

Students' Industrial Work Experience Scheme (SIWES) in Nigerian Universities: Perceptions of Undergraduate Library and Information Science (LIS) Students

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Abstract

Purpose: This paper reports on the results of a survey that investigated the perception of the Students' Industrial Work Experience among undergraduate students of library and information science programmes.

Design/Methodology/Approach: One hundred and five (105) final year LIS undergraduate students from three universities in South East Nigeria were purposively sampled. A questionnaire was used to collect data. Data analysis was carried out using frequency counts, percentages and mean score.

Implications: The results revealed that most training facilities were adequate in many of the industry establishments, although internet connection was poor in some. The students acquired competencies mostly in traditional librarianship areas while there were shortcomings in the area of information and communication technology, personal and generic competencies/skills. The SIWES is deficient in its current form.

Originality/Value: Findings provided empirical insight into library and information science undergraduate students' experiences on the scheme. The findings have implications for SIWES agency, ITF, universities and industry.

Key words: Students' Industrial Work Experience Scheme, SIWES; Industrial training; Library and information science training; Library and information science education.

Paper type: Empirical

Introduction

Social and economic factors are today influencing the needs of the job market in Nigeria. Consequently, employers of labour are no longer contented to employ graduates with only theoretical knowledge. Rather, the employment market makes a demand for graduates who possess high level academic knowledge and are also able to demonstrate core competencies and skills that are required for success in the work environment (Lowden, Hall, Elliot & Lewin, 2011). To have graduates that are ready for the job market, it is imperative that undergraduate training incorporates both theory and practice for a more balanced outcome. Unfortunately, in Nigeria, Anho (2011), and Edukugho (2012) contend that the training obtained from most tertiary institutions is mostly theoretical, and so does not equip their graduates with the necessary competencies and skills

demanded by the job market. Consequently, over the years there have been calls for a bridging of the gap between theory and practice.

It was in response to these calls that the Student Industrial Work Experience Scheme (SIWES) also known as Industrial Training (IT) was established and introduced into tertiary institutions in Nigeria (Akerejola, 2004; and Ugwuanyi & Ezema, 2010). The scheme is jointly arranged between the schools and industries for all students studying technical courses requiring one form of industry exposure or another. According to Ugwuanyi and Ezema, the specific objectives of the scheme as summarized are as follows:

- To provide an avenue for students in institutions of higher learning to acquire industrial skills and experiences in their course of study

- To provide students with an opportunity to apply their knowledge in real work and actual practice.
- To make the transition from school to the world of work easier and to enhance students contacts for later job placement.

Over the years, students of Library and Information Science (LIS) departments in Nigerian tertiary institutions have compulsorily engaged in the SIWES, an exercise that normally lasts a period of six months in the penultimate year of schooling. For students of LIS programmes in Nigeria, the need for SIWES cannot be overemphasized. For instance, Edegbo (2011) notes that although information and communication technology (ICT) is a critical need in the 21st century job market, many of the LIS departments have not yet incorporated it in their curriculum.

In the same vein, Kamba (2011), Okolocha and Okolocha (2012) observe that even in LIS departments where some relevant ICT courses have been incorporated in the curriculum, most of the courses are taught theoretically because the schools lack facilities such as computers and reliable internet access needed for the practical aspect of training. Simisaye (2014) opines that in addition to shortcomings in the curriculum of LIS departments in the area of application of ICT in library and information services, the curriculum is also deficient on entrepreneurship. They attributed this to the fact that the curriculum is heavily tailored towards preparing professionals for job positions in libraries regardless of the fact that LIS professionals should be trained to work in varying types of environments. Consequently, there is a mismatch between LIS curricula and work requirements, a problem Pasipamire (2014) observes, is common in developing countries. Saleh (2011) posits that because of this mismatch, fresh graduates of LIS from tertiary institutions in Nigeria lack confidence and initiative in carrying out assigned responsibilities in the work place.

Given the foregoing, there is no doubt that the establishment and objectives of SIWES are worthwhile for LIS undergraduate training. However, if the scheme is to have successful outcomes, the tertiary institutions and the Industrial Training Fund (ITF) must be clear on the requirements from industry for providing industrial training. It is also important that LIS students undergo the training in establishments

that have both the facilities and human resources needed to provide appropriate forms of training. Additionally, given the fact that the scheme was established as a platform that would enable students acquire the much-needed competencies/skills that will make them fit for productive work upon graduation, there should be effective periodic monitoring and evaluation of LIS trainees by the schools' departmental supervisors to assess the extent of knowledge and competencies/skills acquisition. Except this is done, the training will amount to little more than an academic exercise.

Statement of the Problem

There is no doubt that the SIWES or industrial training conceived as an avenue for bridging the gap between theory and practice, is important for LIS undergraduate training in tertiary institutions in Nigeria. Over the years, students of LIS departments in tertiary institutions in Nigeria have been involved in the scheme. However, in spite of the many years of existence of the SIWES and the continuing participation of LIS students in the scheme, doubts are still being expressed over the competencies and skills levels of graduates of LIS from tertiary institutions in Nigeria (Simisaye, 2014; Saleh, 201; Ugwu, 2010).

This study was motivated by the fact that over the years the researchers have observed that LIS undergraduate students have to seek for placement with industries themselves. They are also almost never visited by their school department supervisors during the course of the industrial training. In many cases, the trainees are merely required to fill their log books and get their activities rated and signed by their industry supervisors. Often, in a bid to ensure that the student trainees' academic records are not negatively impacted - the training carries four credits - the industry supervisors award them high grades which often do not reflect the reality. This raises a question as to whether the SIWES is an effective platform for equipping LIS students with the competencies and skills they so much require. It is important therefore, to conduct an empirical study to generate feedback on some aspects of the scheme from LIS undergraduates.

Objectives of the Study

The general objective of the study is to determine LIS students' perception on the Student Industrial Work Experience Scheme

(SIWES). Specifically, the study sets out to do the following:

1. Determine students' perceptions on the scheme in relation to adequacy of training facilities.
2. Find out students' views on the scheme in relation to acquisition of competencies and skills.
3. Ascertain the challenges/barriers to effectiveness of the scheme.
4. Determine strategies to enhance effectiveness of the scheme.

Literature Review

Cheff et al, cited in Sinnasamy and Nasir (n.d.) posit that while it was sufficient in the past for library schools to teach students the rudiments of housekeeping library collections and training was basically in the area of cataloguing and classification; the expectations today is different. According to them, with the rapid advances in ICT, the field of Library and Information Science (LIS) has become specialized and technical in nature demanding that students' training incorporates the elements of theory and practice. In essence, in the current environment, in addition to possessing traditional librarianship skills, LIS students are also expected to possess other general and personal skills required for transfer from one job to another (Orme, 2008).

SIWES or industrial training as it is commonly called is seen as a viable avenue through which students can gain the much-needed competencies and skills (Ojokuku, Emeahara, Aboyade & Chris-Israel, 2015; Kuranaratne & Perera, 2015). This is because it offers them opportunity to experience on-the-job-training and real-life job experience while still in school (Ballinger & Lalwani, 2000). Also, through it, students are made more aware of the needs and expectations of the industry and so are able to prepare themselves for the world of work. In the same vein, Ojokuku, Emehara, Aboyade & Chris-Israel (2015) posit that by actively participating in industrial training, students are able to appreciate work methods and gain experience in handling equipment and machinery which may be unavailable in their institutions.

Furthermore, Karunaratne & Perera (2015) are of the view that industrial training provides students with significant benefits in career preparation and income and also strengthens their self-confidence and self-satisfaction in the lifelong learning process. Knouse, Tanner &

Harris (1999) and Mihail (2006) add that students who have been through industrial training are more likely to find jobs more quickly than those who did not, given the competencies and skills they acquire and the contacts they make while in training. Be that as it may, students are not the only beneficiaries of industrial training as employers and the learning or parent institutions also stand to benefit (Mgaya & Mbekomize, 2014; Bukaliya, 2012). In their view, while students need an avenue to gain those competencies and skills that will bring them up to the level and expectation of employers, the employers on their part need competent graduates who are ready for immediate employment. The learning or parent institutions on the other hand, benefit through increased cooperation and rapport with the industry.

A number of studies have identified some areas where students of LIS programmes need to enhance their competencies and skills. In Nigeria, Nwalo & Oyedum (2011) in their study evaluated the information literacy skills of undergraduate LIS students and found it to be generally poor. Similarly, Issah, Amusan, Olarongbe, Igwe, & Oguntayo (2015) assessed the information literacy competencies of undergraduate students of University of Ilorin, Kwara State Nigeria and found that majority had limited information literacy skills amidst limited exposure to information literacy programmes. In corroboration, Anunobi & Udem (2015) in their study among postgraduate students of LIS found that the students possessed moderate level of information literacy skills. Eke, Omekwu & Agbo (2014) investigated internet search strategies employed by LIS students of University of Nigeria, Nsukka and found that although the students used the internet to search for materials for writing term papers, projects and other assignments in order to enhance their academic work; they lacked training in basic internet skills.

Elsewhere, in the Philippines, Quijano (2015) assessed the feedback of nineteen graduates of LIS and library directors and supervisors on the competencies and skills possessed/required in the work environment and found that while the graduates were good in personal and professional competencies, they have need in the areas of information technology, managerial and general skills. On the other hand, the library directors and supervisors indicated need for graduates with personal, managerial, research

and publication competencies. In India, Barush & Hangsing (2012) assessed the relevance of the rising job market for LIS professionals versus the competencies needed and concluded that there was an ever-widening gap between competencies required on the job market and the course structure.

Similarly, in the United Kingdom, Orme (2008) in his study on job advertisements to determine employers' requirements for LIS professionals found that general skills topped the list followed by discipline specific and personal skills. Mason, Williams & Crammer (2006), Gill & Lashine (2003) identify the general and personal competencies/skills to include working in teams; presenting orally and problem-solving skills; communication and time management; better self-confidence and better self-motivation; flexibility and willingness to handle a wide range of tasks; ability to handle change; continual learning and entrepreneurial attitude; computing skills and knowledge of current information systems, and information delivery mechanisms among others. An earlier study by Khoo (2005) to determine the competencies which library directors expected should be possessed by librarians in the next 5 to 10 years found that although traditional librarianship skills- cataloguing, acquisitions and reference - are still relevant for future librarians, value added skills such as research skills, soft skills, IT skills, subject knowledge and appropriate attitudes, values and personal traits are also highly important.

However, while it is acknowledged that industrial training is a viable avenue through which students, including LIS students can gain these competencies and skills, oftentimes the programme is fraught with challenges that tend to affect its effectiveness. Olabiyi, Okarfor, & Peter (2012) identify the following as challenges/barriers to effectiveness of industrial training in Nigeria: absence of approved job specification for the courses, inadequate participation of students in skill acquiring projects and poor supervision of students. Effah, Bomphong, Adu, Anokye & Asamoah (2014); Gault, Redington and Schlager (2000) also identify barriers such as difficulty in getting placement, poor supervision from industry based supervisors, restriction of trainees from accessing machinery and equipment, high cost of undergoing the programme, lack of training materials, lack of appropriate skills among professionals among others.

Other barriers include shortness of the industrial training period which makes it difficult for trainees to have sufficient industry exposure (Karunaratne & Perera, 2015); unfriendliness of industry workers towards trainees, who for fear of losing their jobs to trainees are unwilling to provide in-depth training to them (Bukaliya, 2012). On the part of Sinnasammy & Nasir (n.d.) unsynchronized training schedules between schools and industry, and varying library systems are barriers/challenges to industrial training of LIS students in Malaysia.

A number of strategies that could enhance industrial training have also been identified. Kuranatne & Perera (2015) posit that industrial training will yield the expected result if training is channeled to developing trainees' skills by exposing them to creativity based learning projects and presentation skills, team work activities and managerial skills results. On the other part, Ogheneruemu & Tiemo (2000) counsel that LIS students should be exposed to information and communication technology facilities and their uses. Kavulya (2016) recommends integration of modern ICT into training, recruitment of qualified teaching staff, ensuring adequate learning resources and facilities, and enhancement of industrial attachment. Ayarkwa, Agyekum & Adinyira (2012) note that students will benefit from industrial training if the industries that provide the practical experience have knowledgeable human resources as well as suitable work environment with facilities that can provide appropriate forms of work experience capable of building up transferable skills in the trainees. Consequently, Arikewuyo (1996) counsels that both the institution and industry based supervisors should be more committed to the programme.

To that end, Ugwuanyi & Ezema (2010) emphasize the need for LIS professionals in libraries to constantly engage in re-tooling especially in ICT. It is also imperative that the programme is structured and executed in such a way that makes it possible for the student trainees to acquire the much-needed competencies and skills. Bukaliya (2012) add that the industrial training period should not be too short if trainees are to benefit maximally from it. In fact, respondents in a study by Mihail (2006) were of the view that the training period should range between six and nine months instead of three months. The foregoing indicates that the subject of industrial training by students

of LIS is not a new one. However, most of the literature in existence on the subject emanating from Nigeria are either theoretical in their approach or written from the perspective of industry trainers. This is not sufficient to provide a balanced view of the scheme. Moreover, there is lack of research on the perception of LIS students in Nigeria on the student industrial work experience scheme. It is this gap that this study aims to fill.

Methodology

The study adopted the descriptive survey design. A sample size comprising one hundred and five (105) final year students was purposively drawn from undergraduate students of Library and Information Science department from three universities in South East, Nigeria: University of Nigeria, Nsukka; Enugu State College of Education (affiliate of Nnamdi Azikiwe University, Awka) and Michael Okpara University, Umudike. Purposive sampling was preferred because it was reasoned that having already experienced the training the final year students were much more informed and likely to respond more knowledgeably.

A questionnaire designed by the researchers was used as the instrument for data collection. A covering letter attached to the questionnaire explained the purpose of the research and solicited the respondents' cooperation and honesty in filling the questionnaire. To ensure anonymity and also increase confidence, the students were not required to supply the name of the organisations where they underwent the training. The questionnaire was divided into five sections. Section 1 sought for demographic information on respondents. Sections 2-4 were designed to elicit information in line with the objectives of the study. Provision was also made for additional comments to give respondents an opportunity to offer information on areas that may not have been covered in the questionnaire. A four-point scale as appropriate was used to measure the opinions of the respondents. For objective 1, a four-point response option of Very Adequate (VA), Adequate (A), Fairly Adequate (FA) and Not Adequate (NA) was used to determine respondents' perception on the adequacy of training facilities. Objective 2 also, with four response options of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was used to determine the level of agreement of respondents on the items. For

objective 3, a four-point response option of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE); while for objective 4, a four-point response scale of Very Appropriate (VA), Appropriate (A), Fairly Appropriate (FA) and Not Appropriate (NA) was used. The value points attached to the response options for objectives 1-4 were 4, 3, 2 and 1 respectively.

The researchers were involved in the distribution of the questionnaire. However, to increase the chances of return the researchers also engaged the assistance of some final year students in distribution and retrieval of completed questionnaire. It was reasoned that the respondents will be more comfortable and cooperative with fellow classmates. A total of one hundred and five copies of the questionnaire were distributed. Out of this number, ninety-seven copies were returned and 92 (89%) copies found correctly filled and useable. The collected data were analysed with frequencies, percentages and mean score. The mean score was however, used for data presentation. The decisions were based on limits of real numbers thus, for instance, Very Adequate (VA)= 3.50-4.00, Adequate (A)=: 2.50-3.49, Inadequate (IA)=1.50-2.49 and Very Inadequate (VIA)= 0.50-1.49 were assigned to the response options, Strongly Agree (SA)=, Agree (A)= 2.50-3.49, Disagree (SD)= 1.50-2.49 and Strongly Disagree (SD)=0.50-1.49 and so on.

Results

Table 1 presents the demographic profile of respondents. The table shows that there are slightly more females (48 or 52%) than male (44 or 48%). The table also shows that the majority (69 or 75%) of respondents underwent the industrial training in academic libraries. In terms of length of time spent on training, 65 (71%) spent over three months on the exercise.

Table 2 sought to find out respondents' views on adequacy of facilities in the libraries where they underwent industrial training to find out their adequacy or otherwise. The table shows that work tables and chairs has the highest mean score with of 3.01 indicating that the majority of the respondents are of the view that they are adequate. This is followed by computers with a mean score of 2.55. the other facilities are considered Inadequate with internet connection having the lowest mean score of 1.88.

Table 1: Demographic profile of respondents

| | Frequency | Percentage |
|---|-----------|------------|
| Gender | | |
| Male | 44 | 48 |
| Female | 48 | 52 |
| Total of Respondents | 92 | 100 |
| Type of Library where SIWES was undertaken | | |
| Academic | 69 | 75 |
| Special | 11 | 12 |
| Public | 6 | 7 |
| National | 4 | 4 |
| School | 2 | 2 |
| Total No of Respondents | 92 | 100 |
| Length of SIWES Training | | |
| More than 3 months | 65 | 71 |
| Three months | 27 | 29 |
| Total Noof Respondents | 92 | 100 |

Research Objective 1. Determine respondents' perception on training facilities

Table 2: Training facilities

| | VA | A | IA | VIA | Mean | Decision |
|------------------------|---------|---------|---------|---------|------|------------|
| Computers | 27(29%) | 37(40%) | 18(20%) | 10(11%) | 2.55 | Adequate |
| Internet connection | 10(11%) | 27(29%) | 19(21%) | 36(39%) | 1.88 | Inadequate |
| Cataloguing tools | 17(18%) | 42(46%) | 24(26%) | 9(10%) | 2.41 | Inadequate |
| Classification tools | 18(19%) | 40(43%) | 27(29%) | 7(8%) | 2.43 | Inadequate |
| Work tables and chairs | 50(54%) | 30(33%) | 11(12%) | 1(1%) | 3.01 | Adequate |

Research Objective 2. To find out the views on competencies/skills acquired

Table 3: Competencies/skills acquired

| | SA | A | D | SD | Mean | Decision |
|----------------------------------|---------|---------|---------|---------|------|-------------------|
| Time management | 19(21%) | 46(50%) | 24(26%) | 3(3%) | 2.55 | Agree |
| Communication/Presentation skill | 4(4%) | 30(33%) | 57(62%) | 1(1%) | 2.13 | Disagree |
| Leadership | 5(5%) | 39(42) | 48(52%) | - | 2.24 | Disagree |
| Work ethics and values | 39(42%) | 40(43%) | 11(12%) | 2(2%) | 2.88 | Agree |
| Team spirit | 49(53%) | 33(36%) | 8(9%) | 2(2%) | 3.01 | Agree |
| Managing information resources | 16(17%) | 21(23%) | 43(47%) | 12(13%) | 2.16 | Disagree |
| Internet literature search | 13(14%) | 39(42%) | 34(37%) | 6(7%) | 2.43 | Disagree |
| Library Database Management | 12(13%) | 21(23%) | 40(43%) | 19(21%) | 2.02 | Disagree |
| Digitization | - | 8(9%) | 39(42%) | 45(49%) | 1.41 | Strongly Disagree |
| Reference | 45(49%) | 36(39%) | 10(11%) | 1(1%) | 2.97 | Agree |
| Original (Manual)Cataloguing | 22(20%) | 40(43%) | 30(33%) | - | 2.58 | Agree |
| Online cataloguing | 19(21%) | 15(16%) | 46(50%) | 12(13%) | 2.16 | Disagree |
| Copy cataloguing (CIP) | 28(30%) | 41(45%) | 18(20%) | 5(5%) | 2.65 | Agree |
| Subject classification | 32(35%) | 43(47%) | 14(15%) | 3(3%) | 2.77 | Agree |
| Shelf arrangement | 48(52%) | 31(34%) | 9(10%) | 4(4%) | 2.96 | Agree |
| Filing of catalogue cards | 42(46%) | 33(36%) | 14(15%) | 3(3%) | 2.87 | Agree |

Results in table 3 show that respondents agree that they acquired competencies/skills in some areas with the highest mean score recorded on team spirit (3.01). Others include reference (2.97), shelf arrangement (2.96). This is followed by work ethics with mean score of 2.88, filing of card catalogues (2.87), subject classification (2.77); copy cataloguing (2.65); original cataloguing (2.58) and time management (2.55). On the other hand, digitization has the lowest mean score of 1.41 indicating that the majority of the respondents

are of the view that they did not acquire this competency. Other areas with low mean scores are: library database management (2.02); communication/presentation skill (2.12) managing information resources and online cataloguing with a mean score of 2.16 respectively, leadership (2.24) and internet literature search with a mean score of 2.43.

Table 4 presents respondents' views on challenges/barriers to effectiveness of the scheme. A low mean score on any of the items indicate that majority of the respondents do not

perceive that item as constituting a major challenge/barrier. The results in table 4 show that lack of expertise among professionals has the lowest mean score of 1.79 indicating that the majority do not consider it a major challenge/barrier. While all the factors constitute a challenge/barrier to a low extent, the factors

perceived to pose challenges/barrier to a high extent are: poor supervision (school) with a mean score of 2.87, poor training structure (2.74), difficulty getting placement (2.61), irrelevance of some assigned course (2.58) and shortness of SIWES training period (2.5).

Research Objective 3. To ascertain the challenges/barriers to the scheme

Table 4: Challenges/barriers to effectiveness of scheme

| | VHE | HE | LE | VLE | Mean | Decision |
|--|---------|---------|---------|---------|------|------------|
| Difficulty getting placement | 28(30%) | 37(40%) | 21(23%) | 6(7%) | 2.61 | High Exten |
| Inadequate training facility | 21(23%) | 34(37%) | 25(27%) | 12(13%) | 2.38 | Low Extent |
| Poor supervision (industry) | 19(21%) | 39(42%) | 31(34%) | 3(3%) | 2.48 | Low Extent |
| Poor supervision (school) | 49(53%) | 23(25%) | 13(14%) | 7(8%) | 2.87 | High Exten |
| Shortness of SIWES training period | 16(17%) | 47(51%) | 26(28%) | 3(3%) | 2.5 | High Exten |
| Lack of opportunity to be creative | 20(22%) | 40(43%) | 25(27%) | 7(8%) | 2.47 | Low Extent |
| Irrelevance of some assigned tasks to course Requirement | 41(45%) | 17(18%) | 19(21%) | 15(16%) | 2.58 | High Exten |
| Restriction of some work areas to Trainees | 28(30%) | 24(26%) | 32(35%) | 8(9%) | 2.47 | Low Extent |
| Poor training structure | 39(42%) | 34(37%) | 8(9%) | 11(12%) | 2.74 | High Exten |
| Unfriendly work environment | 20(22%) | 27(32%) | 35(38%) | 10(11%) | 2.32 | Low Extent |
| Little practical training sessions | 23(25%) | 26(28%) | 32(35%) | 11(12%) | 2.36 | Low Extent |
| Inflexible work schedule | 16(18%) | 39(42%) | 32(35%) | 5(5%) | 2.40 | Low Extent |
| Lack of expertise among professionals | 5(5%) | 15(16%) | 45(49%) | 27(29%) | 1.79 | Very Low I |
| Poor working conditions | 24(26%) | 40(54%) | 10(11%) | 18(20%) | 2.44 | Low Extent |

Research Objective 5. To ascertain the views on strategies to enhance effectiveness of the scheme

Table 5: Strategies to enhance effectiveness of training

| | VA | A | FA | NA | Mean | Decision |
|--|---------|---------|---------|---------|------|--------------------|
| Involvement of department process | 37(40%) | 55(60%) | - | - | 3.01 | Appropriate |
| Provision of adequate training facilities | 39(42%) | 37(40%) | 11(12%) | 5(5%) | 2.83 | Appropriate |
| More effective supervision | 46(50%) | 28(30%) | 15(16%) | 3(3%) | 2.89 | Appropriate |
| Relate assigned tasks to course | 40(43%) | 37(40%) | 14(15%) | 1(1%) | 2.88 | Appropriate |
| Provide opportunity for creativity | 47(51%) | 29(32%) | 10(11%) | 6(7%) | 3.73 | Very Appropriate |
| Extend SIWES training period | - | 34(37%) | 34(37%) | 24(26%) | 1.87 | Fairly Appropriate |
| Allow more freedom to trainees | 32(35%) | 46(50%) | 8(9%) | 6(7%) | 2.77 | Appropriate |
| Provision of a well-structured training schedule | 45(49%) | 40(43%) | 6(7%) | 1(1%) | 3.01 | Appropriate |
| More friendly work environment | 35(38%) | 49(53%) | 6(7%) | 2(2%) | 2.89 | Appropriate |
| More practical sessions | 44(48%) | 41(45%) | 4(4%) | 3(3%) | 2.98 | Appropriate |
| More flexible work schedule | 43(47%) | 40(43%) | 6(7%) | 3(3%) | 2.95 | Appropriate |
| Enhanced expertise among professionals | 26(28%) | 54(59%) | 7(8%) | 5(5%) | 2.74 | Appropriate |
| Improved working conditions | 29(32%) | 54(59%) | 8(9%) | 1(1%) | 2.84 | Appropriate |

Table 5 presents responses on strategies to enhance the scheme. The results show that extending the IT training period with the lowest mean score of 1.87 is the only strategy that is not considered very appropriate or appropriate for enhancing effectiveness of the scheme. Out of all the outlined strategies, the statement -provide opportunity for creativity has the highest mean score of 3.73 is considered a very appropriate strategy by respondents, indicating that the respondents are not satisfied with the extent of creative opportunities offered during training. Strategies that are considered very appropriate

include: involvement of department in the placement process and provision of a well-structured training schedule which have a mean score of 3.01 respectively. This is followed by the desire for more practical sessions (2.98) and more flexible work schedule with mean score of 2.95.

Discussion

The findings of this study reveal that some of the respondents spent less than six months on the training. The reason for the variation in length of time spend on the SIWES training may not be unconnected with the fact that reoccurring incidents of strike actions among lecturers in

tertiary institutions in Nigeria has brought about the problem of lack of synchronization of academic calendars among the tertiary institutions. Consequently, to make up for lost time in the academic calendar, some of the institutions shorten the SIWES training period for their students. This is not in the best interest of students as it makes it difficult for trainees to have sufficient industry exposure. Bukaliya (2012) & Mikail (2006) also agree that if the industrial training period is too short, it makes it difficult for students to have meaningful industry exposure

On adequacy of training facilities, the findings reveal that most of the libraries where the respondents underwent the SIWES are equipped with training facilities. However, work tables and chairs are the most adequate of the facilities available, followed by computers. On the other hand, internet connection fell short in most of the libraries even though computers are available. While it is commendable that most of the libraries are equipped with computers, the fact that internet connection is not adequately provided for indicates that many of the students were not sufficiently exposed to this aspect of training. This is rather unfortunate because this is one of the areas not adequately covered in the curriculum of the tertiary institutions as reported by Kamba (2011) and Okolocha & Okolocha (2012) who asserted that most of the LIS schools have not incorporated the relevant ICT courses into the curriculum while many of the ones that have done so lack reliable internet access needed for the practical aspects of training. Not being able to acquire or enhance this skill during industrial training explains is among the reasons that most of the graduates leave school insufficiently prepared for the job market.

Irrespective of that finding, the results reveal that the SIWES enabled students to acquire some competencies/skill. However, a close observation shows that students gained competencies/skills mostly in traditional librarianship areas while they did not fare so well on competencies/skills that lean towards information and communication technology (ICT) and personal skills. While acquisition of traditional competencies/skills is highly important, it is also imperative that LIS students are proficient in ICT as this is a very critical need in the 21st century work environment especially because of its influence on the tools and functions of librarians as noted by Edegb, 2011; Ugwuanyi & Ezema, 2010). Moreover, Khoo (2005) posited that while traditional

librarianship skills – cataloguing, acquisitions and reference skills - are still relevant for future librarians, value added skills such as research skills, soft skills, IT skills, subject knowledge and appropriate attitudes, values and personal traits are also highly important. This is all the more imperative considering that Similaye (2014) reported the obvious shortcomings in the curriculum of LIS programmes of tertiary institutions in Nigeria resulting in low acquisition of ICT and personal skills such as communication/presentation and leadership skills. With this shortcoming being experienced during SIWES training also, it is no wonder that most of the graduates end up in the labour market very ill prepared as observed by Saleh (2011).

The findings on the challenges/barriers to the scheme indicates that majority of the respondents consider poor supervision by schools, poor training structure, difficulty getting placement and irrelevance of some assigned tasks to course requirement to top the list. These are also among the challenges/barriers identified in previous studies by Olabiyi, Okarfor & Peter, (2012); Tackett, Wolf & Jaw, (2001).

On the strategies to enhance effectiveness of the scheme, the findings reveal that the item with the highest score is “provide opportunities for creativity “. This is followed by “more involvement of schools in the placement process” and provision of a well-structured training schedule. The desire for more involvement of schools in the placement process is hardly surprising as this is one area that students experience a very serious challenge. Olabiyi, Okarfor & Peter (2012) in their study also noted that the respondents bemoaned the lack of data about industries that will accept them for placement. Effah, Bomphong, Adu, Anokye & Asamoah, (2014) also observed this as a challenge to effectiveness of industrial training in Ghana. The implication of this challenge is that more often than not, students take up this responsibility themselves. Sometimes, their applications are turned down by industry employers resulting in some of them applying to establishments which are really not in a position to provide the expected training. It is also instructive to note that out of the items listed, extending the IT training period is the least favourite among respondents even though it is recognized as a barrier to its effectiveness. This finding runs contrary to one of the findings of the study by Mihail (2006) that revealed that student trainees wanted the training period extended to

enable them have more industry exposure. This finding is however, not surprising as most establishments in Nigeria do not remunerate trainees while the allowance given to them by the Industrial Training Fund is paid several months or years after the exercise entailing that they bear the financial costs of undergoing the training. Extending the industrial training period will no doubt add more financial strain on them.

Conclusion

This study sought to provide some understanding of the perception of the Students' Industrial Work Experience Scheme among undergraduate library and Information Science students. The study sought their perception on adequacy of training facilities in industry establishments, acquisition of competencies/skills, barriers to effectiveness of the scheme and the strategies that can enhance the scheme's effectiveness.

Based on the findings, most training facilities such as computers, chairs and tables were adequate at the training establishments. However, others such as internet connection, cataloguing and classification tools were only fairly adequate. The findings further revealed that while the students to a large extent acquired competencies/and skills during the period of training, these were principally in traditional librarianship areas such as manual cataloguing and classification. On the other hand, they did not fare so well in the area of information technology. The study also identified some barriers to the effectiveness of the scheme such as poor training structure, poor supervision by schools and irrelevance of some assigned tasks to course requirements. The strategies that could enhance the scheme's effectiveness include: more involvement of schools in the placement process, relate assigned tasks to course requirements, more effective supervision among others.

Implications

Our research represents an initial attempt to obtain feedback on the Students' Industrial Work Experience Scheme from undergraduate Library and Information science students who are among the beneficiaries of the scheme. The findings of this study have some implications for the universities, SIWES/Industrial Training Fund (ITF), training establishments and LIS students.

The industrial training as it is presently organized is not sufficiently meeting the practical needs of students. There is therefore very serious need for the stakeholders: universities, ITF and training

establishments to collaborate more to strengthen the scheme. These stakeholders should be involved in the programme from the placement to the actual training period. The universities must design a programme of training which should communicate the expected training needs of students to industry establishments and ensure that the training establishments are aware of this rather than leave them to run the training as they deem fit.

The LIS departments and ITF should also be more involved in the supervision of facilities and students in training. Students must also take industrial training very seriously and ensure that they undergo the training in establishments where they stand to benefit. Strengthening the effectiveness of SIWES will make it possible for students to acquire those competencies/skills that will equip them for the job market.

Limitations

Although this research attempted to determine the perception of LIS students in Nigeria on the SIWES, the study was conducted among library and information science students in only three universities in South East Nigeria. To this extent, the findings cannot be generalized to students of LIS in Nigeria universities outside the study area. It is recommended therefore, that similar studies be carried out among LIS undergraduates in universities in other geographical zones of Nigeria using this study as a baseline.

Another limitation stems from the fact that although the researchers tried to elicit honest responses from students by clearly explaining the purpose of the research in the covering letter of the questionnaire, it is possible that some may have felt that providing correct information especially on the competencies/skills section may put them in a negative light. This is one of the limitations associated with self-report studies. Future research may focus on assessment of competencies/skills of LIS students during the SIWES training period

References

- Akerejola, R. (2004). Information for students' industrial work experience scheme. Jos: ITF.
- Anho, J. E. (2011). An evaluation of the quality and employability of graduates of Nigeria universities. *African Journal of Social Sciences*, 1(1): 178-185.
- Anunobi, C. & Udem, O. K. (2015). Information literacy competencies of library and information science postgraduate students in South East

- Nigeria universities: a focus on the knowledge and skill level. *Information and Knowledge Management*, 5(2), Retrieved from www.iiste.org
- Ayarkwa J., Agyekum K. & Adinyira E. (2012). Perceptions of undergraduate construction student on industrial training in Ghana. *Journal of Science and Technology* 32(1): 56-67. Retrieved from <http://dx.doi.org/10.4314/just.v32i1.7>
- Ballinger, R. C. & Lalwani, C. S. (2010). The role of internship in marine policy and integrated coastal management higher education. *Ocean & Coastal Management*, 43(4-5):409-426.
- Bukaliya, R. (2012). The potential benefits and challenges of internship programmes in an ODL institution: A case for the Zimbabwe Open University. *International Journal on New Trends in Education and Their Implications*, 3(1): 118-133. Retrieved from www.ijonte.org
- Edegbo, W. O. (2011). Curriculum development in Library and Information Science education in Nigerian universities: issues and prospects. *Library Philosophy and Practice*. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1591&context=libphilprac>
- Edukugho, E. (2012, July 21). Challenge of producing unemployable graduates. *Vanguard Newspapers*, Retrieved from www.vanguardngr.com/2012/07
- Effah, B., Bomphong, E., Adu, G., Anokye, R. & Asamoah, J. N. (2014). Issues of the industrial training programme of polytechnics in Ghana: the case of Kumasi Polytechnic. *Journal of Education and Practice*, 5(5), 39-46.
- Eke, H. N., Omekwu, C. O. & Agbo, J. E. (2014). Internet search strategies employed by Library and Information Science students of University of Nigeria, Nsukka for research. *Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3110&context=libphilprac>
- Gault, J., Redington, J. & Schlager, T. (2000). Undergraduate business internships and career success: are they related? *Journal of Marketing Education*, 22, 45-53.
- Gill, A. & Lashine, S. (2003). Business education: A strategic market-oriented focus. *The International Journal of Education Management*, 17(5): 188-94.
- Kakwagh, V. V. (2013). Declining quality of intellectual output in Nigeria's tertiary institutions of learning: the underlining existential factors. *Journal of Education and Practice*, 4, (11), 34-38.
- Kamba, M. A. (2011). ICT competency framework for library and information science schools in Nigeria: the need for model curriculum. *International Journal of Library and Information Science*, 3(4), 66-80.
- Karunaratne, K. & Perera, N. (2015). Students' perception of effectiveness of industrial internship programme. In *Proceedings of the International Conference on Global Business Economics, Finance and social Sciences (GB15_Thai Conference, Bangkok, Thailand, 20-22 February)*. Retrieved from www.globalbizresearch.org
- Kavulya, J. M. (2007). Training of library and information science (LIS) professionals in Kenya: a needs assessment. *Library Review*, 56(3):208-223. doi:10.1108/002453071035993
- Khoo, C.S.G. (2005). Educating LIS professionals for Singapore and beyond. In J Tan et al (Eds), *Celebrating 50 years of librarianship in Malaysia and Singapore* (pp.26-36) Singapore: Library Association of Singapore & Persatuan Pustakawan Malaysia.
- Knouse, S. N., Tanner, J. T. & Harris, E. W (1999). The relation of college internship, college performance and subsequent job opportunity. *Journal of Employment Counseling*, 36: 35-43.
- Lowden, K., Hall, S, Elliot, D. & Lewin, J. (2011). Employers' perception of the employability of skills of new graduates: Research community by the Edge Foundation. Retrieved from www.edge.co.uk
- Mgaya, K. & Mbekomize, C. (2014). Benefits to host organizations from internship programs in Botswana. *Asia-Pacific Journal of Cooperative Education*, 15(2): 129-144.
- Mason, G., Williams, G. & Cranmer, S. (2006). Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes? National Institute of Economic and Social Research. Retrieved from www.niesr.ac.uk
- Mihail, D. W. (2006). Internship at Greek universities: An exploratory study. *Journal of Workplace Learning*, 18 (1): 28-41.
- Ojokuku, B. Y., Emeahara, E. N., Aboyade, M. A. and Chris-Israel, H. O. (2015). Influence of Students' Industrial Work Experience Scheme on professional development of library and information science students in South West Nigeria. *Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu/libphilprac>
- Olabiya, S. O., Okarfor, B. O. & Peter, A. O. (2012). Managing the challenges of industrial work experience scheme in developing workforce among the youths in South-West Nigeria. *British Journal of Arts and Social Sciences*, 4(2): 330-241. Retrieved from <http://www.bjournal.co.uk>
- Orme, V. (2008). You will be: a study of job adverts to determine employers' requirements for LIS

- professionals in the UK in 2007. *Library Review*, 57(8): 619-633.doi: 10.1108/00242530810899595
- Pasipamire, N. (2014). Examining the gap between employers' skills needs and library and science education in Zimbabwe. Retrieved from <http://www.ifla.org>
- Quijano, G.D. (2015). Competencies of LIS graduates: implications for outcome based teaching and learning. The General Conference Congress of South East Asian Librarians (CONSAL) xvi held in Bangkok-Thailand on 11-13 June. Retrieved from <http://www.consaxvi.org>
- Rukwaro, M. W. and Bii, R. (2015). Library and information science (LIS) education and training in Kenya: emergence, evolution, challenges and opportunities. *International Journal and Information Science*, 8(2):11-18.doi: 10.5897/IJLIS2015.0626
- Saleh, A. G. (2011). Employers' expectations of library education in Nigeria. *Library Philosophy and Practice*. Retrieved from <http://unlib.unl.edu/LPP/>
- Similaye, A. O. (2014). Training of library and information professionals for the 21st century job market in Nigeria: implications for curriculum re-design. *Journal of Education and Practice*, 5(27). Retrieved from www.iiste.org
- Sinnasamy, J. & Nasir, E.(n.d.) industrial training for library and information science students: a Malaysian experience. Retrieved from www.consaxvi.org
- Tackett, J., Wolf, F. & Jaw, D. (2001). Accounting interns and employers: Conflicting perceptions. *Ohio OPA Journal*, 60: 34-56.
- Ugwu, E. I. (2010). Towards effective education and training of library and information science delivery in the South East geographical zone of Nigeria. *Journal of Library & Information Technology*, 1(1), 17-33
- Ugwuanyi, C. F. and Ezema, J. U. (2010). Challenges of students' industrial work experience scheme (SIWES) in library and information science in the ICT environment. *Library Philosophy and Practice*. Retrieved from www.webpages.uidaho.edu