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A Survey of Information Literacy (IL) Programmes in Technical University (Tu) Libraries in Ghana

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A SURVEY OF INFORMATION LITERACY (IL) PROGRAMMES IN TECHNICAL UNIVERSITY (TU) LIBRARIES IN GHANA

Abstract

A quantitative study of the libraries of 7 Technical Universities (TUs) of Ghana was conducted to evaluate information literacy programmes at such universities in Ghana. The study employed a descriptive survey research strategy. A sample of 7 librarians out of the 8 TUs libraries in Ghana was collected using purposive sampling. A questionnaire served as the instrument to collect data relating to the objectives of the study. The study gathered mostly quantitative data which were analyzed using the Statistical Package for Social Sciences (SPSS). The findings showed that the majority of the examined libraries included information literacy classes as part of their information literacy programmes. These were mostly widely delivered through face to face and online tutorial methods. Furthermore, the study identified the barriers to the successful implementation and running of information literacy programmes in Ghana. It identified lack of integration of information literacy into the curricula of tertiary institutions as a barrier to effective information literacy programmes. From this barrier many other barriers that are typically rectified when information literacy is properly integrated into school curricula

Keywords: Information Literacy, Technical Universities, User education, Library literacy, Library instruction.

Introduction

The government of Ghana in 2016, converted 8 Polytechnics in Ghana to TUs with a redefined mandate to provide higher education in engineering, science and technological based disciplines, technical and vocational education and training, applied arts and related disciplines with little concentration on Business and Humanities. This is clearly stated in the Technical Universities Act, 2016 (Act 992) passed by the Parliament of the Republic of Ghana and assented to by the President of Ghana on 31st August, 2016. Thus, TUs are technological universities with focus on the application of technology to the various fields of learning rather than the search for new knowledge. They are mandated to offer a minimum of four (4) year Bachelor of Technology (BTech) degree programmes in science and technology based disciplines. The new converted TUs are Kumasi Technical University, Accra Technical University, Sunyani Technical, Koforidua Technical University, Ho Technical University, Tamale Technical University, Takoradi Technical University and Cape Coast Technical University.

The relevance of (IL) in such academic institutions cannot be overemphasized as IL is a critical skill all students must possess in tertiary institutions to successfully achieve most academic outcomes (Okoye, 2013). He further states that “skills acquired thro IL, especially during the tertiary education training, are very useful for knowledge-based development and lifelong learning, even long after they would have left school”. Without it, a significant number of students will struggle to put together competent research papers, compose meaningful articles and provide effective referencing for academic papers (Lwoga 2013). The ability to successfully search for and find literature and other resources to aid academic is work significantly hampered if IL is low or lacking in students (Lloyd, 2012). Some tertiary institutions, especially in

developed countries, recognize the need for some form of education in this area and duly deploy competent library staff in the execution of this task (Mackey & Jacobson, 2011). Martin (2013) in his treatise on the British information literacy model opines that the teaching of information literacy in schools augments the academic performance of students and aids in perfecting their literary ability

Problem Statement

The absence of IL policy in schools in Africa, coupled with insufficient attention paid to IL in the school curricula in most African countries are identified as some of the factors militating against IL programmes in universities in Africa(Baro & Zuokemefa, 2011; Okoye, 2013)

In Ghana, however, while some schools purport to offer some forms of information literacy training, many more schools do not see a need for information literacy in their course content (Dadzie, 2009). For both types of schools, studying information literacy is important in order to establish its benefits and to suggest methods for its delivery. The challenge however, has revolved around the lack of attention and focus on information literacy training in academic institutions, and lack of skills in terms of concept identification among others things in Ghanaian academic institutions (Anafo & Filson, 2014). There is also scant local literature on the topic, a situation which needs to be rectified if the nation is going to improve academic performance in general and literary ability in particular. Accordingly, this study has the following objectives,

1. To identify IL programmes provided in the libraries of TUs in Ghana
2. To identify the methods used in the delivery of IL training programmes

3. To establish the extent to which IL is integrated into the curriculum of the TUs in Ghana
4. To ascertain barriers to IL programmes in the libraries of TUs in Ghana

Literature Review

Evolution of Information Literacy

The term "information literacy" (IL) was coined outside of academia in 1974 by a lawyer named Zurkowski, who was interested in intellectual property and industries (Badke, 2010; Wen & Shih, 2008). The term was first used in a proposal submitted to the National Commission on Libraries and Information Science (NCLIS): in which Zurkowski stated: "People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing the wide range of information tools as well as primary resources in molding information-solutions to their problems," (Zurkowski, 1974). Zurkowski's emphasis was on the private sector (Bowden, 2001), and his concern was using information skills as a problem-solving approach for workplace contexts (Pinto et al., 2010). The evolution of IL, however, has occurred mostly within the public sector, mainly in the field of library sciences. Librarians and academics have set IL as one of their major goals (Pinto, Cordon & Diaz, 2010). Accordingly, this phase of the evolution of IL is associated and mixed with library user education and bibliographic instruction programmes in the form of short orientations on how to use library and information resources (Pinto et al., 2010).

IL gradually began to evolve from the user-education concept of the library environment. Spiranec & Zorica, (2010) inform us that, theoretically, the concept began to shift from teaching tools to teaching competencies that were not limited to particular tools or contexts. In practice, however, the view is that the transformation was very gradual because the users were still viewed as passive information consumers.

With the advent of digital technology in the 1980s, IL expanded to include more than library resources, and it started to be associated with technological literacy, information and communication technology (ICT) literacy, digital literacy, and computer literacy (Pinto et al., 2010). IL at this stage was viewed as tool based, but with a focus on technology.

Constant advancement in information technology led to an increase in information resources and complexity in the digital information environment. It has become obvious that knowing how to use computers and access information is not sufficient for locating and extracting relevant information in such a complex environment. Therefore, the need for underlying competencies such as critical thinking and evaluation skills (Spiranec & Zorica, 2010), as well as socio-cultural support (Pinto et al., 2010), have become more prominent.

The emotional or affective nature of IL has also been taken into consideration as an essential requirement (Nahl, 2001). Studies on emotional, or affective, aspects of information began with Kuhlthau (1991) and continued with several others, including Julien and Mckeachie (2005), Bilal and Bachir (2007), and Lopatovska and Mokros (2008).

In recent years, Web 2.0 technology has begun to play an important role in IL, leading to a drastic change in the way we collaborate, communicate, and share information. Mokhtar et al.

(2009) interpret this change as advancement in the social dimension of IL. Spiranec and Zorica (2010), furthermore, think Web 2.0 is significant enough to provide us with a new definition of IL.

Another important influence on the evolution of IL is educational practice. Spiranec and Zorica (2010) note the presence of a strong tie between education and IL. They refer to the impact of constructivism on providing new arguments for IL, which led to the promotion creative and reflective users of information, particularly now that users have access to Web 2.0 tools that can allow them to be both reflective and creative. Similarly, Farkas (2012) notes how social constructivism and connectivism can facilitate a teaching approach in accordance with current participatory technology, or Web 2.0. In a broader perspective, Bruce (2008) views IL as an extension of the notion of literacy that directs us towards a future “learning society” and away from the current information society. Whilst there is a strong relation between IL and educational practice, IL is not limited to academic contexts. It goes far beyond these contexts to lifelong learning and our identities. Bruce (2004) views IL as critical for lifelong learning, which empowers us both personally and economically.

To sum up, IL has been approached in different ways over time. First it was viewed as a problem-solving approach within the context of the private sector. Then, it underwent the influence of the library sector, and it was mostly viewed as learning about the collection of information resources that libraries offer. It later became associated with information technology, technical skills, and databases. IL has also been viewed through different lenses: as critical thinking skills, as a social practice, as affective competencies, and in terms lifelong learning.

Definitions of Information Literacy (IL)

As stated above, IL evolved in the domain of library sciences (Saranto & Hovenga, 2004; Spiranec & Zorica, 2010), and as a result, a number of popular definitions have come from library associations. For example, according to the American Library Association [ALA] (1989), IL is “a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information”. Similar frameworks and models have also been developed by the Council of Australian University Librarians (CAUL) (2001); the Library and Information Association of New Zealand Aotearoa (LIANZA) (Bundy, 2004), and the Standing Conference of National and University Libraries (SCONUL, 1999), and The National Institute of Library & Information Science (NILIS) (Owusu-Ansah, 2005).

IL has also been defined by individual scholars. Eisenberg (2008) defines it as "the set of skills and knowledge that allows us to find, evaluate, and use the information we need, as well as to filter out the information we don't need". Eisenberg's definition is very similar to previous ones, but his emphasis is more on filtering out irrelevant information due to advancements in information technology and the complexity of the information environment. Both of the above definitions are limited in their perspectives viewing IL merely as set of skills that can be achieved individually.

Bruce's relational model, formulated in 1997, offers a new approach to IL. Bruce highlighted the importance of the ways in which IL is perceived by the information users. In other words, IL entails being aware of various ways of experiencing information use, through pertinent practices and reflections (Bruce, 2004). Rather than offering a set of skills or processes, Bruce (1997), offers seven ways, or faces, in which one experiences IL: information technology, information

sources, information process, information control, knowledge construction, knowledge extension, and wisdom experience. To be effectively information literate, according to him, one needs to experience and relate to information in these various ways. The concept of variation is significant because learning happens when we identify and act upon various ways of experiencing something (Bruce, Edwards, & Lupton, 2006). The Bruce definition by his colleagues relies on a learner's behaviour and perception, and, thus, is more conceptual than practical. Tuominen, et al. (2004), view IL as a sociotechnical practice. They argue that IL is embedded in the actions of specific communities that use adequate technologies. Their idea of socio-technical practice is built upon concepts such as collaboration, sharing, technological artefacts, and contexts. Furthermore, in the education sector, IL has been generally seen as an understanding and a set of abilities enabling individuals to recognize when information is needed, and to have the capacity to locate, evaluate and use efficiently the needed information (Tantiongco and Evison, 2008).

Despite some similarities among various definitions, there is no real consensus on how to define IL (Sundin, 2008). Mackey and Jacobson (2011) argue that the current definitions are not comprehensive enough. Lloyd (2005) maintains that IL contains various perspectives and practices, and that we are not yet able to fully capture its depth and breadth. Specifically, IL has been defined mostly through a textual practice (where the interaction is between an individual and a text he or she reads), rather than a social practice (Lloyd, 2012). The shift in emphasis on what is important in IL continues due to our new understanding of the concept, our involvement in different contexts, or the changes we face in our information environment, particularly due to

the rapid advancement in information technology. Therefore, defining IL is similar to aiming at a moving target.

IL Interventions in Africa

According to Lwehabura and Stilwell (2008), it is imperative for information users to acquire the IL skills and knowledge, because in the present global arena, the competitive use of information is vital to gaining competitive advantage in one's field of work. The benefits of thorough knowledge and skills in IL can be endless. Rasaki (2008) posits that it is through the use of IL that lifelong learning skills can be acquired. Rasaki (2008) performed a comparative study of credit earning IL skills courses at three African universities and found that IL is often neglected in most universities in Sub-Saharan African states in favour of computer literacy. The evidence of these findings can be found in the largely outdated and mostly irrelevant writings on the subject that are kept in school libraries and journals.

Okoye (2013) asserts IL is insufficiently acknowledged in school curricula in most African countries. He further states that "information literacy skills acquired, especially during the tertiary education training, are very useful for knowledge-based development and lifelong learning, even long after they would have left school".

A study by Agyen-Gyasi (2008) identified many challenges facing user education programmes in tertiary educational institutions in Ghana like the Kwame Nkrumah University of Science and Technology (KNUST) Library. The challenges he identified were apparent apathy of students regarding user-education programmes, a lack of adequate staffing in libraries, a lack of training

for librarians, a lack of reliable internet connectivity in libraries and debilitating financial constraints.

Similarly in her study titled “Information Literacy: Assessing the Readiness of Ghanaian Universities” Dadzie (2009) identified some challenges that hinder effective implementation of IL programmes in Ghanaian universities. These identified challenges included a lack of management commitment to IL programmes / projects, a lack of adequate information regarding IL, and staff and departments who are unwilling to handle IL programs.

A similar study by Sitima-Ndau (2010) examined IL programmes at the Chancellor College, University of Malawi, in an effort to ascertain whether IL programmes at the university were adequate in equipping students with the required skills. The study showed that the level of IL offered to students at the university were inadequate and did not go far enough to equip students with the requisite computer skills or data searching skills. In addition to curricular and financial challenges, other challenges such as electricity failure, high internet charges, and inadequate infrastructure were cited.

In a study by Dennis (2004) on the “User education programme at the University of Ghana”, a number of challenges were identified that stifled the success of IL. Key among these challenges were the inadequate number of teaching staff to facilitate IL programmes, lack of sufficient orientation for students on the subject and practice of IL and inadequate time allocated to the programmes. Similarly, Lwehabura (2008) conducted a study that revealed a lack of clear IL policy in most Tanzanian universities. Furthermore, the study found that IL programmes were given inadequate time, that information literacy was not offered as stand-alone course, or as voluntary course, and that of professional lecturers were not involved in teaching IL.

Kavulya (2003) observed that librarians in most educational libraries in Kenya do not commit to pushing IL programmes to the fore, and therefore these programmes are neglected as a function of the library. The University of Fort Hare Library in South Africa was subject to a study by Somi and De Jager (2005) who found that students in the University of Fort Hare still faced difficulty in finding requisite information both online and in libraries. The study also showed that a significant percentage of students did not possess skills that would enable them engage in critical evaluation and usage of information.

Research Methodology

An explanatory research design was used in combination with a quantitative research approach. According to Amin (2005), an explanatory research design enables accurate depictions of situations, opinions and facts and allows for deeper descriptions of phenomena. Saunders, Lewis and Thornhill (2012) posit that a quantitative research approach enables data to be quantified and measured to enable the observation of trends in results. The study combined the two approaches to enable comprehensive a depiction of the situation on the ground in relation to information literacy and accurately measure data obtained.

This study sampled 7 librarians out of the 8 TUs in Ghana using purposive sampling techniques. A questionnaire and a cover letter were emailed to 7 purposively selected participants. All seven questionnaires were completed and returned making up a 100% response rate. The sample size was 85% male. Over 80% had a master's degree, and over 50% had worked in libraries for more than 6 years.

The data were collated and coded into the Statistical Package for Social Science (SPSS) software. A descriptive as well as a factor analysis were used to analyse the data. A mean and standard deviation analysis was conducted to determine the patterns and skewness of responses which were given on a 5 point Likert scale. A mean value closest to 1 indicated negative values or perceptions and a value closer to 5 indicated positive values or perceptions. Findings are presented in the tables.

Presentation and Analysis of Data

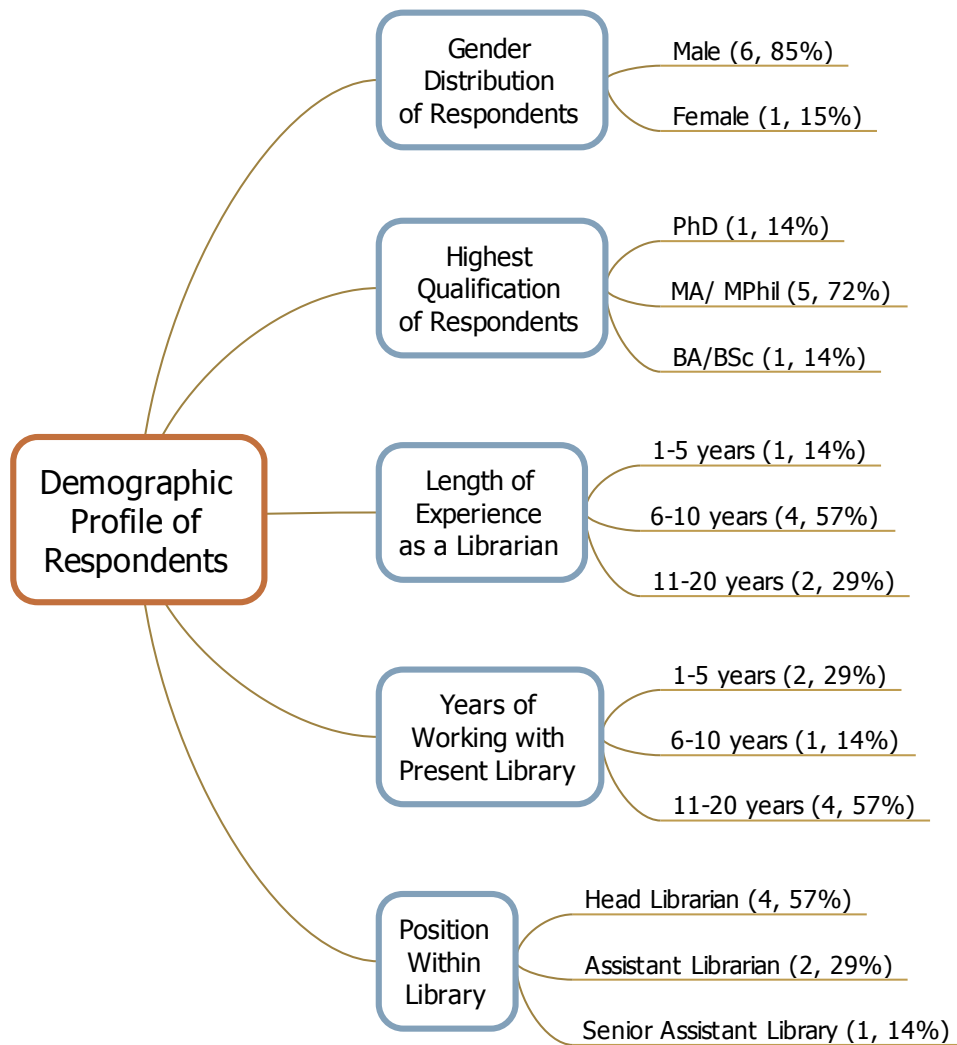
Introduction

This section presents the data collection and the analysis as well as a discussion of the study findings and how they resolve the research questions. This study analysed the demographic characteristics of the study participants and the responses relating to the research objectives. The data are presented the in tables.

Demographic Characteristics of Participants

This section presents the demographic profiles of the respondents who provided data for the analysis. These data included gender, highest educational qualification, length of experience in the industry and the present job and position within the present library.

Figure 1: Demographic Profiles of Participants



Source: Field Data Analysis, 2017

Results

Table 1: IL Programmes Provided in TU Libraries In Ghana

	N	Mean	Std. Deviation	Std. Error Mean
1. IL programmes include library tours and orientation sessions	7	3.4286	1.71825	.64944
2. IL programmes include IL classes	7	3.7143	1.88982	.71429
3. IL programmes include teaching of advanced IL skills such as database searching skills,	7	2.8571	1.67616	.63353
4. IL programmes include bibliographic Instruction	7	2.8571	1.77281	.67006
5. IL programmes include referencing and citation	7	3.1429	1.77281	.67006

Source: Field Data Analysis, 2017

To Identify the Methods Used in the Delivery of IL Training Programmes

Table 2: Methods Used In the Delivery of IL Training Programmes

	N	Mean	Std. Deviation	Std. Error Mean
1. Face-to-face teaching approach is used in delivering IL training programmes	6	4.3333	.51640	.21082
2. Online library tutorials are one of the approaches used to deliver IL programmes	6	4.0000	.89443	.36515
3. Combination of face-to-face and online teaching approaches	6	3.8333	18.45716	7.53510

Source: Field Data Analysis, 2017

Extent to which IL is Integrated into the Curricula of the TUs of Ghana

Having determined the IL training programmes and the methods of delivering them to students, this study sought to identify the extent to which IL is integrated into the curricula of the TUs in Ghana. The study showed that IL is not integrated into the curricula of most of these universities

in Ghana and therefore there is no dedicated programme across the academic year for which a proper evaluation of delivery and performance can be assessed. The study showed that students who wished to acquire knowledge in IL must, by their own accord, approach library officials and seek guidance. Beyond this, TUs in Ghana have no dedicated programmes in their curricula that seek to develop the IL knowledge of students.

Table 3: Barriers to IL Programmes

	N	Mean	Std. Deviation	Std. Error Mean
1. Curriculum integration is an identified barrier to effective IL programmes	6	4.6667	.81650	.33333
2. Lack of adequate staffing is an identified barrier to effective IL programmes	6	3.0000	1.67332	.68313
3. Lack of facilities for teaching IL remain a credible barrier to effective IL programmes	6	1.5000	.54772	.22361
3. Students assessment is a challenge to effective IL programmes	6	1.8333	.75277	.30732
4. Instruction coordination remains a credible barrier to effective IL programmes	6	2.8333	.98319	.40139
5. Lack of commitment from school management is a barrier to effective IL programmes	6	3.8333	1.47196	.60093

Source: Field Data Analysis, 2017

Discussion of Findings

The primary objective of the study was to conduct a survey on IL programmes in TUs in Ghana. The study sought to achieve this objective by identifying IL programmes provided in these university libraries identifying the methods used in the delivery of IL training programmes, identifying the extent to which IL is integrated into the curriculum of the TUs in Ghana and identifying barriers to IL their programmes.

Discussion of Respondents' Demographic Data

The gender distribution of the sample showed that males dominated the sample, at 85% whilst females constituted 15%. Moreover, most of the sampled respondents were very highly educated, with 72% having attained master's degrees in various fields and 14% having attained doctorate degrees. All study respondents had completed tertiary education. The study respondents possessed varying degrees of experience in library settings; 57% had 6-10 years of experience, whilst 29% had 11-20 years of experience. The remaining 14% had worked in librarian positions for 1-5 years. Additionally, 57% had been working in their present institutions for 1-5 years, 29% for 6-10 and the remaining 14% for 11-20 years. Finally, 57% of the sampled respondents were Head librarians, 29% were Assistant librarians and the remaining 14% were Senior Assistant librarians. The analysis of the demographic characteristics of the study respondents showed that the respondents held the requisite academic qualifications and the experience to provide adequate responses to the study. They were also shown to possess the necessary

diversity to make the study findings representative of the various library set-ups and librarian operations.

Discussion of Research Findings

To Identify IL Programmes Provided in the Libraries of TUs in Ghana

Table 1 shows the descriptive analysis of IL programmes provided in the TU libraries in Ghana. As shown in the table, out of the 5 programmes (items) presented, only item 2 had a mean score closer to 4, an indication that majority of the libraries assessed had IL classes as part of their IL programmes. Items 1 and 5 are also shown to be popular in some of the libraries but not all. The study shows that a significant majority of respondents could not identify items 3 and 4, an indication that most of the libraries sampled do not teach advanced IL skills such as database searching skills and bibliography instruction.

The study therefore, concludes that IL programmes include IL classes, referencing and citation courses and library tours and orientation sessions. Beyond these, there is little by way of teaching students how to conduct effective research in the library, and teaching of advanced IL skills, such as database searching skills and bibliographic instructions. This finding shows that IL programmes in TU libraries in Ghana are limited and do not equip students and other library users with the requisite knowledge and skills regarding properly searching for information, presenting information and even crediting information sources.

Compared to similar libraries in other countries, the types and levels of IL programmes offered in Ghanaian TU libraries are inadequate. In his treatise on integrating IL into the curriculum,

Cohen (2009), in his capacity as the head of the Consortium of National and University Libraries (CONUL) asserts that whereas some libraries strive to expand the range of IL services they offer and to broaden the understanding of the resources available to education and research, others neglect to improve in teaching of users how to find information, evaluate results, work with or exploit results, engage in ethical and responsible use, communicate or share findings and manage findings. He posits that ‘because information now comes in many different forms and its quality varies enormously, students must develop the cognitive, transferable skills to be able to work efficiently with information. Finding and evaluating information has never been more important; nor has the need to develop skills in the ethical use of information, in order to mitigate against plagiarism.’

In light of these assertions and the varied IL programmes on offer in other libraries, it is the contention of this study that the IL programmes offered by Ghanaian TU libraries are few and deficient, and need improvement

To Identify the methods used in the Delivery of IL Training Programmes

As shown in table 2, the study sought to identify the methods used in the delivery of IL training programmes. The study shows that IL programmes in Ghanaian T U libraries are most widely delivered through the face-to-face method and the online library tutorials method. The study also shows that in some cases, these libraries employ a combination of both the face-to-face and the online library tutorials methods.

The findings therefore show that only two methods are used by Ghanaian TU libraries in the delivery of IL programmes, contrast to other libraries. The study has also shown that there no individual or group study methods are employed, but subject-specific e-classroom training is offered for individuals or groups. There are no hands-on, interactive or unassisted library guides. According to Tirado and Muñoz (2012) in their treatise on information literacy competency standards for higher education and their correlation of knowledge generation, a wide array of methods of delivery for information literacy programmes aids in enabling students to acquire a better understanding of the research process, information evaluation and how to avoid plagiarism. Without effective measurement and data analysis regarding the effectiveness of the face-to-face and online tutorial methods, the researcher can only conclude that the adoption of other methods of delivery should be considered to improve the achievement of the aims and objectives of the IL programmes.

To identify the extent to which IL is integrated into the Curricula of the TUs in Ghana

Having determined the IL training programmes and the methods of delivering them to students, the study sought to identify the extent to which IL is integrated into the curricula of the TUs in Ghana. The study has shown that IL is not integrated into the curricula of most universities, and therefore, there is no dedicated programme to students across the academic year for which a proper evaluation of delivery and performance can be assessed. The study has shown that students who wish to acquire knowledge in IL can acquire this through library tours and orientations sessions, among offerings of these libraries. This revelation confirms a similar survey conducted in 36 university libraries in Nigeria by Baro and Zuokemefa (2011) who

observed that the majority of academic libraries in Nigeria mainly offered library orientation sessions which are not sufficient to transfer IL skills to students. Beyond this, TUs in Ghana have no dedicated programmes that seek to develop IL knowledge among students.

According to Cohen (2009), ‘integrating information literacy into the curriculum is about building skills for independent and lifelong learning in a systematic way throughout a student’s career. Graduates should be able to find, evaluate, process, present and communicate information in any work or life situation.’ The reasons for the non-integration of IL into the curricula of tertiary institutions may not be readily known, but the effects of non-integration can be felt in the quality of academic materials students produce in schools and the quality business documents they might produce in the corporate world.

Identification of Barriers to IL Programmes

This study attempted to identify the barriers to the successful implementation and running of IL programmes in Ghana, as shown in Table 3. The study has shown that lack of integration of IL into the curricula of tertiary institutions is a barrier to effective IL programme. From this barrier stems many other barriers, such as the inadequate number of teaching staff to offer IL on programmes, lack of commitment from school management towards effective IL programmes and a lack of facilities for teaching IL programmes. These revelations confirm earlier studies conducted by (Deinis, 2004; Agyen Gyasi, 2008; Dadzie, 2009).

Implications and Conclusions

The need for a heightened awareness of the significance of IL for students in tertiary educational institutions should be championed by all stakeholders of education in Ghana. Seeing the important benefits widespread IL and the biting consequences of low IL skills, it is imperative that tertiary institutions make it a primary concern to implement IL courses and programmes that are effective in serving the needs of all students. In other parts of the world, fulfilling this critical need has been championed by library staff with significant accounts of success and effectiveness. Such a model, using librarians as the primary lecturers or human resource persons would therefore be in line with accepted norms in developed institutions. However, for this to be successful, TUs and other tertiary institutions must make it a point to promote IL by first incorporating it as a course in their academic contents (either as a scoring or non-scoring course). When that is done, the quality of students' academic presentations and overall performance research will significantly improve.

Recommendations

In light of the findings of this study, it is recommended that stakeholders of the educational sector seek to incorporate IL into the course content of not just TUs, but also all tertiary institutions in the country. It is envisaged that the incorporation of IL would improve course work and the quality of assignments, projects and other academic documents and also equip students to function at a higher level in the business world.

Furthermore, the study recommends that when incorporated, IL courses should be made compulsory to all students to avoid the undesired result of improving some segments of students and leaving others behind.

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