraries have a significant impact on society's information literacy levels. Lai (2011) suggested that librarians can provide lifelong learning and adult learning programmes to assist those who have not received formal training in information literacy. The work of Adeleke (2015), Dube (2018), and Lai (2011) showed that the use of information and communication technologies in libraries has made information literacy essential, and that this has further contributed to the proliferation of information and information sources.

When people are looking for information, the academic library has consistently been the first place of contact. The library should naturally play a proactive role in providing students and other users with information literacy skills they need to locate, evaluate, organise, create, use, and share information

to solve challenges and problems. Although academic libraries play a crucial role in disseminating information, new research suggests that the majority of academic librarians are unclear about what information literacy actually means. Soylu and Yilmaz (2014) found that the Ankara Adnan Otuken Provincial Academic Library in Turkey did not significantly contribute to improving users' information literacy skills. Furthermore, De la Vega (2014) found that information literacy is still not accepted as a regular activity in academic libraries in Lima, Peru. There is much to learn about the situation in Ghana.

3. METHODOLOGY

This is a multiple case study that adopts the qualitative research approach. The interview served as a research instrument. The researchers used the semi-structured interview guide designed to extract data from the participants. The rationale for choosing this method was that a qualitative research interview aims to cover information at both factual and meaningful levels.

There are 12 public universities in Ghana. All the universities exist and operate under different acts enacted by the parliament of Ghana. The study focused on the library systems of the Kwame Nkrumah University of Science and Technology (KNUST) and the University of Ghana (UG) because the majority of the library staff of the two oldest universities are located on their respective campuses. Another rationale for the selection was that only libraries that provided instructional services to their clients were suitable for inclusion in the study, as they aimed to conduct comprehensive research on this issue.

The total population included 36 professional librarians from KNUST and UG who were involved in teaching information literacy skills. There were 15 and 21 librarians from KNUST and UG respectively. The researchers decided to interview all the librarians because they believed that the total population of 36 was manageable within the time period to achieve the objectives of the study.

3.1 Research questions

The study aimed to explore the extent of awareness of information literacy as a means to improve scholarly work in public universities in Ghana. It further aimed to find out the roles that librarians play in promoting information literacy in public universities. An interview was conducted for this purpose.

The interviews included a brief introduction to the following areas: time and place/venue where the interview was conducted, gender, and current position. The other aspect of the interview aimed to obtain the participants' views on their understanding of the importance of information literacy for library staff in order to answer the following main research questions:

- RQ1 What is the extent of library staff's awareness of information literacy as a means to improve scholarly communication in Ghana?
- RQ2 What roles do librarians play in promoting information literacy?

    In order not to deviate from the core focus of the study, a semi-structured interview guide was used. The researchers conducted the interview during business hours at the different libraries in every instance. The interview guide was sent to some interviewees via email prior to the telephone interview. After approval for the interview was granted, the researchers arranged suitable times with the interviewees to conduct the interview for the study. Some interview schedules were conducted via telephone calls because interviewees were not immediately physically available.

3.2. Data analysis

Eight participants were interviewed at KNUST over a period of 10 days from February 18 to 28, 2020. Similar interviews were conducted at UG over a period of 8 days from March 2 to 9, 2020.

The interviews were audio-recorded and transcribed. Themes and patterns developed from the data paved the way for analysis. The study adopted the thematic analysis developed by Braun and Clarke (2012) to analyze the qualitative data collected from the interviews (Figure 1).
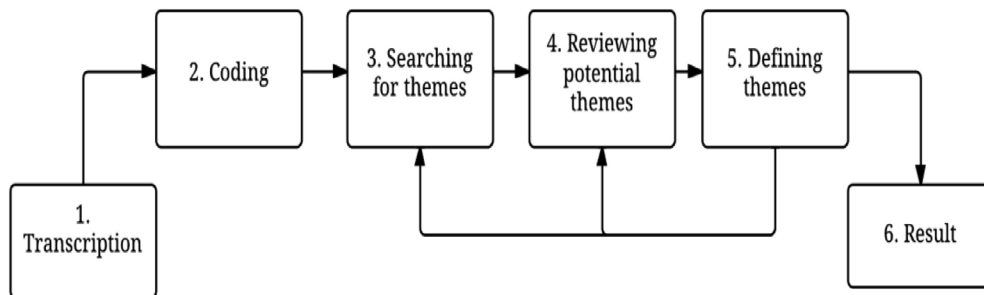
Figure 1. An illustration of the thematic data analysis (Braun & Clarke, 2012)

To ensure the confidentiality and anonymity of the interviewees, the researchers identified and represented the interviewees from Kwame Nkrumah University of Science and Technology as "KNUST 1", "KNUST 2", "KNUST 3", etc., while interviewees from the University of Ghana were referred to as "UG 1", "UG 2", "UG 3", etc.

4. FINDINGS

Of the 36 participants, 22 were available for the interview: 14 were from the UG library system and 8 were from KNUST. On average, an interview lasted about 25 minutes. Each interview was audio-recorded and transcribed into Microsoft Word before analysis. The researchers guided the participants to ensure that they did not deviate from the core objectives of the study.

There were two participants in the position of Deputy Librarian from the KNUST library system. In the UG library system, there were two interviewees in the position of Principal Librarian. In addition, there were four Senior Assistant Librarians: two each from KNUST and UG libraries. Thirteen interviewees were in the position of Assistant Librarian: four from the KNUST and nine from UG. There was one Junior Assistant Librarian from the UG library. Clearly, the majority of the interviewees were assistant librarians. However, they all had sufficient experience to provide an opinion on the teaching of information literacy in academic libraries.

4.1 Knowledge of information literacy
The interviewees understood information literacy as a means of equipping individuals with skills that enable them to identify, evaluate, and retrieve relevant information to meet their information needs. UG 1 expressed the view that:

> I know Information literacy is a critical skill that allows individuals to identify when information is needed and to be able to locate, evaluate, and use information effectively.

UG 5 also spoke up, saying:

> It's the ability of an individual to recognize the need for information…be able to find and locate the information and evaluate it before using the information effectively… or …the acquisition of a skill set for one to be… able to identify an information need, to be able to locate that information, retrieve and to be able to use the information appropriately…

Some participants from KNUST library understood information literacy as a form of orientation provided to users, especially students, to enable them to use the library's available resources online. KNUST 2 said that:

> …We provide library orientation for fresh students and faculty… We also provide instructions to students on how they can access the library materials, what type of resources the library has and also the reference management software such as; Mendeley, Endnote, how to access the physical resources, and the rest…

In addition, KNUST 4 opined that:

> …I think it is a set of abilities that can be passed on to the recipient that has to do with the information, to recognize when information is needed and how to locate, evaluate and effectively use the information…so basically it is the set of abilities that an individual is required to have and be able to do this…

A participant from KNUST expressed his knowledge about information literacy. He claimed that this emanated from what he had taught and read extensively about information literacy (IL). KNUST 3 had this to say:

...My association as a professional librarian and the fact that I once taught the course when it was running in the university. ...Also, I got to know about IL when I was in the library school..., being a librarian IL certainly cannot pass by me whether reading about it and also attending workshops/conferences or hearing about it from a colleague. Information literacy is certainly something I know about...

The above responses largely reflect the participants' knowledge and awareness of information literacy.

4.2 Organized information literacy programmes

In the researchers' effort to obtain more information about the importance of information literacy in their activities, the interviewees were also asked about the type of information literacy programs organized by their libraries. The interviewees' responses showed that the majority of them mentioned education for patrons and faculty members on how to use library services and resources. Some also indicated bibliographic instructions and research seminars.

Evidently, KNUST 7 listed the programs organized in its library as follows:

Some are defunct, others are still running, such as: education on how to use library services and resources, bibliographic instructions, library guide, user education, self-tutorial slides on the library website, research seminar, workshops, formalized information literacy courses (taught on-demand)...

KNUST 3 had this to say:

...We organise programmes such as library orientation, bibliographic instructions ...the library used to run a formalized information literacy course for all first-year students, which was approved by the Academic Board but unfortunately, it has been suspended. The only departments which are still running this information literacy course are the Faculty of Law and the Department of Publishing Studies...

The list of programmes organized by librarians in the UG was not significantly different from that of KNUST. UG 5 noted that:

...When you come to my library, we organise a lot of literacy programmes to sensitize the users on what the library has. Some of which are; orientation which is done for the fresh students, series of library instructions and training workshops on how to use the library...

UG 9, who also supported this response, expressed by saying:

...We have several programmes that we organise for the users of the library such as orientations,...Subject librarians assigned to faculties/departments teach users about the products that the library has at its disposal... Training in the use of reference management tools (Mendeley, Endnote), electronic databases and other library services, Training on the research process, one-one-one tutorials on how to use library services...

It is adequately clear from the responses of the interviewees that they do not only have knowledge of information literacy, but are also deeply involved in its delivery.

4.3 Importance of information literacy programmes

The researchers further sought to find out the relevance of the information literacy programmes. Six interviewees from the University of Ghana (UG 4, UG 14, UG 10, UG 8, UG 3, and UG 12) indicated that they learned the relevance of information literacy through personal research. Some (UG 2, UG 11) stated that they realized the importance of information literacy through interaction with users. UG 6 corroborated that:

...I got to know from various sources. One is, I've been reading and also I have done personal research in information literacy so I know the significance of information literacy, ...When I started work I went through in-service training so I think I acquired some knowledge about information literacy from there too...

UG 5 affirmed that:

...I have done extensive work on IL when I was doing my M. Phil, ...also I learnt from fellow librarians, read extensive literature on it, and I have taught IL for some time now so I think it's important...

The findings of the study further revealed that information literacy programmes provide users with skills that help them retrieve relevant information to meet their information needs. It also broadens their mental horizons to think critically, and to access and locate information.

UG 9 remarked that:

> I think some of it is that IL provides users with skills to be able to build their capacity, it helps the information literate person to become well-grounded in how to select, how to process and use the information on their own.
>
> ...Another important thing is that it helps users to distinguish good information from bad one especially for academic work...

UG 8 also indicated that:

> It helps our patrons to identify their information needs, the information literate person can know where information sources are..., and the information literate person can use the information responsibly...

In support of the responses from the interviewees from the UG library, KNUST 8 was of the view that:

> Information literacy skills help you become a lifelong learner. It helps you basically to be able to address issues and advise you on information generally.... It develops your critical thinking, it helps you to satisfy the conditions that have been set for presenting your paper, developing your knowledge. Information literacy is very important as it equips students with the needed skill to achieve most academic results successfully. This skill enables students to successfully search for and find literature and other resources to aid their academic work....

4.4 Roles played by librarians

Some of the interviewees indicated that the roles they play as librarians in promoting information literacy include training users in the use of academic databases. Others include formulating research strategies/questions, evaluating databases and sources, searching advanced internet, evaluating copyright, plagiarism, and managing references and citations.

UG 7 was of the view that:

> We organise activities such as library orientations, train in the use of academic databases, prepare library guides, assign subject librarians to faculties/departments to teach users about the library resources... and also guide users with research strategies/questions, evaluation of databases and advanced internet searching...
>
> ...We also provide one-on-one tutorials for users on how to evaluate sources, references and citation...

UG 10 illustrated the following to the researcher:

> ...The librarians' role involves planning the entire programme...Some people think that we should be the front runners but in practice ...and the literature supports that ... we partner with faculty...so we engage faculty and assure that we can support what you're doing... If you're teaching, you want the students to grasp it well to become better in research writing, the library has the skills to support literature searches ... could be done either before or after lectures... so usually I prefer to partner with faculty,...Our basic role is to make our users aware of the resources the library has. Because as librarians if we don't let our users know what materials are in the library then we're neglecting our core mandate... We carry out teaching as well...

In support of UG 10, KNUST 4 indicated that:

> We organise library orientations; the library management team plans the entire information literacy programmes...All library staff are involved in the promotion of information literacy. From senior management to library assistants all play a role, we also organise in-service training for newly employed staff who will be involved in the teaching of information literacy and create access to information resources (acquisition and cataloguing of print materials)

One of the interviewees revealed that librarians used to play critical roles in information literacy skills, but recently they have not had enough opportunities to do so. KNUST 4 opined that:

> ...The official course was running and we were directly involved, I'll say we played an important role as far as teaching information literacy was concerned. In recent times because we've lost the slot to teach, I cannot say we are playing any major role in the teaching of information literacy ....

UG 12 also indicated that:

> As a subject librarian, our role is basically to promote information literacy, whether formal or informal..., I think the role of creating library guides (i.e. creating special web pages that are

research-oriented) so that's a diversity of librarians, now we create webpages but it's academic-oriented to promote information literacy... so they're research guides..."

Similarly, KNUST 1 pointed out that:

...We organise Library tours and orientation sessions for freshers, IL classes, the teaching of advanced information literacy skills such as database searching and referencing and citation...

With a few exceptions, all interviewees made it sufficiently clear that teaching information literacy is a very important in-service delivery.

5. DISCUSSION

The findings of the study revealed that most of the library staff considered information literacy to be very important as they shared that it enables individuals to gain skills that enable them to identify, evaluate, and retrieve relevant information to meet their information needs. Therefore, the library cannot do without this core focus of information literacy programmes. Most of the interviewees understood information literacy as a critical skill that allows individuals to identify when information is needed and to be able to locate, evaluate, and use information effectively.

The findings indicate that information literacy has not yet strongly gained ground in all academic libraries. In this regard, it is important that library staff are constantly reminded of the importance of information literacy in their effort to improve service delivery. This finding is in line with Durodolu and Adekanye (2017) and Lefalatsa (2018), who emphasized on the importance of information literacy skills imparted by librarians. It plays a core function in providing information. It also supports the study by Oyewo and Asiyanbi (2020), which reiterated the significance of equipping users with information literacy skills. The present finding is also in line with the study by Thanuskodi (2019), which demonstrated the widespread knowledge among librarians about the idea and benefits of teaching information literacy to students in Indian universities.

The study supports the works of Lefalatsa (2018), which found that library staff's awareness of the importance of information literacy skills has contributed tremendously to the development of academic libraries as it has fueled the interest of librarians and clientele. Conversely, the works of Oyewo and Asiyanbi (2020) revealed that some librarians doubted the phenomenal importance of information literacy in information provision due to a lack of awareness about the importance of information literacy. Furthermore, the findings are inconsistent with the work of Manthiramoorthy et al. (2014), which revealed a moderate level of awareness about the importance of information literacy. In this case, librarians faced some critical challenges such as lack of training and knowledge of search techniques. Librarians should therefore strive to instruct users how to locate, search, evaluate, and use information effectively and efficiently. In this way, users and library staff will begin to appreciate the essence of information literacy. The findings suggest that when the library focuses more on information literacy through programmes, its impact on information provision will ultimately be felt and this will enable librarians to recognise its importance in the delivery of their services.

Librarians have been found to play a phenomenal role in teaching information literacy to users, especially new students. This is done by organising training courses for users and providing them necessary orientation, library guides, etc. This finding is supported by the work of Praveen Kumar et al. (2018), which revealed that librarians play a pivotal role in implementing resource-based information literacy programmes. It is also consistent with the study by Crawford (2013), Demasson et al. (2019), and Lai (2012), which found that librarians help design information literacy curriculum because they have the expertise and knowledge to teach these skills. The findings are also consistent with the studies of Balapanidou (2015), which found that information literacy is a core function of the library and without it there is a high propensity that libraries will lose their customers. It also supports the study of Dube (2018), Lai (2011), Mackey and Jacobson (2011), and van der Walt (2015), which emphasized that the role of information literacy is important and if libraries want to make continuous progress, then resources should be channeled towards it.

On the contrary, the finding is inconsistent with the study by Soylu and Yilmaz (2014), which concluded that librarians at Otuken Provincial Academic Library in Turkey did not play a strong significant role in promoting information literacy as anticipated by management. However, the findings corroborate the works of Hall (2010), Jiyane and Onyancha (2010), Mackey and Jacobson (2011), and de la Vega (2014), which revealed that information literacy provided by librarians is critical, and without this, progress in lifelong learning cannot be achieved.

6. CONCLUSION AND RECOMMENDATION

Information literacy programmes have been implemented by academic libraries to achieve the goal of transforming their users into lifelong learners and critical thinkers. The study revealed that academic librarians are well aware of their essential roles in delivering information literacy. These compelling roles of helping users to formulate research strategies/questions, evaluate databases and other sources, search advanced internet, evaluate copyright, plagiarism, and manage references and citations require collaboration with their faculty counterparts in order to be successful. So far it has been one-sided as the needed collaboration from their faculty counterparts has yet to be established.

Regular seminars and workshops on best practices and contemporary teaching and learning methodologies are required to maintain and improve the knowledge and skills of librarians. Librarians should be encouraged to attend national and international conferences to advance their information literacy careers and gain experience. Success in this field largely depends on effective collaboration with faculty.

The academic library community should consider vigorously advocating for the role of academic libraries in information literacy. Important actions need to be taken to raise awareness among university administrators, institutions, and other stakeholders.

Authors' contributions

YAA conceived the idea and collected the data. MAM and YAA drafted all sections of the original manuscript. MAM with VNS supervised the data analysis, and YAA performed the data analysis. VNS led the final revision of the article. All authors contributed to the approval of the manuscript for final publication.

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