

HARNESSING INFORMATION PRODUCTS FOR SELF-EMPLOYMENT, MICRO AND MACRO DEVELOPMENTS BY POLYTECHNIC LIBRARY AND INFORMATION SCIENCE GRADUATES IN NIGERIA

Jerry Arthur IJIEBOR

Department of Library and Information Science,
Federal Polytechnic Offa, Kwara State, Nigeria
E-mail: jerry4weal@yahoo.com
Mobile: +2348032640722, +2348057046904

Khadija Yetunde SALAWU

Department of Library and Information Science,
Federal Polytechnic Offa, Kwara State, Nigeria

Abstract

Tackling the prolong unemployment and underemployment situations in Nigeria prompted some programmes and interventions; one it is self-employment backed by entrepreneurship study and skills acquisition. Library and information students are taught those skills and for a long time still remain unemployed and underemployed. It has become a clarion call for librarianship professionals to become involved, instigate and show their graduates to discipline-based and information-related self-employment opportunities to take advantage of the short-term and long-term entrepreneurial goals of creating job for self and others, even in other sectors of the economy. Three specific research objectives and questions guided this study, relevant literature reviewed, quantitative methods and techniques used which called for the use of descriptive survey design. The population was about 200 HND II graduates of Library and Information Science Department, Federal Polytechnic Offa, Kwara State, Nigeria. The sample was 110 and simple random technique was used. The data gathering instrument used was well-structured and standardized questionnaire. Procedure for administration was face to face and free-floating so that everyone qualified was given questionnaire. Data gathered were analyzed manually by the researcher and few assistants using simple average of the Likert. The findings showed that majority of the respondents know the various types of information products to a level that is statistically acceptable, a little bit higher than they did with knowing their contents; though acceptable statistically. As well they can develop the products to a statistically acceptable level but not as they did with other two key questions. Appropriate recommendations were given with emphasis on development and implementation of functional curriculum to enable library and information science graduates tap the benefits of the economies created by information, knowledge and digital assets with information products.

Keywords

Information, Self-Employment, Information Entrepreneurship, Information-related Entrepreneur, Information Products

Introduction

In a democratic society, the government is of the people, by the people and for the people. That means that there is a give and take arrangement in place in the sense that the people give the government the needed mandate to lead them and in return expect the government to use whatever power in such mandate to effectively harness the available public resources to better their lives. Peradventure the government alone cannot do that, it would still be that within that mandate the government use the available economic and political instruments to provide a conducive atmosphere and level playground for private control of means of production and distribution of goods and services. Government makes the plans, policies, and initiate programmes for sustainable development while the people take advantage of these for their economic and business endeavours. The private talked about here may be in the informal or formal sector; it may be just one person or combination of persons from two, fifty and to unlimited number. A combination of government and private participation leads to inclusivity, which is akin to balanced and equitable society and sustainable development. According to United Nations Development Programme [UNDP] (2016), inclusivity in development is what nations, especially developing ones, pursue and it is only achievable if all groups of people contribute to creating opportunities, share the benefits of development and participate in decision-making. World Economic Forum [WEF] (2015) submitted that inclusivity in growth is about growth in output that is sustainable, broad-based across economic sectors, productive and broods gainful employment and further opportunities for a great majority of the country's working age population, poverty eradication, and society for all. That is what Nigeria needs now that close to 40% of its over 200 million population are unemployed.

Okoli and Allahna (2014) submitted that the government of any nation has a basic goal of empowering its citizens economically. One of the ways government empowers its citizens for functionality and to become assets for growth and development of the society is through education from pre-primary through primary, secondary and tertiary. The higher the educational level, the better for the society, and visionary governments around the world stops at nothing but tertiary education for their citizens. World Bank (2021) defined tertiary education to be all formal post-secondary education, including public and private universities, colleges, technical training institutes, and vocational schools. It associated tertiary education with prerequisite for innovation and growth, as they are more employable and productive, earn higher wages, and cope with economic shocks better.

The unemployment and underemployment rate in Nigeria is alarming and yet continuously increasing. World Bank (2021) observed that as at 2020 Nigeria as a country had a total population of 206,139,587. Majority of this is youths of working age but largely unemployed and not fully engaged. It is reasonable to assume that between then and now the population would have grown more owing to upwardly population trend line experienced in Nigeria. It is up-going especially due to high illiteracy rate of close to 40% which is hampering access to and use of birth control measures. As the population grows dependency ratio grows, labour market grows and joblessness grows. As at last quarter of 2018 the National Bureau of Statistics [NBS] reported about 23% of Nigerian population were unemployed. The heat of pandemic of first and second quarter 2020 further threw that figure up to about 55% and now trying to rebound positively. In its trend line study, World Bank said that the unemployment rate in Nigeria rose five-fold in 10 years, specifically from 2010 to 2020. That, unemployment rate moved from 6.4% in 2010 to 33.3% at the end of 2020, and this mostly affected Nigerian youth in their quest to find gainful employment opportunities. That statistic was a five-fold unabated rise in a period of ten years. And in March of

2021 the NBS reported that Nigeria's unemployment rate climbed to 33.3% in the fourth quarter 2020 from 27.1% recorded in the second quarter 2020. That, a total of 23.18 million persons in Nigeria either did nothing or worked for less than 20 hours a week, making them unemployed during the fourth quarter of 2020. Within that period, underemployment rate decreased from 28.6% to 22.8%. The sum up of this— unemployment and underemployment figure—gave a figure of 56.1%. Meanwhile, World Bank (2021), submitted that higher education is instrumental in fostering long-term growth, boosting shared prosperity in both low and middle-income countries, and the economic returns for tertiary education graduates are the highest in the entire educational system— an estimated 17% increase in earnings as compared with 10% for primary and 7% for secondary education. That, these high returns are even greater in Sub-Saharan Africa, at an estimated 21% increase in earning for tertiary education graduates. That means that tertiary education is akin to employment opportunities and plays a major role in a country's economic development. It also means that the cost of unemployment in Nigeria is aggregately high. However, unemployment and underemployment is rampant with Nigerian graduates. Abioye (2020) hinted that every year Nigerian tertiary institutions graduates about 500,000 from about 150 Universities and 50 Polytechnics and Monotechnics and a large number of these are grossly unemployed. These exclude those from colleges of education, health, agriculture, science and technology etc, and those with national diplomas from Universities and Polytechnics. It is further disturbing that the figure is upwardly increasing. As at 2017, it was about 300,000.

Entrepreneurship, which is self-employment, has been recognized to be the solution to unemployment and underemployment around the world and Nigeria. It has since been institutionalized in the educational system and curricular contents of schools around the world. An economic viable country like China institutionalized it in 2002 (Shah, Gao & Mittal, 2015). The same with America and some Asian countries. In the case of Nigeria, the idea of entrepreneurship education was formalized in 2004 and became operational in the 2012/2013 academic session for the polytechnics and 2014 for the university. Education is mainly about what is taught or the content of what is taught relative to the dynamics of the society and the global world. That is where the transformation is domiciled. Information and its kindred knowledge, have gained much economic momentum and carved "societies" and "economies" for themselves— information society, information economy, and knowledge economy—with highly priced products and services. But the curricular content of the entrepreneurship education for Library and Information Science at the Polytechnic sector does not recognize information related self-employment opportunities for the students. This is despite the calls for it from library and information science professionals, for example Igwe, Uzoegbu, Issa, Aliyu and Adebayo (2015).

This research is not about criticism and curricular evaluation, but to examine knowledge of and indirectly points graduates of Library and Information Science at the Polytechnic sector to the goldmine of information products.

Statement of the Problem

The need for self-employment and self-reliance is upwardly becoming a necessity in Nigeria owing to the prevalent economic and social situation the citizens find themselves. Librarians are scientists, inventors, creative and innovative people. Their curriculum taught them to be managers, marketers, manufacturers and distributors of information products. The upwardly importance of information and librarians' professionalism have given them the edge as designers and planners of quality information products that are highly valuable, quality commanding, highly priced, inelastically

demanded and paid for with local and first-grade foreign currencies in higher denomination. Librarians, as foreseers and forecasters, have long recognized that employment opportunities do not exist only in the public and organized private sectors, but also there are avenues for self-employment. And they equally knew that there are disciplined-based avenues for self-employment. Their curriculum and core knowledge areas speak for this. The value placed on quality information and knowledge by nations, societies, groups and individuals is enough for trainee and professional librarians to take advantage of, unleash their entrepreneurial skills to innovate, create and market information products in the cases that call for information-related self-employment opportunities. Therefore, this paper is to see to how librarianship trainees at the Higher National Diploma of Federal Polytechnic Offa knowledgeable in harnessing these discipline-based information products for self-employment and savour entrepreneurial short-term and long-term growth.

Research Objectives

Reflection on library and information science curriculum, garnished with entrepreneurial training and the upwardly importance of information in the present knowledge economy would make one wonder why graduates from library and information science discipline are still unemployed or underemployed. This paper is to investigate if librarianship trainees at the Higher National Diploma Library and Information Science of Federal Polytechnic Offa have knowledge of the various types of information products in their discipline, know their contents and make-up, and can develop or manufacture each of them for entrepreneurial enterprises. However, the specific objectives derived from the above are:

1. To know if Higher National Diploma Library and Information Science students of Federal Polytechnic Offa have knowledge of the various types of information products in their discipline
2. To know if Higher National Diploma Library and Information Science students of Federal Polytechnic Offa know the contents of each of the various types of information products in their discipline
3. To know if Higher National Diploma Library and Information Science students of Federal Polytechnic Offa can develop each of the various types of information products in their discipline

Research Questions

The following research questions are derived from the specific objectives:

1. Do Higher National Diploma Library and Information Science students of Federal Polytechnic Offa have knowledge of the various types of information products in their discipline?
2. Do Higher National Diploma Library and Information Science students of Federal Polytechnic Offa know the content of each of the various types of information products in their discipline?
3. Can Higher National Diploma Library and Information Science students of Federal Polytechnic Offa develop each of the various types of information products in their discipline?

Scope and Limitations of the Study

This study is about knowledge of information products to the extent of their contents and development for entrepreneurial initiatives. It does not include the practicalities involved in their actual development, and never on their distribution and marketing in the physical or virtual realm. It used only HND II graduates of the department and institution.

Literature Review

Like other countries, Nigeria adopts education as vital instrument for growth and development. Unfortunately, its educational outcomes have not matched up with that. Education which should have been hinged on the philosophy of qualitiveness, comprehensiveness, functionality and relevancy with the dynamics and needs of the society, failed to be so. Graduates should have been employed as soon as they finish their studies but that is not so. Rather, what is rampant is unemployment and underemployment. In lieu of this, entrepreneurship education was introduced into the Nigerian education system. Around the globe, entrepreneurship education is gaining momentum and earning international, national and regional recognition as an established field of study, and earning interest of educational stakeholders, policy makers and students. Ojeifo (2012) identified the problems facing Nigeria as a country that warranted entrepreneurship education to be acute poverty, youth and graduate unemployment, dependence on foreign goods and technology, very low economic growth and development, among others. That, entrepreneurship education was envisioned to inculcate in graduates the needed entrepreneurship skills that would enhance their usefulness in real sector, usher in sustainable development, and ultimately make them self-reliant, self-employed and employers of labour on the long-run. The author therefore recommended that educational programmes at all levels should be made relevant to provide the youth the needed entrepreneurial skills. Aladejebi (2018) noted that there is an increasing interest in entrepreneurship education in Nigeria, that the pattern is that more private universities are including entrepreneurial education in their curriculum while public universities are making it as part of their general studies. Okeke and Edikpa (2014) submitted that beyond the shores of Nigeria, globally entrepreneurship education is looked upon as the engine of economic growth and development since it develops students to use their creativity, have the ability to recognize and evaluate business opportunity, take initiative, responsibility, risks and appropriate actions to succeed.

Librarians have long welcomed entrepreneurship and its education to the fold of the discipline. Ekoja and Odu (2016) hinted that upon presidential directive of 2004 for entrepreneurship education, librarians follow suit as others but those of their propositions were not approved and implemented "...desiring to develop a tailor-fit programme for students of library and information science, Departments of Library and Information Science in Nigerian universities, have also come up with LIS-related entrepreneurial courses. A look at the course descriptions of the about 25 approved LIS programmes in Nigerian universities indicates that entrepreneurship courses peculiar to the field are hardly offered presently...." Usuka, Ekere and Ajibo (2019) recognized librarians to be people who love economic self-development and therefore recommended entrepreneurship opportunities in library and information science profession for achieving such. They however identified sources of capital for entrepreneurial ventures, to be one of the challenges that would be associated with that. On their expository study, Soyele and Sodeinde (2020) believed that entrepreneurship education for library and information science students could be enhanced with a mix of professional librarianship knowledge, knowledge of information communication

technology and knowledge of entrepreneurship. While the professional knowledge and knowledge of information communication technology expose the students to the traditional and newer disciplinary goldmines, the entrepreneurship component takes care of skills acquisition so that they can be innovative, creative and become risk takers; and the combination of these makes them better self-reliants, employers of labour and valuable assets to the society.

Ntui (2015) conducted a survey to know the magnitude of entrepreneurial attitude, such as inclinations, feelings, competence, intentions and desirability of business start-up, in order to determine attitude of library and information science students towards entrepreneurship and self-employment, and found out that library and information science students are enterprising and have positive attitude towards entrepreneurship, as 40% of them have the intention to become entrepreneurs, 58% possess entrepreneurial competence and 37% have desirability positive feelings about entrepreneurship. Aladejebi (2018) conducted a survey of a University, Polytechnic, College of education and asatellite campus of a University and found out that behavioural component of the students' attitude toward entrepreneurship education was positive, as many of the students showed the zeal of starting their own business when they graduate.

However, despite the delay in approving and implementing information-related entrepreneurial courses for library and information science discipline, as reported by Ekoja and Odu (2016), the authors noted that there were disciplinary business-related courses that could speak for self-employability of librarianship graduates, such as the cases of the Ahmadu Bello University, Zaria, offering LIS 220: Business Information Systems and Services, LIBS 321: Marketing of Libraries and Information Centres, LIS 323: Financial Management in Libraries and Information Centres, and LIBS 414: Publishing and Advertising; the University of Nigeria, Nsukka offering LIS 448: Library Marketing and Public Relations; the Abubakar Tafawa Balewa University, Bauchi, offering LIS 513: Library and Information Consultancy, and LIS 523: Marketing of Library and Information Services; the University of Abuja, offering LIS 302: Introduction to Publishing, LIS 408: Marketing Library and Information Services, LIS 409: Library and Information Consultancy, and LIS 411: Revenue Generation in Libraries and Information Centres. The authors concluded that there is no doubting the growing awareness and need for entrepreneurship courses in library and information science. That same is the situation with Library and Information Science programme at the Polytechnic sector of education in Nigeria; hence, the necessity for this research. One thing is to have entrepreneurial knowledge another is to become knowledgeable of the rich disciplinary goldmines domiciled in information resources, which are raw materials in the hands of librarians (Ifidon, 1997).

Methodology

Methodology of a research is purely about participants and procedure, including the detailed description of their characteristics. This research is quantitative and used quantitative methodology. The methods and techniques are reflexive of the specifically determined objectives and questions amenable for gathering data that are in numerical form and performing statistical calculations so that conclusions can be drawn and far-reaching implications made for the decision-making process of the beneficiaries of the research. The design of a research constitutes the blueprint or master-plan for the collection, measurement and analysis of data. It eases the task of getting and analyzing data as it provides the needed structure and strategy to pass through the research process and meet expectations. This research employed a descriptive survey design. Such design is a combination of descriptive and survey research approaches. It is necessitated by a systematic description of a

research problem involving fairly large, large or very large number of research subjects over a large expanse of area. Descriptive approach is useful in obtaining information about the current status of phenomena and to describe "what exists" with respect to variables or conditions. Simply, it tells "what is" by providing answers to the questions of who, what, when, where, how, but not necessarily why. Survey is necessitated by a fairly large, large or very large number of research subjects. It is suited for observing phenomena that cannot be directly observed, such as events, objects, opinion, attitudes, preferences and interests. With a large number of participants, the data collection and analysis method was highly structured, having questions in close-ended form while minimal outlets were given to respondents to state their subjective states. This was to avoid the difficulty in analyzing the data. Survey is used across all disciplines and hence used here. The population is the about two hundred (200) graduated Higher National Diploma (HND) students of Library and Information Science, Federal Polytechnic Offa. The reason for that choice was that they have had all the dose of the polytechnic curriculum for the discipline and that of entrepreneurial education; hence, would be knowledgeable enough for the research. Moreover, they are the fresh ones going to the labour market after the compulsory national service. Being a survey research, the study employed sampling technique of the simple random with an underpinning philosophy of giving all elements an equal chance of being selected with no pre-planned arrangements in mind. The sample size was 110, and procedure for data collection was a free-floating approach as everyone met was given a questionnaire. Customized and well-scaled and structured questionnaire with standardized questions across board was used for the study. This was because the research is purely quantitative, uses a survey design, population and sample large. The study employed simple average and tabulation for analysis and data description. Data analysis was done manually by the researcher and few assistants.

Findings of the Study

In case, this and another of my research on information services, were done concurrently with the same group of students as respondents. The two questionnaires were given to them together, filled in together and returned together. They share the same demographic characteristics and have the same errors. One hundred and ten (110) copies of questionnaire were taken to the field for distribution but only 100 were returned without errors and fit to be analyzed for the study. Findings from that analysis are presented below.

Demographic Characteristics of Respondents

Table 1: Distribution of respondents by sex and educational level

Sex	Frequency	Percentage
Male	62	62%
Female	38	38%
Total	100	100%
HND II	100	100%

The above table reveals that 62(62%) of the respondents are male, and 38(38%) female. That is to say majority of the respondents are male. Moreover, all the respondents are students of the Higher National Diploma. They have had all dozes of the polytechnic curriculum—from the disciplinary and entrepreneurial strands—ready to go to the labour market and at the verge of making career or entrepreneurial decisions as source of livelihood. They were the most fit for such research.

Presentation and Discussion of Findings Based on Research Objectives

The study has relatively large data. However, the data are each self-explanatory and yet ranked in ascending order according to the magnitude of their mean values. This is to further make them obvious and simplify them to the level that even lay readers who are not statistically sound can comprehend them. Emphasis is on the modal mean values—highest against the lowest.

Table 2: Mean score of student knowledge of the various types of information products in LIS

I know these products	Mean (X)	Ranking	Decision
Textbooks	4.9	1	Accepted
Journals	4.7	2	√
Newspapers	4.7	2	√
Cataloguing/classification information	4.7	2	√
Data sets	4.7	2	√
Magazines	4.5	3	√
Social media sites	4.4	4	√
References books	4.3	5	√
Video tapes	4.3	5	√
Bibliographic	4.3	5	√
Indexes	4.2	6	√
Blogs, Wikis, Youtubes	4.2	6	√
Software packages	4.2	6	√
Abstracts	4.0	7	√
CD-ROM databases	4.0	7	√
Radio cassettes	4.0	7	√
Emails	4.0	7	√
Translations	3.9	8	√
Constitutions	3.8	9	√
Reports, newspapers, bulletins	3.8	9	√
VCDs/DVDs/MPs/Podcasts	3.8	9	√
Photographs	3.6	10	√
Online catalogues	3.6	10	√
Membership sites	3.5	11	√
Indigenous/local content products	3.5	11	√
Repackaged information products	3.5	11	√
Statistical data information	3.5	11	√
Seminar, Workshop and symposium papers	3.3	12	√
Conference proceedings	3.3	12	√
Really Simple Syndication (RSS)	3.2	13	√
Coaching courses	2.7	14	√
Tutorial courses and help files	2.6	15	√
Patents/standards	2.5	16	Rejected
Digests	2.5	16	Rejected
Total Mean (ΣX)	3.8		

Table 2 reveals that majority of the respondents know disciplinary information products to a very statistically encouraging and accepted extent; at least at ratio 31:4. This is likely to happen because their curriculum must have taught them about those products, even repeatedly from NDI to HNDII. It does not mean that their opinion would still be to that magnitude when it comes to harnessing those information products for entrepreneurial initiatives. It is only with entrepreneurial knowledge and business-like disciplinary knowledge that they would be able to do so.

Table 3: Mean score of student knowledge of contents of the various types of information products in LIS

I know the contents of these products	Mean	Ranking	Decision
Textbooks	4.8	1	Accepted
Reference books/resources	4.8	1	√
Journals	4.4	2	√
Magazines	4.3	3	√
Data sets	4.3	3	√
Reports, newsletters, bulletins, proceedings	4.2	4	√
Bibliographic	4.2	4	√
Newspapers	4.1	5	√
Cataloguing/classification information (documented)	4.1	5	√
Video tapes	4.0	6	√
Emails	4.0	6	√
Photographs	3.9	7	√
Indexes	3.8	8	√
Social media sites	3.8	8	√
Software packages	3.8	8	√
Online catalogues	3.7	9	√
Abstracts	3.6	10	√
Radio cassettes	3.6	10	√
CD-ROM databases	3.5	11	√
Blogs, Wikis, YouTube	3.2	12	√
Repackaged information products	3.2	12	√
Tutorial courses and help files	3.2	12	√
VCDs/DVDs/MP3/podcasts	3.1	13	√
Indigenous/local contents products	3.1	13	√
Conference proceedings	3.1	13	√
Statistical/data information	3.1	13	√
Membership sites	2.8	14	Rejected
Magnetic discs	2.8	14	√
Coaching courses	2.8	14	√
Really simple syndication (RSS)	2.7	15	√
Constitutions	2.6	16	√
Parents/standards	2.5	17	√
Digests	2.3	18	√
Translations	2.3	18	√

Seminar, workshop and symposium papers	2.1	19	Rejected
Total Mean ($\sum X$)	3.5		

Criterion Mean = 3

Majority of the Higher National Diploma graduates of Library and Information Science, Federal Polytechnic Offa know the components of a greater number of information services; though at different degrees. When compared, those who know it to an acceptable level and those who do not are at ratio 26: 9 as the table reveals relative to the criterion mean of 3. This too may be because their curriculum would have taught them about those products from NDI to HNDII. The ranking is statistically encouraging—just look at it.

Table 4: Mean score of student knowledge to develop the various types of information products in LIS

I can develop these products	Mean	Ranking	Decision
Cataloguing/classification information (documented)	4.3	1	Accepted
Newspapers	4.1	2	√
Journals	3.9	3	√
Radio cassettes	3.7	4	√
Data sets	3.7	4	√
Bibliographies	3.7	4	√
Video tapes	3.6	5	√
Emails	3.6	5	√
Indexes	3.4	6	√
Textbooks	3.4	6	√
Software packages	3.4	6	√
Translations	3.4	6	√
Online catalogs	3.4	6	√
Statistical data/information	3.3	7	√
Seminar, workshop and symposium papers	3.2	8	√
Social media sites	3.2	8	√
Reference books/resources	3.1	9	√
Photographs	3.1	9	√
Magazines	3.0	10	√
Blogs, wikis, YouTube	3.0	10	√
Indigenous/local content products etc.	3.0	10	√
Repackaged information products	3.0	10	√
Tutorial courses and help files	3.0	10	√
CD-ROM databases	2.9	11	Rejected
VCDs/DVDs/MP3s, podcasts	2.8	12	√
Conference proceedings	2.8	12	√
Constitutions	2.7	13	√
Reports, newsletters, bulletins, proceedings	2.7	13	√
Membership sites	2.6	14	√
Coaching courses	2.5	15	√
Parents/standards	2.4	16	√

Digests	2.3	17	√
Magnetic discs	2.2	18	√
Really Simple Syndications (RSS)	1.6	23	Rejected
Total Mean (ΣX)	3.1		

Criterion Mean = 3

When it comes to developing the products, majority of the Higher National Diploma graduates of Library and Information Science, Federal Polytechnic Offa know how to develop a greater number of information products to an acceptable level; though at different degrees. When compared critically, the total or grand mean of this table is the lowest among the three tables for the three key questions—knowing the products has 3.8, knowing their contents is 3.5, and this, which is knowing how to develop the products, is 3.1. One of the implications of this is that even though these graduates know the various information products more than they know their contents, and developing them is the least. A detailed and more focused knowledge about information products, maybe from information-related entrepreneurial courses, would have salvaged the situation. Entrepreneurs who do not know how to develop their products on their own are not likely to be creative and innovative, which is the bedrock of entrepreneurship and entrepreneurial activities (Ekoja&Odu, 2014; Soyele&Sodeinde, 2020). Entrepreneurs are supposed to be creative and innovative in manufacturing information products to customers’ specifications, and sometimes to the tune of their customizations.

Conclusion and Recommendations

Majority of the Higher National Diploma graduates of Library and Information Science, Federal Polytechnic Offa know a greater number of information products in their discipline at different degree that is altogether acceptably encouraging. This is likely to happen because they have been taught those products repeatedly from NDI to HNDII. Except a minimal and insignificant number, majority of them know the contents of a greater number of information products; though at different degrees that is close to their knowledge about those products and statistically encouraging.

Majority of the Higher National Diploma graduates of Library and Information Science, Federal Polytechnic Offa know how to develop a greater number of information products to an acceptable level; though at different degrees. However, their knowledge about the products and their contents is more than that to develop them for entrepreneurial initiatives. One of the entrepreneurship implications of this is that their creativity and innovation would not be infused developing those products, which is not encouraging. However, this is likely to be that because they are not specifically taught information-related entrepreneurial opportunities. This would increase with quality instructions and detailed knowledge of information products offered through information-related entrepreneurial opportunities.

The outcome of the research on a majority basis is encouraging but when checked on the basis of the column average percentage there some implications. The outcome that only 32.8%, 28.6% and 24.3% of the respondents in that respective order know information products, their contents and can develop them is not encouraging. Conclusions drawn have said something about this. A more directed and focused information-related self-employment curriculum and entrepreneurship education biased towards the discipline, is needed for trainees of Library and Information Science. It would fill gaps, give close attention and reasonable level of detail to each of

the various types of information products. The design and implementation of such curriculum has to recognize and take care of the evolving nature of information products in line with the dynamisms in the information and knowledge economies. It should be dynamic, flexible, comprehensive and functional enough to accommodate both the traditional and emerging information products in the physical and digital economies. ICT and telephony technologies have come to stay, at least for now, the new curriculum has to reflect their characteristics in their functionality relative to information products design, development, management, distribution and marketing.

Library and Information Science students need to be given detailed knowledge on the development of information products such that is needs based in consonance with societal dynamisms, user information consumption characteristics, and digital realities for easy distribution and marketability. This would cost more than design and implementation of the hitherto traditional models of entrepreneurial-driven disciplinary curriculum and entrepreneurship training. Information and communication technologies (ICT) is the vogue and even fused with librarianship. Therefore, library schools in Nigeria need to be ICT-compliant so that teachers, instructors and trainees become users of them. A great number of newer information products are digital and electronic, manufactured and distributed through same medium.

References

- Abioye, R. U. (2020). Exploring the impact of entrepreneurship education program on current graduate entrepreneurs. Walden Dissertations and Doctoral Studies Collection at ScholarWorks. Retrieved from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=9705&context=dissertations>
- Aginam, E. (2014, Nov.). NUC approves integration of entrepreneurship program in varsity curriculum. *Vanguard Newspaper*. <https://www.vanguardngr.com/2014/11/nuc-approves-integration-entrepreneurship-program-varsity-curriculum/>
- Aladejebi, O. (2018). The effect of entrepreneurship education on entrepreneurial intention among tertiary institutions in Nigeria. *Journal of Small Business and Entrepreneurship Development*, 5 (2), 1-14. Retrieved from http://jsbednet.com/journals/jsbed/Vol_6_No_2_December_2018/1.pdf
- Edeh, S. (2017, Apr.). NYSC mobilises 300,000 graduates annually—Director General. *Vanguard Newspaper*. Retrieved from <https://www.vanguardngr.com/2017/04/nysc-mobilises-300000-graduates-annually-dg/>
- Edewor, N., & Omosor, U.A. (2012). Reflections on prospects of enterpreneurial librarianship in Nigeria. *Journal of Information and Knowledge Management*, 3 (1&2). Retrieved from <https://www.ajol.info/index.php/ijikm/article/download/144604/134242>
- Ekaja, I.I., & Odu, A.O. (2016). Developing and implementing entrepreneurship curriculum in Nigerian library and information science programmes. *International Journal of Library and Information Science*, 8 (6), 48-53. Retrieved from <https://academicjournals.org/journal/IJLIS/article-full-text-pdf/BBC267B60723I>
- Encyclopedia Britannica (2021). Education. Retrieved from <https://www.britannica.com/topic/education/Introduction-of-Buddhism>
- Ifidon, S.E. (1997). Planning for collection development in the 21st century. *World libraries*.7(2), 23-39.
- Igbeka, J.U. (2008). *Entrepreneurship in library and information services*. Stirlin-HoldenPublishers: Ibadan.
- Igwe, K.N., Uzuegbu, C.P., Issa, A. O., Aliyu, M.B. & Adebayo, O.A. (2015). Entrepreneurship education in library and information science: The structure and mode of delivery in federal polytechnic Offa, Nigeria. In Udo Nwokocha& Michael G. Ochogwu (Eds.), *Contemporary issues in library and information science education in Nigeria* (pp.52-68).

- Umuahia: Zeh Communications. Retrieved from https://www.researchgate.net/profile/Chimezie-Uzuegbu/publication/292906655_Entrepreneurship_Education_in_Library_and_Information_Science_The_Structure_and_Mode_of_Delivery_in_Federal_Polytechnic_Off_a_Nigeria/links/56b1d2a608ae795dd5c6b0fe/Entrepreneurship-Education-in-Library-and-Information-Science-The-Structure-and-Mode-of-Delivery-in-Federal-Polytechnic-Offa-Nigeria.pdf
- National Board for Technical Education [NBTE] (2007). National Innovation Diploma (NID). Introduction to entrepreneurship curriculum and course specification. Retrieved from <https://net.nbte.gov.ng/sites/default/files/2017-10/NID%20in%20Entrepreneurship.PDF>
- National Bureau of Statistics [NBS] (2015). Unemployment and underemployment watch Q1 2015. Retrieved from <http://www.nigerianstat.gov.ng/pages/download/294>
- National Bureau of Statistics [NBS] (2020). labor force statistics: Unemployment and underemployment report, abridged labour force survey under COVID-19(Q2 2020). Retrieved from https://www.nigerianstat.gov.ng/pdfuploads/Q2_2020_Unemployment_Report.pdf
- Nnadozie, C. O., Akanwa, P. C, & Nnadozie, D.N. (2013). Impact of entrepreneurship education on the career aspirations of Nigerian para-professional librarians-in-training. *Academic Journal of Interdisciplinary Studies*, 5(2). Retrieved from https://pdfs.semanticscholar.org/42c5/1ef0c5114bb4233b9bf80bd72055c854792b.pdf?_ga=2.123328718.493798256.1645618851-987560048.1640763914
- Ntui, A. I. (2015). Examining the attitude of library and information science (LIS) students in University of Calabar towards entrepreneurship. *Information and Knowledge Management*, 5 (8). Retrieved from <https://www.iiste.org/Journals/index.php/IKM/article/download/24762/25365>
- Ojeifo, S.A.(2012). Entrepreneurship education in Nigeria. *Journal of Education and Practice*, (3), 14. Retrieved from <https://www.iiste.org/Journals/index.php/JEP/article/viewFile/3425/3571>
- Okafor, E. (2021, Jan). Nigeria unemployment hit 35% in 2021. *Agusto and Company. BusinessEconomy*. Retrieved from <https://businessday.ng/business-economy/article/nigeria-unemployment-hit-35-in-2021-agusto-co/>
- Okeke, F.C., & Edikpa, E. C. (2014). Entrepreneurship education in Nigeria: Prospects, challenges and strategies. *Multidisciplinary Journal of Research Development*, (22), 2. Retrieved from <https://www.globalacademicgroup.com/journals/nard/ENTREPRENEURSHIP%20EDUCATION%20IN%20NIGERIA.pdf>
- Okoli, N., & Allahna, E. J. (2014). Entrepreneurship education from Pre-colonial to Post-independent Nigeria. *Merit Research Journal of Education and Review*, 2(10), 252-256. Retrieved from <https://meritresearchjournals.org/er/content/2014/October/Okoli%20and%20Allahna.pdf>
- Punch Newspaper (2021, March). Unemployment rate hits 33.3%, 23.18million Nigerians jobless – National Bureau of Statistics. Retrieved from <https://punchng.com/unemployment-rate-hits-33-3-23-18million-nigerians-jobless-nbs/>
- Shah, R., Gao, Z., & Mittal, H. (2015). *Innovation, entrepreneurship, and the economy in the US, China, and India: Historical perspectives and future trends*. Elsevier Inc. Retrieved from DOI: <https://doi.org/10.1016/C2014-0-01381-0>
- The Cable (2021, July). World Bank: Nigeria's unemployment rate rose five-fold in 10 years. Retrieved from <https://www.thecable.ng/world-bank-nigerias-unemployment-rate-rose-five-fold-in-10-years>
- Soyele, E. K., & Sodeinde, V. O. (2020). Enhancing entrepreneurship education through library information science and information communication technology. Proceedings of the 2nd International Conference, The Federal Polytechnic, Ilaro, 10th – 11th Nov., 2020. Retrieved from https://fpi2ndinterconf.federalpolyilaro.edu.ng/uploads/new_uploads/1269296.pdf

- The Federal Polytechnic, Ilaro (2021). Entrepreneurship Development Centre. Retrieved from <https://federalpolyilaro.edu.ng/service/entrepreneurship-development-centre>
- Usuka, E. I., Ekere, C. F., Uchenna, O. B., & Ajibor, C. A. (2019). Enhancing the self-development of librarians through entrepreneurship opportunities in library and information science profession. *Library Philosophy and Practice (e-journal)*. 2590. Retrieved from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5986&context=libphilprac>
- Wema, E. (2021). Examining entrepreneurship opportunities among Library and Information Science professionals in Tanzania. *Library Philosophy and Practice (e-journal)*. 4962. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=9224&context=libphilprac>
- United Nations Development Programme (2015). What is inclusive growth? Retrieved from <http://www.ipc-undp.org/what-inclusive-growth>
- United Nations Development Programme (2016). Inclusive development. Retrieved from http://www.undp.org/.../focus_inclusive_development.
- Wong, B. A. (2020). How digital entrepreneurs will help shape the world after the COVID-19 pandemic. World Economic Forum. Retrieved from <https://www.weforum.org/agenda/2020/06/entrepreneurs-must-embrace-digital-during-pandemic>
- World Bank (2021). Higher Education. Retrieved from <https://www.worldbank.org/en/topic/tertiaryeducation#1>
- World Bank (2021). Population total, Nigeria. Retrieved from <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=NG>
- World Economic Forum (2015). *The inclusive growth and development report 2015*. Retrieved from http://www3.weforum.org/.../wef_inclusive_growth.pdf...