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EVALUATION OF LIBRARY AND INFORMATION SCIENCE STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES) IN SELECTED TETIARY INSTITUTIONS IN KWARA STATE, NIGERIA

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ABSTRACT

This study evaluated Student Industrial Work Experience Scheme (SIWES) of Library and Information Science in selected tertiary institutions in Kwara State. The study adopted a survey design using questionnaire as instrument for data collection. Simple random sampling technique was adopted to select 184 respondents from three selected library schools in three tertiary institutions including: (University of Ilorin, Kwara State University, Malete and Federal Polytechnic Offa). To achieve the objectives of the study, five (5) research questions were developed to guide the study. Descriptive analysis was used to analyze the data collected. The results indicate that SIWES programs in library schools of Kwara state conforms with crucial objectives of SIWES, However, there are some factors that limit the actual performance of students in SIWES compared to the set objectives of the SIWES program. These factors include; lack of motivation and incentives to the students on industrial attachment, difficulty in finding industrial placement and inaccessibility to facilities and equipment's in the place of attachment. The study recommends that tertiary institutions' authority should create awareness on the existence and importance of SIWES, and mandate organizations and companies to actively participate in the SIWES program. Library schools should provide a means of helping students find relevant

place for industrial attachment and such should be made to give incentives to the students so as to motivate them to participate actively.

Keywords: Evaluation, Library and Information Science (LIS), LIS students, Students' Industrial Work Scheme, Industrial attachment, Training, Library School.

Introduction

Practical involvement of students in their field of study aids their theoretical learning. Going by Kolb and Kolb (2005) assertion, theory must be reinforced with practice and practices need sound theory to guide their conduct. In Nigeria, Student Industrial Work Experience Scheme (SIWES) was established by Industrial Training Fund (ITF) to solve the problem of lack of adequate practical skills in preparation for employment in industries by graduates of tertiary institutions. The scheme exposes students to industry based skills that are necessary for smooth transition from the classroom to the world of work and it gives the students opportunity to be part of real work situation outside the lecture room. Industrial training that is relevant to professional development of library and information science undergraduates prior to graduation provides pre-professional work experience with specific assignments and responsibilities. As noted by Nse (2012), Industrial training for Library and Information Science students is of paramount importance. This is because students are expected to acquire adequate and relevant skills that would enable them to perform effectively in their future place of work or assignment.

Nse (2012:1) observed that "in spite of the high level of quality and qualified Library Science educators in Nigeria library schools, there are still gaps in both the theoretical and practical knowledge acquired by the students". An industrial training should be relevant to a student's personal career interests and academic courses of study. The quality of library professionals produced by library schools largely depends on the adequacy of their practical knowledge on the field. The industrial skills gained from the organization of placement helps in putting theoretical knowledge into practice and making informed decisions in carrying out work responsibilities. Nse (2012), posits that the quality of service rendered in the library is in proportion to the level of knowledge and skills possessed by the library staff and it is a fact that today library science students are the librarians of tomorrow, and if effective service delivery should be expected from them, it is imperative that they are given adequate opportunities to acquire an all-round skills. In the light of this, Student Industrial Work

Experience Scheme (SIWES) is geared towards creating an opportunity for the industrial readiness of students through training in relevant organizations.

On this note,Wodi and Dokubo (2009) opined that if the Scheme is not adequately implemented, it becomes difficult for graduates of the system to secure employment in the occupations or make a smooth transition from schools to work. In producing quality library professionals, effective training in real work situation is inevitable. This presupposes that SIWES should be geared towards creating opportunities of training in real work situation and in relevant organizations. However, students are placed in jobs and environment that are not related to their course of study. Experiences gained by such students become irrelevant to their course of study. This is the current situation in the Nigeria SIWES programme. To bridge this gap therefore, this study aims to evaluate library and information science students' industrial work experience scheme (SIWES) in tertiary institutions in Kwara State, Nigeria. Evaluation of SIWES in Kwara State Library Schools would help check the adequacies and inadequacies of the SIWES programme in the library schools and make suggestions that would enhance the effects of SIWES on the students. It is pertinent that the SIWES programme be evaluated; doing so would help to address the shortcomings and loopholes preventing students from gaining effective and relevant work experience and training during SIWES. It will further increase the student's knowledge and participation in the programme, enhance the use of students' theoretical knowledge, and most importantly improve students' skills and experience on the job after graduation.

Literature Review

Training

Training according to Ajidahun (2007) is an integral part of vocational or career development and it is fast becoming a global and pervasive phenomenon in any establishments, the absence of which spells doom for such an institution and the presence of which determines the success of any enterprise. In the view of Ezeali and Esiagu (2009), training is an organized, coordinated development of knowledge, skills and attitudes needed by an industrial worker to master a given situation or perform a certain task within an organization setting. Tella and Popoola (2007) when relating training to library work stated that it is as an essential strategy for motivating workers in the library as a service organisation. For the Librarian or information professional to have opportunities for self-improvement and development to meet the challenges and requirements to perform a task there is the need to acquire the needed skills suitable for the work at hand. According to Flippo (1984) the act of increasing the skills of an employee for

doing a particular Job" can be termed as training. Similarly Steinmetz has observed. Training is a term, a process of utilizing a systematic and organized procedure by which non-personnel learns technical knowledge and skills for a definite purpose. From the above definitions it can be asserted that training is a technique concerned with the development of skills and knowledge in particular actor discipline. Training enhances and improves person's skills, Imparts knowledge to change person's attitudes and values towards a particular direction. Similarly, Ajidahun (2007) was of the view that training should take the form of continuing education, industrial attachment, formal education programmes leading to certificates, diploma and degrees, on–the–job learning from experienced colleagues, coaching and special project and off–the–job lectures, seminars, discussions and instructions of various types.

There are two major types of training: curative and preventive. Curative training is used to address problems that workers demonstrate at the present. This is more emphasised in Nigeria. Preventive training is a programme aimed at solving a future problem(s) that may occur. Other methods of training include the following: apprenticeship, in-service training, on the job training, and vestibule training.

The Nigerian government has encouraged the establishment of many institutions and organisations for training and development. Such institutions include:

- National Manpower Board, which is responsible for the periodic appraisal of requirements for manpower in all occupations and the development of measures for in-service training of, employed manpower both in the public and private sectors.
- The Administrative Staff College of Nigeria (ASCON) was established to provide diverse training facilities for senior managers of the economy.
- The Nigerian Institute of Management,
- The Centre for Management Development (CMD)
- The Industrial Training Fund (ITF) was established to promote and encourage the acquisition of skills in industry and commerce with a view to generating a pool of indigenous trained manpower sufficient to meet the needs of the economy. The Nigerian government has also entered into bilateral agreements with some foreign countries for the training of Nigerians in practical skills. Each year, many scholarships are offered to deserving Nigerians to study in foreign countries.

No doubt, there is need for training evaluation. This is to know whether or not the purpose of it is achieved. Hemus and Moores (2008) referred to evaluation as the process of finding out how the development or training process has affected the individual, team and the organisation. The process of examining a training program is called training evaluation. Training evaluation checks whether training has had the desired effect. Training evaluation ensures whether candidates are able to implement their learning in their respective workplaces, or to the regular work routines.

Of course, there are purposes of training evaluation. From extant literature, the five main purposes of training evaluation are: 1)**Feedback, which** helps in giving feedback to the candidates by defining the objectives and linking it to learning outcomes; 2)**Research, which** helps in ascertaining the relationship between acquired knowledge, transfer of knowledge at the work place, and training; 3) **Control, which** helps in controlling the **training program** because if the training is not effective, then it can be dealt with accordingly; 4) **Power games:** At times, the top management (higher authoritative employee) uses the evaluative data and manipulates it for their own benefits and5) **Intervention, which** helps in determining whether the actual outcomes are aligned with the expected outcomes.

The process of training evaluation from literature also reveals three forms. These are (i) before training where the learner's skills and knowledge are assessed before the **training program**. During the start of training, candidates generally perceive it as a waste of resources because at most of the times candidates are unaware of the objectives and learning outcomes of the program. Once aware, they are asked to give their opinions on the methods used and whether those methods confirm to the candidates preferences and learning style. (ii)**During Training**: i.e. the phase at which instruction is started. This phase usually consist of short tests at regular intervals; and, (iii)**After Training:** the phase when learner's **skills and knowledge** are assessed again to measure the effectiveness of the training. This phase is designed to determine whether training has had the desired effect at individual department and organizational levels. There are various evaluation techniques for this phase. So also, **there are various methods of training evaluation. These are** observation, questionnaire interview, self-diaries, **and** self-recording of specific incidents.

SIWES (Student Industrial Work Experience Scheme)

The Students Industrial Work Experience Scheme (SIWES) is a skill Training programme designed to expose and prepare students of Agriculture, Engineering, Technology, Environmental Science, Medical

Sciences and Pure and Applied Science for the Industrial work situation which they likely meet after graduation. Duration of SIWES is four months in Polytechnics at the end of ND 1, four months in College of Education at the end of NCE II and six months in the Universities at the end of 300 or 400 or 500 levels (or 5 years) depending on the discipline (Information and Guideline for SIWES, 2002).

There are different forms of Cooperative Education around the world, all emanating from the innovation of Herman Schneider in 1906. In Nigeria, the current form of Cooperative Education is known as the Students' Industrial Work-Experience Scheme (SIWES). Often, students mistakenly and commonly refer to "SIWES" as "I.T" i.e. industrial attachment whereas industrial training is generic while SIWES is a specific form of Cooperative Education or industrial training operated in Nigeria.

Objectives of SIWES

The Industrial Training Fund's Policy Document No. 1 of 1973 (ITF, 1973) which established SIWES outlined the objectives of the scheme. The objectives are to:

- Provide an avenue for students in institutions of higher learning to acquire industrial skills and experience during their courses of study;
- Prepare students for industrial work situations that they are likely to meet after graduation;
- Expose students to work methods and techniques in handling equipment and machinery that may not be available in their institutions;
- Make the transition from school to the world of work easier and enhance students' contacts for later job placements;
- Provide students with the opportunities to apply their educational knowledge in real work situations, thereby bridging the gap between theory and practice;
- Enlist and strengthen employers' involvement in the entire educational process through SIWES.

Following the discontinuation of the system of sponsorship of students by employers at the Yaba Technical Institute and the emergence of other higher institutions offering science, engineering and technology programmes, there was no organised industrial training in Nigeria. Only those students who engaged in holiday jobs in areas relevant to their courses of study could be said to have had some form of work-experience or industrial training while others did not. The situation led to a spate of criticisms of SET of graduates from Nigerian institutions as lacking practical

skills in general and, in particular, the relevant production skills needed by industry. Consequently, some higher institutions introduced the Student Work-Experience Programme (SWEP) to enrich the curricula of engineering courses (Uvah, 2004). SWEP was designed to enable students understand the practical applications of the basic principles underlying the traditional engineering programmes (Civil, Electrical and Mechanical Engineering). SWEP was conducted during the long vacation in the institutional workshops under simulated industrial conditions for 200 Level students of universities who have just been introduced to engineering and technology courses. Students were allowed to use machines and tools available in the workshops in the production of simple jobs and were introduced to some basic practices which they were likely to encounter during industrial training. However, SWEP was not a substitute for real industrial training.

Historical Perspectives on SIWES

The Students' Industrial Work-Experience Scheme (SIWES) started in 1974 with 748 students from 11 institutions of higher learning participating. By 1978, the scope of participation in the scheme had increased to about 5,000 students from 32 institutions. The Industrial Training Fund, however, withdrew from the management of the scheme in 1979 owing to problems of organisational logistics and the increased financial burden associated with the rapid expansion of SIWES (ITF, 2003). Consequently, the Federal Government funded the scheme through the National Universities Commission (NUC) and the National Board for Technical Education (NBTE) who managed SIWES for five years (1979 – 1984). The supervising agencies (NUC and NBTE) operated the scheme in conjunction with their respective institutions during this period.

The bodies involved are: Federal Government, Industrial Training Fund (ITF), Other Supervising Agencies are: National University Commission (NUC), National Board for Technical Education (NBTE), & National Council for Colleges of Education (NCCE).The functions of these agencies above include among others to:

- Ensure adequate funding of the scheme;
- Establish SIWES and accredit SIWES unit in the approved institutions;
- Formulate policies ad guideline for participating bodies and institutions as well as
- appointing SIWES coordinators and supporting staff;
- Supervise students at their places of attachment and sign their log-book and ITF Forms;

- Vet and process student's log-books and forward same to ITF Area office;
- Ensure payment of Allowances for the students and supervisors.

Ugwuamji (2010) asserts that SIWES is a cooperative industrial internship program that involves institutions of higher learning, Industries, the Federal government of Nigeria, Industrial Training Fund (ITF), Nigerian Universities Commission (NUC) and NBTE/NCCEE in Nigeria. Relevant to this, Bansa, Grover, Kumar(2010) opined that Industrial training is one of the strongest viable modes of interaction between industry and institute. The present work highlights industrial feedback on various issues related to industrial training which can be useful in updating student's curriculum and improving governance in order to enhance education quality, training effectiveness and to strengthen industry-academia-interface. Therefore, the rapid change in ICT has effects on the activities of SIWES, as asserted by (Ugwuanyi and Ezema, (2010).The ICT environment has created a new modus operandi for the LIS profession by virtue of new tools for information exchange. Jestin and Parameswari (2002) recognize the challenges when they note that the library profession in India, like their colleagues everywhere, particularly those serving high-tech institutions, are already subject to challenges resulting from ICT. They assert that the new technology may call for organizational change in the traditional library and that librarians may function more like consulting information engineers than as the traditional, passive custodians of information and dispersers of documents. This poses new challenges to educators, practitioners, and students. The challenges among others include:

Digital Environment: ICT created a new digital environment that led to the development of digitization, the conversion of print and other formats to digital form, as an enhanced storage and preservation technique. Digital libraries are one result of these new information acquisition and distribution techniques. The ICT environment calls for librarian to be managers and organizers of digital content. It requires new management skills and other roles such as content creators, web page planners and designers, and Internet navigators.

New Career Specializations: The digital environment facilitated by ICT created new platforms for professional activities, where librarians can be more proactive than in the analogue era. Librarians operating in this information environment may be called Internet librarians, digital librarians, "cybrarians," or "webarians," all coined from ICT jargon. These changes are positioning librarians for the global information arena.

Information Services: There has been a revolution in user services. Developments in ICT affected users' information need, tasking librarians to catch up with the trend and satisfy their clientele. Musoke (2007) observes that the growing number of university students, the increase in study programs, the increase in research, and rapid ICT developments have all changed the routines of traditional academic librarianship. He stresses the fact that these changes and demands need innovative librarians who can meet the needs of 21st users. E-learning also developed in academic communities following the emergence of digital technology. To satisfy their patrons, librarians should adapt to the new learning environment characterized by new information formats with a learner-centred and interactive approach.

Transformation of Some Specialized Subject Areas: The statistical analysis of bibliographic information flow has been transformed to Webometrics, the analysis of Web content and information use on the World Wide Web. Bibliometric specialists are challenged to absorb this new concept in citation analysis. Ugwuanyi and Ezema (2010) stated the following Strategies for Situating LIS Participants in SIWES for Global Information development. All LIS stakeholders must acknowledge the new trends in the profession and put right strategies in place which could include training, infrastructural development, Collaboration or Networking between Library Schools and Practitioners, curriculum revision, creation of new market opportunities, etc.

Nse (2012) points out that there seems to exist a wide margin in the reality and actualization of the objectives of the students industrial work experience scheme (SIWES). Lack of proper coordination and supervision of the exercise is a factor limiting the full actualization of the objectives of the SIWES; this however, implies that for the students to be fully equipped with skills/knowledge required for efficiency in the place of work all hands must be on desks. The federal government through the industrial training fund and other Agencies involved in the SIWES programme should wake up and address the situation to ensure that the loopholes in the system are covered

Related Literature

Mofesola (2012) conducted a study at the Federal College of Agriculture, Akure, using 55 students IT report, interviewed 20 students and the SIWES coordinators to **appraise the Students' Industrial Work Experience Scheme (SIWES) in Federal College of Agriculture Akure.** The report of

the study shows that out of the fifty-five(55) students' SIWES report analyzed; twenty-seven 27(49%) SIWES placement were very relevant to students courses while twenty-six 26(47.3%) were relevant and only two(2) 3.7% were not relevant. This implies that the placement of students for industrial training through SIWES in Federal College of Agriculture Akure is relevant to the students' course of study and this fulfils the number one objective of the Federal government for establishing SIWES. The evidence of knowledge gained by the students from the quantitative analysis done on the fifty-five (55) students' SIWES project reports, thirty-five (63.7%) show high evidence of knowledge gained while 7(12.7%) show slight evidence of knowledge gained and 13 (23.6%) show that there were no evidences of knowledge gained by the students. This was based on the quality of the log books and the reports written by the students during and after the IT program. The quality of the students SIWES reports shows that the Industrial training program is very relevant to the National Diploma program of the college. Twenty one(38.2%) of the reports analyzed were well written revealing in details that all the activities carried out at the centre and the experience gained were well spelt out. Twenty three(41.8%) reports were fairly written while eleven (20%) were poorly written. All the students and SIWES coordinator interviewed confirmed that students' placement were done by students but that the college authority compels them to choose relevant centres for the industrial training. Also, all the students and coordinator indicated that SIWES is very important to the National Diploma program because it compliments students' studies through exposure to practical aspects of their courses and having physical contact with tools used in farms and industries and that SIWES should not be scrapped but be improved. These results are evidence that the Federal College of Agriculture Akure SIWES program conforms to the Federal government's set objectives for Student Industrial Training in Nigeria.

Nse (2012) conducted a study at the Federal Polytechnic Nekede using first year national diploma students to evaluate the Student Industrial Work Experience Scheme (SIWES) in Library School. The report of the study indicated that all the respondents (100%) confirmed that they participated effectively in the SIWES programme organized between October 2010 and January, 2011. This shows that the students are aware of the relevance of the SIWES programme to their academic pursuits. A total of 94 respondents (81.7%) confirmed that the organization they were attached to, were related to their area of study, while 21 (18.3%) reveals that they were attached to a

place not relevant to their area of study. This shows that majority of the students were fully absorbed in areas related to their field of study. Again, 16 respondents (13.9%) were attached to libraries, 56 (48.7%) to cyber cafes/computer business centres, 9 (7.8%) to publishing houses, 8 (7%) to Archive and Record Centres, 5 (4.3%) to Bookshops and 21 (18.3%) to other organization like construction, manufacturing companies etc. The findings show that majority of the students did their industrial training in cyber cafes/computer business centres with only 16 (13.9%) been attached to libraries. This apparently is nothing to write home about as this is not in consonance with the objective of the SIWES as most of the experience acquired in computer centre will not actually prepare them for actual work situation. Furthermore, the results show that 69 respondents (60%) agreed that the knowledge acquired is highly relevant to their field of study, 10 (8.7%) indicated it is not relevance at all, 34 (29.6%) indicated average relevance while 2 (1.7%) were undecided. Therefore, majority of the students acquired knowledge and skills relevant to their field of study in the course of the training.

A total of 12 respondents (10.4%) gained knowledge mostly in the area of cataloguing, 10 (8.7%) in the area of indexing of documents, 8 (7%) in the area of classification, 2 (1.7%) in the area of reference services and abstracting services respectively while 81 (70.5%) indicated gaining knowledge in other areas of life. The findings show that majority of the students did not gain practical knowledge in the core areas of their field of study and this will have an adverse effect on their performance in their future place of work, except they are given on-the-job turning. However, most of the students gained knowledge in the area of computer appreciation, internet browsing, printing and publishing. It was also revealed that 63 (54.8%) affirmed delay in issuing of log book/I.T letters, 75 (65.2%) refusal to accept students by various organizations/industries, 23 (20%) lack of motivational incentives, 97 (84.3%) lack of proper coordination/supervision while 15 (13%) indicating non-cooperative attitude between staff and the students attached as the various problems associated with the programme. The analysis shows that the major limitations to the actualization of the objectives of SIWES programme are: lack of proper coordination and supervision of the SIWES exercise, refusal to accept students by industries/various organizations as well as delay in issuing log books and I.T letters. From the above extant literature, it is evidence that not much have been done as regards the evaluation of

SIWES programme to determine its effectiveness in the tertiary education institutions in Nigeria. The little available studies were conducted in the polytechnic and not university. Evaluating SIWES in the University context particularly among the Library and Information Science Students is one of the factors that prompt the researcher into this research.

Objectives of the Study

This main objective of this study is to evaluate the Library and Information Science Student Industrial Work Experience Scheme (SIWES) in selected tertiary institutions in Kwara State. This is with the essence of knowing the effect of SIWES on library science undergraduates in tertiary institutions in Kwara state. The specific objectives of this study are to:

1. Determine the extent of participation of library and information science students in SIWES
2. Identify the relevance of knowledge gained from SIWES to student's academic field of study.
3. Identify the specific organizations that the students are usually attached to for their SIWES programme.
4. Determine the level of knowledge gained by the students during the SIWES programme
5. Find out the limitations/hindrances to the actualization of the objectives of SIWES Programme.

Research Questions

To achieve the above stated objective of this study, the following research questions were developed and answered.

1. What is the extent of participation of library and information science students in SIWES?
2. What is the relevance of knowledge gained from SIWES to student's academic curriculum?
3. What are the specific organizations that the LIS students are mostly attached for SIWES?
4. What is the level of knowledge gained by the students during the SIWES programme?
5. What are the limitations/hindrances to the actualization of the objectives of SIWES Programme?

Methodology

Research Design

This study adopted survey design, because it generally gathers data with the intention of describing existing conditions, identifying standards against which existing conditions can be compared (Cohen and Manion 1994). Survey as a research design collects standardized data about large numbers of people (Haralambos, Holborn and Heald, 2004). The survey design was considered appropriate in this study as it allows the use of various data collections techniques such as questionnaires, interviews and observations.

Population of the Study

According to Best and Khan (2006) population is any group of individuals that has one or more characteristics in common which are of interest to the researcher. The target population of this study consists of Library and information science undergraduate students from three tertiary institutions in Kwara state. They are Library and information science undergraduate from University of Ilorin, who are in their 3rd and 4th year of study, 400 level or year 4 Library and Information Science undergraduate from Kwara State University, and ND II Library and Information Science undergraduates from the Federal Polytechnic, Offa. According to the 2012/2013 report from the examination offices, from the three selected schools, the total number of 3rd and 4th year students from library and information science departments; University of Ilorin are 38 and 59 respectively. The total number of 4th year undergraduates from Kwara State University is 11 while the total number of ND II undergraduates from Federal polytechnic, Offa is 210. This gives an overall total of 318.

Sampling Methods

The study adopted a simple random sampling technique to select the sample for the study. This was to give every respondent in the population the equal opportunity of being selected. According to Aina (2002), simple random sampling is the basic sampling method of survey research and its aim is to give each person an equal chance of being included in the sample. This study adopted the Israel (2003) sample size model for determining sample size. This was to arrive at the actual sample for this study. The model states that taken sample size for ±3%, ±5%, ±7%, and ± 10% for precision levels where confidence level is 95% and P=.5. Going by the

model if ±5 was taken for precision when the population is 318, the sample should be 180. This justifies the sample of 190 used in this study.

Sample size for ±5%, ±7% and ±10% P recision Levels Where Confidence Level is 95% and P=.5.			
Size of	Sample Size (n) for Precision (e) of:		
Population	±5%	±7%	±10%
100	81	67	51
125	96	78	56
150	110	86	61
175	122	94	64
200	134	101	67
225	144	107	70
250	154	112	72
275	163	117	74
300	172	121	76
325	**180**	125	77
350	187	129	78
375	194	132	80
400	201	135	81
425	207	138	82
450	212	140	82

Source: (Israel, 2003).

Data Collection Instruments

A self-designed questionnaire was used for data collection in this study. This is because the questionnaire helps in gathering the factual-in-depth information desired. The questionnaire was a structured questionnaire, it was divided into two sections, A and B. Section A required the respondents bio-data information while section B was subdivided into 5 parts. Part I-V were based on the objectives and research question of the study.

Validity of the Instrument

The instrument was validated to ensure both the content and construct validity. To achieve these, the instrument was given to two experts who are researchers in areas of training evaluation for scrutiny and expertise judgment. The comments and suggestions by these experts led to the modification of the items in the questionnaire. This to a large extent ascertained both the face and content validity of the questionnaire.

Reliability of the Instruments

Reliability is the extent to which a questionnaire, test, observation or any measurement procedures produces the same results on repeated trials. Reliability of an instrument reflects its stability and consistency within a given context.To achieve the reliability of the instrument used for data collection in this study, the instrument was administered to 16 library and information science undergraduate students at the University of Ibadan which was not part of the study. A split-half reliability method was used and responses collected was subjected to Cronbach alpha with the reliability co-efficient yielded an r = (0.734). This showed that there was high correlation between both halves of the instruments thereby implies that the instrument is reliable for use.

Data Collection Procedure

The administration of the questionnaire was done by the researcher with the help of research assistants recruited in each participating school. The copies of the questionnaire were administered when students were in session, because that was the time they could be easily reached. Out of 190 copies of questionnaire administered, 184 copies were returned and completely filled representing 96.8% return rate. These were used for data analysis on the study.

Data Analysis

The data collected from the field was analyzed using descriptive statistics including simple percentage and frequency count. The descriptive statistical tool was adopted because of its simplicity and easy to understand pattern to different cadet of researcher that may be interested in reading this report.

Results

Table 2: Demographic variable of respondents

Year of study	Frequency	Percentage	Cumulative percentage
Year 1	0	0	0
Year 2	115	62.5	62.5
Year 3	26	14.1	76.6
Year 4	43	23.4	100.0
Total	184	100.0	
Gender			
Male	85	46.2	46.2
Female	99	53.8	100.0
Total	184	100.0	
Age			
16 -20 years	34	18.5	18.5
21-25 years	106	57.6	76.1
26 - 30 years	44	23.9	100.0
31-35 years	0	0	100.0
Total	184	100.0	
Institutions			
Unilorin	59	32.1	
KWASU	10	5.4	
FEDPOFFA	115	62.5	

The table above shows the distribution of students based on their level/year of study. None of the students were in their first year of study, (62.5%) were in their second year of study, and (14.1%) of the students were in their third year of study, while 23.4% were in their fourth year of study. This indicates that the larger percentage of the students were in their second year. The table also indicates that (46.2%) of the respondents were male while (53.8%) were female. These shows there are more females than male that took part in this study. In addition, (18.5%) of the students were between the ages of 16 -20years, (57.6%) were between 21-25 years of age, (23.9%) were aged 26 -30years while none of the respondents were between the ages of 31- 35 years. On the institutional distribution, the results indicate that (32.1%) of the students were from University of Ilorin, (5.4%) were from Kwara State University, and (62.5%) of the students were from Federal Polytechnic, Offa. This shows that students from Federal Polytechnic, Offa have the highest percentage, while students from Kwara State University

have the lowest percentage. This might be because it is a new school and the department from which participants from the school were selected is very new with limited students.

Table 3: Extent of participation in SIWES

S/N	Extent of participation in SIWES	YES	NO
1	I participated in SIWES program.	182 (98.9%)	2 (1.1%)
2	I was industrially attached for the required duration.	82 (44.6%)	102 (55.4%)
3	I was engaged in tutorials and practical in the organization I was attached to.	113 (61.4%)	71 (38.6%)
4	I did not absent throughout the duration of my industrial attachment.	156 (84.8%)	28 (15.2%)

The above table shows that (98.9%) participated in SIWES, only (44.6%) were industrially attached for the required duration, (61.4%) of the students were engaged in tutorials and practical in their organization of attachment, (84.8%) of the students never absent throughout the duration of their industrial attachment.

Table 4: Relevance of knowledge gained from SIWES to students' academic curriculum

S/N	Relevance of knowledge	YES	NO
1	Your Organization of attachment engages in information management activities.	145 (78.8%)	39 (21.2%)
2	The training activity relates to courses taken at school.	125 (67.9%)	59 (32.1%)
3	Training activity gives me a better understanding of the courses taken at school.	123 (66.8%)	61 (33.2%)
4	I find participating in SIWES instrumental to development.	104 (56.5%)	80 (43.5%)
5	It helps to practicalise the theories I was thought at school.	167 (90.8%)	17 (9.2%)

The above table shows that (78.8%0 of the students were attached to organizations that are engaged in information management activities, (67.9%) responded that training activities related to the course taken at school. Training activities gives (66.8%) of the respondents a better understanding of the courses taken at school, (56.5%) of the respondents finds participating in SIWES instrumental to development, and a larger percentage of the respondents(90.8%) agreed that SIWES helps them put into practice courses taken at school.

Table 5: Organization of Attachment

S/N	ORGANISATION OF ATTACHMENT	YES	NO
1	Library	139 (75.5%)	45(24.5%)
2	Information centre	30 (16.3%)	154 (83.7%)
3	Archive and Record Centers	9 (4.9%)	175 (95.1%)
4	Publishing houses	16 (8.7%)	168 (91.3%)
5	Organizations with information resource management departments	11 (6.0%)	173 (94.0%)

The table above shows that majority of the students were attached to libraries with a percentage of (75.5%), while (16.3%) were attached to information centers. The table also indicates that less student were attached to archive and record centers (4.9%), publishing houses (8.7%) and organizations with information resource management departments (6.0 %). This is an indication that as far as library schools SIWES programme is concerned, students are place in organisations relevant to their field of study. It's also implies that SIWES programs in library schools of Kwara State conforms with crucial objectives of SIWES.

Table 6: Level of knowledge gained during the SIWES programme

S/N	Level of knowledge gained during the SIWES programme	YES	NO
1	I was able to learn about the latest development in my course of study.	157 (85.3%)	27 (14.7%)
2	I added a good deal to my scientific knowledge.	66 (35.9%)	118 (64.1%)
3	I was able to gain experience on applying the knowledge gained at school to the real life situation.	111 (60.3%)	73 (39.7%)
4	SIWES helped me in improving my skills, and abilities for tackling technical problems.	160 (87.0%)	24 (13.0%)

The table above indicates that (85.3%) of the respondents were able to learn about the latest development in their course of study, (35.9%) agreed that SIWES added a good deal to their scientific knowledge, (60.3%) were able to gain experience on applying the knowledge gained at school to the real life situation, while (87.0%) of the students agreed that SIWES helped them in improving their skills, and abilities for tackling technical problems. This indicates that knowledge and experience acquired during the SIWES programme is very high.

Table 7: Limitations to the actualization of the objectives of SIWES

S/N	Limitations to the actualization of the objectives of SIWES	YES	NO
1.	It took time to gain industrial attachment.	113 (61.4%)	71 (38.6%)
2.	I didn't receive a form of payment/ allowance from the organization I was attached to.	135 (73.4%)	49 (26.6%)
3.	I wasn't engaged in the activities of the organization during the period of my training.	77 (41.8%)	107 (58.2%)
4.	I didn't receive adequate supervision during training	83 (45.1%)	101 (54.9%)
5.	I didn't have access to training with the equipment's and facilities of the organization I was attached to.	96 (52.2%)	88 (47.8%)
6.	I didn't experience an encouraging reception by the staffs of the organization.	27 (14.7%)	157 (85.3%)

The table above shows (61.4%) of the respondents indicate it took time to find place of industrial attachment, (73.4%) of the students didn't receive a form of payment/ allowance from the organization they were attached to, and (41.8%) of the students were not engaged in the activities of the organization during the period of their training. In addition, (45.1%) of the respondents did not receive adequate supervision during training, (52.2%) did not have access to train with the equipment and facilities of the organization they were attached while (14.7%) of the respondents did not experience encouraging reception by the staffs of the organization.

Discussion of Findings

The study sought to find out the extent of participation of library and information science students in SIWES. The results suggested that almost all the students participated in SIWES and go for training always during the period of their attachment; more than average of the respondents were engaged in practical and tutorials in their organization of attachment. This relates to the findings of Nse (2012) who revealed that the students in his study participated effectively in the SIWES programme.However, his results indicate less than average of the total respondents was industrially attached for the required time. This implies that some of the students did not participate in SIWES for the required duration.

The study sought to find out the relevance of knowledge gained from SIWES to student's academic curriculum. The results suggested that the knowledge gained from SIWES by students were very relevant to their academic curriculum. This is related to the findings of Mofesola (2012) who conducted a study to appraise **the Student Industrial Work Experience Scheme (SIWES) in Federal College of Agriculture,Akure and revealed that** the placement of students for industrial training through SIWES is relevant to the students' course of study.

That the SIWES training activities gives students a better understanding and helps put into practice courses taken at school indicate the fulfillment of one of the objectives of SIWES which is to provide students with the opportunities to apply their educational knowledge in real work situations, thereby bridging the gap between theory and practice. There is no doubt about the fact learning is incomplete without putting what has been learnt into practice.

The study sought to find out the specific organizations that the students under study were mostly attached. The results suggested that most of the students were attached to libraries and other organisations such as

information centers, archives and record centers, publishing houses, and organizations with information resource management departments. This is related to the findings byNse (2012) who conducted a study to evaluate theStudent Industrial Work Experience Scheme (SIWES) in Library Schoolat the Federal Polytechnic Nekede and revealed that students were industrially attached to cyber cafes/computer business centers, publishing houses, archives and record centers, libraries and other organizations like construction, manufacturing companies,e.t.c.

The study sought to find out the level of knowledge gained by the students during the SIWES programme. The findings revealed that students were able to learn about development in their course of study with more than average of the respondents indicating that it added a good deal to their scientific knowledge, and they were able to apply the knowledge gained at school to the real life situation. Most of the respondents confirmed that SIWES helped them in improving their skills and abilities for tackling technical problems. This implies that there is a high level of knowledge gained by the students during their SIWES programme. This development confirms the fact that experience is the best teacher. Theoretical knowledge alone is not sufficient for solving problems in this age but rather good practical knowledge of the discipline or field of study that one has been exposed.

In identifying the limitations to the SIWES objectives, the study indicates that minority of the respondents were not able to gain industrial attachment while it took most of the respondents' time to gain industrial attachment, and most of the respondents also did not receive any form of payment/allowance. This is related with the findings by Nse (2012) who revealed that the major limitations to the objectives of SIWES programme are lack of proper coordination and supervision of the SIWES exercise, refusal to accept students by industries/various organizations as well as delay in issuing log books and I.T letters while other factors indicated include: lack of motivational incentives, non-cooperative attitude between staff and the students attached. Motivation usually enhances good performance, lack of it might proof otherwise. No doubt, many organisations today face with the problem of poor performance resulting from poor motivation and lack of incentives given to staff. Also, most of the respondents were not engaged in activities of the organization during their training, majority of the students did not have access to train with the equipment of the organization, and didn't experience encouraging reception by the staffs of the organization thereby hindering the actualization of SIWES objectives. Many programme are established by

the government with good intent but the implementation most of the time usually kill the vision. What was reported in this study justifies the fact that SIWES, the programme focused in this study is not an exception.

Conclusions

The purpose of the study was to assess Library and Information Science, Student Industrial Work Experience Scheme (SIWES) of tertiary institutions in Kwara state. The results have shown that most of the students participated effectively in SIWES and were attached to organizations relevant to their course of study including libraries, information centers, archives and record centers, publishing houses and organization with information resource management departments.

The level of knowledge gained by most students is high and relevant to their course of study as they were able to learn about development in their course of study, gain experience on the applicationof the knowledge gained at school to the real life situation thereby improving their skills and abilities for tackling technical problems.

However, there are some factors that limit the actual performance of students in SIWES compared to the set objectives of the SIWES program. It took most student time to find organization of attachment; this reduces their time in participating in their SIWES program. Most students did not receive any form of payment/allowance during their SIWES attachment. Also, most of the respondents were not engaged in activities of the organization during their training, majority of the students responded that they do not have access to train with the equipment of the organization, and didn't experience encouraging reception by the staffs of the organization.

Recommendations

The various bodies involved in the management of the SIWES exercise i.e. Federal Government, Industrial Training Fund (ITF), NUC, NBTE and NCCE should create more awareness on the existence and importance of SIWES, and mandate organization and companies to actively participate in the SIWES program.

The various bodies involved in the management of the SIWES exercise should organize workshops/seminars that will enlighten and encourage them to perform their expected roles towards meeting the needs of the students on industrial training. This includes encouraging organizations to engage students in practical and tutorials, allowing students to train with their facilities and equipment and providing suitable training condition for the SIWES students.

Library schools should provide means of helping students find relevant industrial attachment, by liaising with relevant organizations or institutions that can provide industrial attachments for their students.

The Federal governments should pay students industrial training allowance on time, as well as encourage organizations and companies to give incentives to students that are industrially attached to their organization in order to motivate the students. The training activities of the students should be monitored by the industrial training fund official supervisors as well the college supervisors to ensure that students' training activity is in line with the objective of SIWES.

Suggestion for Further Research

The study has been able to showcase the actual performance of students in SIWES compared to the set objectives of SIWES through the assessment of the students' SIWES involvement. Subsequent research can be conducted on Effectiveness of Student Industrial Work Experience Scheme (SIWES) for competence acquisition among library and information science students and by determining the extent of students' skills acquisition, as a result of their participation in Student Industrial Work Experience Scheme (SIWES) program.

REFERENCES

Adeniji, M.A. (2002). *An analysis of human resources development programmes in two selected Nigerian university libraries.* (Unpublished MLS Thesis, Department of Library and Information Studies, University of Ibadan: 19-20

Aina , L. O. (2002). Research in Information Science: an African perspective: Ibadan: stirling-Horden (Nig.) Ltd.

Ajidahun, C .O. (2007). The Training, Development and Education of Library Manpower in Information Technology in University Libraries in Nigeria. World Libraries 17(1): 1-14

Akhigbe, O.O. (1997). Professional Skills Required by Nigerian Library/Information Centres of the Future. *Nigerian Libraries* 31, nos. 1 & 2 (1997), 1–11.

Akinpelu, J.A. (2002). *Philosophy and Adult Education*. Ibadan: Stirling-Horden: 106.

ALIEP (2006). *Proceedings of the Asia-Pacific Conference on Library and Information Education and Practice 2006.* Singapore: 338-346.

Allan, G. and Crow, G, G. (2001). Families, Household and Society, Palgrave Publisher, Basingstoke

Brickman, W. (2007). Vocational Education. *Microsoft® Encarta® Online Encyclopedia*. Redmond WA: Microsoft Corporation

Cohen L, &Manion, L (1994). Research Method in Education: London: Routledge.

Crocker L, &Algina J. (1986). Introduction to Classicaland Modern Test Theory. Orlando, FL:Harcourt Brace Jovanovich, 1-527.

Ebrahimi, R. (2009).The effect of Information and Communication Technology (ICT) on Teaching Library and Information Science. *Library Philosophy and Practice.* April. Available: http://unllib.unl.edu/LPP/ebrahimi.htm

Egunyomi, D. (1999). *Principle and practice of continuing education in Nigeria*. Ibadan: Gabesther Education Publishers.

Ershova, T.V., &Hohlov, Y.E. (2000). Migrating from the library of today to the library of tomorrow: Re-ore-volution? 66th IFLA Council and General Conference. Jerusalem, Israel, 13-18th August. Available: http://www.ifla.org/iv/ifla66/papers/063-110e.htm

Ezeali, B.O., &Esiagu, L.N. (2009). *Public Personnel Management: Human Capital Management Strategies in the 21st Century*. Onitsha: Chambers Books.

Flippo, B. E. (1984) Personal Management. New York: McGraw Hill: P.192.

Gutek, G. (2007). College and Universities. *Microsoft® Encarta® Online Encyclopedia*. Redmond WA: Microsoft Corporation

Hemus. G., &Moores .J (2008). Evaluation of staff development and training. The Manchester metropolitan university

Israel. G.D. (2003). Determining sample size. Retrieved 15 July, 2013; from: http://edis.ifas.edu.

Jestin, J.K. (2002). Challenges for Library Professionals in India in the New Millennium. *Library Philosophy and Practice 4* (2). Available: http://unllib.unl.edu/LPP/jestin1.html

Kolb A.Y, & Kolb D.A (2005). Learning Styles and Learning Spaces:Enhancing experiential learning in higher education. Academic Management inLearning and Education, 4(2), 193-212

Lynn, A. (2006). Grant to Benefit Four Nigerian university libraries. Urbana-Champaign: University of Illinois.

Miller, V. A. in Craig, R. L. (1987). *History of Training. Training and Development Handbook,* 3rd ed., McGraw-Hill, New York, pp. 3-18.

Musoke, M.G.N (2007). Strategies for Addressing the University Library Users' Changing Needs and Practices in Sub-Saharan Africa. Pre-IFLA Satellite conference paper. Available: http://www.ifla.org/iv/ifla73/satelliteprogramme-en.pdf

Nse, J. (2012). Evaluation of Student Industrial Work Experience Scheme (SIWES) in Library School: The Federal Polytechnic Nekede Experience. *Library Philosophy and Practice*

Nwachukwu, C. (1988). *Management: Theory and Practice*. Ibadan: Africana-FEP Publishers Limited: 121-126

Okiy R.B. (1998). *History of Libraries*. Benin City: Justice Jeco Business Ventures Press Ltd.

Oppenhein, C., & Smithson, D. (1999). What is the hybrid library? *Journal of Information Science, 25* (2), 97-112.

Tella, A., &Popoola, S. (2007). Work Motivation, Job Satisfaction and Organisational Commitment of Library Personnel in Academic and Research Libraries in Oyo State. *Library Philosophy and Practice*. Retrieved 15 July, 2013; from: http://unllib.unl.edu/LPP/tella2.htm
Torpey, W. G. (1959). Public Personal Management, p.154.

Ugbokwe, C.U. (1998). Staff Development: A Motivational Tool in University Library Management. *Library Bulletin,* 3 (1 & 2), 74–77.

Ugwuanyi, C.F. (2002). Innovation in Library and Information Management in the Information Technology (IT) age. *Interdisciplinary Education Journal, (INTEJ)4* (2), 113-131.

Ugwuanyi, E.F. (2010). Challenges of Students' Industrial Work Experience Scheme (SIWES) in Library and Information Science in the ICT Environment Library. Available: http://www.faqs.org/periodicals

Uvah, I. I. (2004). *The Place and Relevance of SIWES in the Curricula of Science, Engineering and Technology (SET) Programmes.* Workshop on the Students' Industrial Work-Experience Scheme, University of Lagos, Akoka, Lagos.

Varalaskshmi, R.S.V. (2006). Educating 21st century LIS professionals: The needs and Expectations: A Survey of Indian LIS Professionals and Alumni. In Khoo, C., Singh, D., &Chaudhury, D.S. (Eds.).

Wodi, S.W &Dokubo, A. (2009). Appraisal of Students Industrial Work Experience Scheme (SIWES) in five tertiary Institutions in Rivers State Nigeria. *EuropeanJournal of Social Science*, 7(3), 42-51