

## **NEED FOR ENTREPRENEURSHIP EDUCATION IN LIBRARY AND INFORMATION SCIENCE SCHOOLS IN NIGERIA**

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### **ABSTRACT**

This paper takes a look at the need to introduce and intensify entrepreneurship education in library and information science (LIS) schools in Nigeria in an attempt to have the profession adequately integrated into the emerging global knowledge economy. The changing economic landscape in societies around the world and the rapid development and application recorded in the area of information and communication technology and the need to scale up the readiness of LIS professionals to cope made entrepreneurial education imperative. The paper stressed the fact that the spate of economic changes taking place in the world today necessitated the nascent research interest in entrepreneurship study in *LIS* so as to add value to information and knowledge needed by individuals and organizations that must succeed against co-competitors. In this regard, the paper discussed the relevance of entrepreneurship training requirements for modern LIS professionals, the benefits of such training, and the challenges involved in delivering such training. In this exploratory study, the paper makes the recommendation that present and future LIS professionals be adequately exposed to entrepreneurship education in order to be able to effectively meet the

diverse information needs of users in a globalized world, improve on the economic viability of the discipline in the eyes of the public to have their loyalty retained.

**Keywords:** *Library and information science, Entrepreneurship education, Training, Information products, and services.*

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## **1.0 INTRODUCTION**

Entrepreneurs are gifted individuals that do not usually follow the customary course of action in conducting business. In other words, entrepreneurs are characteristically gifted and inspired people that are capable of translating thoughts into business realities for personal and societal benefits. They are risks takers and non-conformists whose creative ideas and innovative actions open up new horizons not only for economic development but for academic exploration (searching for knowledge) and exploitation (creation of new knowledge) to expand the reach and relevance of the profession in focus despite the rising number of competing interests. From years of study and research, entrepreneurial activities have come to be known to correlate positively with education and training, skills acquisition, and investment in what pundits call best ideas.

Library and Information Science profession has never operated with clear economic objectives of marketing its products and services for monetary gains in order to become economically viable; hence there is the need to introduce entrepreneurial education into its academic programmes to train creative men and women of outstanding competencies for the profession. In light of this, and the face of dwindling funding, the LIS profession in the contemporary Nigerian society requires creative men and women with a broad understanding of the institution or corporation's internal and external environments as Hisrich, Peters and Shepherd (2013) call it. Unfortunately, only a few of the top leaders in the profession possess the creativity and educational abilities to define and determine new service to drive the change that is so badly needed.

Entrepreneurship education in Library and Information Science (LIS) is, no doubt, a recent development. It is envisioned to equip practitioners to take charge of their economic destinies rather than depend on government or private organizations for employment, most notably with no school libraries, dwindling absorbing capacity of our public libraries and non-viability of special libraries among others things. Library and Information Science, therefore, is likely to suffer a loss of professional jurisdiction if new facts and skills that will fundamentally enliven the profession are not learned and used for economic relevance in the unfolding knowledge-driven economy. It

is against this background, and the need to chart new direction for Library and Information Science in Nigeria to sustain its viability that this study examines entrepreneurship education and training in the profession.

Entrepreneurship education seeks to provide students with the knowledge, skills, and motivation to encourage entrepreneurial success in a variety of settings (Wikipedia, 2011). As in other fields of human endeavour, new entrants into the Library and Information Science profession have some forms of innovation and efficacy, waiting to be developed through entrepreneurial education and training. In other words, entrepreneurship education seeks to develop the intrinsic qualities of library and information practitioners by empowering them to give definite expressions to their potentials in the establishment and management of small and new businesses in attempts to match societal demands with information products and services. Entrepreneurship education or training is aimed at raising competent and proficient labour force that would help the profession retain its professional ambience and relevance in the evolving knowledge economy. Until recently, the Library and Information Science profession was satisfied with the procurement, processing, organization, and storage of books and other information-bearing materials for users' easy access.

"The kind of work traditionally performed by those dealing with groups of published documents such as journals and books (covered by national and international standardization, legislation and bibliographic control mechanisms) is different in kind and a degree from work required in a hypertext, networked digital environment; the work required in a physical institution like a library is different from that required for managing virtual information flows in intelligent, learning, networked organizations" Myburgh (2010). To this end, "entrepreneurship and entrepreneurship education (EE) have been described as starters of economic growth" (Sredojevic, 2005).

According to Cornelius, Landström, and Persson (2006), entrepreneurship is a relatively new field of research that has gained considerable interest beyond the usual areas of management studies during the last few decades. They averred that "in the 1970s and 1980s, the society experienced huge structural changes worldwide as informed by oil crises, economic recession, technical progress, increasing internationalization of economies, and far-reaching political changes emphasizing stronger market-oriented ideologies". Arguing further, they affirmed that these changes created a level of uncertainty and disequilibrium that constituted a breeding ground for

innovation and entrepreneurship. It was in this context that the interest in entrepreneurship education research grew.

Current education leadership and research focus in the LIS profession zero in on how people can be made to be career-ready for the future, which appears to be more entrepreneurial. Career readiness as defined by the Consortium for Entrepreneurship Education (2010) “includes not only the academic skills necessary for postsecondary entry, but also the ability to apply those skills in real-world environments, general employability skills like time management, and more job- or industry-specific technical skills and knowledge.” Against this background, the introduction of entrepreneurship education into educational curricula in Nigeria is believed to be vital to curbing the hazards of unemployment being currently encountered by Nigerian graduates in search of jobs that are not readily available. According to McGrath (1998), “the introduction of entrepreneurship education in Kenyan was observed to have brought striking changes in the youths’ unemployment pattern to the extent that entrepreneurship education is now being offered in all vocational and technical institutions across that country”. In the emerging knowledge society where knowledge is central to organizational survival, information professionals should be comfortably placed and celebrated. Unfortunately, this is not the case. In addition to the dwindling patronage of the profession, some universities in Nigeria have attempted to rationalize LIS schools on the grounds of financial viability from the angle of internal revenue generation.

In the light of this, the paper also takes a look at the nature of entrepreneurship education in the hands of Library and Information Science Educators in Nigeria that are expected to educate potential practitioners in the acquisition of new knowledge and skills that would make them career ready in generating and delivering innovative information products and services to the emerging smart community of users. The paper also addressed the benefits of such training and the issues to address to achieve a functional entrepreneurship education and training in LIS schools in Nigeria.

## **2.0 GENERAL OVERVIEW**

Change is one reality which individuals, groups, and organizations must continuously cope with to survive (Halder, 2009). According to the Consortium for Entrepreneurship Education (2011), if teachers include aspects of entrepreneurial thinking in their courses, the local outcome would be a nation of entrepreneurial thinkers for the future. What, in reality, could warrant such radical twist in the thought of LIS practitioners? Before 2006 when National University Commission (NUC)

made entrepreneur education compulsory in Nigerian universities (NBF News, 2011), LIS schools taught students skills and concepts that would qualify them to take up jobs in libraries and information centers across the country. "With the transition from paper to electronic and multimedia resources; and the evolution and increasing use of the technologies of Intranet, extranets and portals by libraries and documentation centers for content management and deployment" (Halder, 2009), the inclination to be trained to work in already established organizations turned out to be losing in relevance. "Preparing students to work in libraries in establishments is still in tune with the way librarians of old perceived and defined themselves, which was pretty much by space and collections; the survival of LIS profession could hardly be guaranteed on such paradigm that is devoid of any form of inclination toward the establishment of independent information service enterprises that could directly create wealth based on the core objectives of LIS profession" (LaGuardia, Blake, Dowler, Farwell, Kent & Tallent, 1996). Based on this, librarianship is growing out of being a profession that was often an appendage of other establishments (Igbeka, 2008).

Replete in the corpus of knowledge are some reasons that the Library and Information Science profession is undergoing remarkable changes (Myburgh, 2010). For example, "ICT convergence has changed and continues to change the nature of information creation, storage and communication, therefore, leaving many librarians with little or no imaginative or innovative paraphernalia to show in their exploitation of technology which in most cases is traceable to lack of confidence from deficiency of requisite training." Through entrepreneurial education, this has to be addressed in an attempt to strengthen the profession to cope with and live through the invasion of its territory by rival information groups.

The philosophy of librarianship encompasses the fundamental principles on which the practices, techniques, and activities of libraries and information centres are based. These principles serve as guidelines for successful librarianship and as a means for resolving problems (Dhiman & Sharma, 2006). Without drawing on the inclusion of marketing into LIS programmes as a set of activities by which the demand for goods, ideas, and services is managed to facilitate exchange, Dhiman & Sharma (2006) asserted that "the profession would lose its jurisdiction to invading competitors." To this end, a planned strategic approach to integrating marketing into library services to reinforce and sustain the fundamental and traditional values of the profession in the changing socio-economic and political environments becomes imperative. As Ocholla & Bothma (2006) had

argued, “there should be increased investment in ICT for LIS education for teaching, learning, research, academic management and decision-making in Africa”. This is doubly so as LIS curricula responding to changing world information environment, the education and training aspects of the profession are becoming highly dependent on modern computer hardware and software, efficient Internet access and connectivity, computer literate and highly skilled information technology staff, and well equipped computer laboratories.

### **3.0 THE NATURE OF ENTREPRENEURSHIP EDUCATION AND TRAINING**

From inception, libraries, and information centers have been known to deal extensively in information products and services that could aid their use and reuse in creating wealth and generating more useful information and new knowledge in line with the dictate of the society and cultural advancement. It is a known fact that “a society that consumes and generates the most of knowledge and information is the strongest society” (Joseph-Jestin and Parameswari, 2002). According to Ajidahun (2007) citing Nzotta (1984), “education and training should provide advanced knowledge and new skills to accommodate modern and latest developments in Library and Information Science Schools”. The intended entrepreneurial education and training should focus on creating experts in such areas as:

- Databases design and management
- Information retrieval services/metadata mining
- Programming
- Bibliometrics
- Information audit
- Systems analysis and design
- Skills acquisition in programming
- Electronic resources acquisition and management
- Managerial studies
- Document procurement services
- Publishing and printing using POD facilities

- Editing services
- Abstracting and indexing services
- Documentation of indigenous knowledge and practices
- Principles of environmental scanning
- Website design and maintenance
- Networking and troubleshooting
- Financial management
- Advertising in hypertext environment
- Communication and technical writing
- Information consulting
- Information products and services
- Cyber security
- Cloud computing, and
- Translation services.

At this point, the expediency for the Twenty-first Century library and information professionals possessing requisite skills by training in selection, content management, and knowledge management, organization services, developing and maintaining digital libraries, and bringing information resources to the reach of the people remain incontestable. Although Library and Information Science courses being offered at the undergraduate levels in the nation's universities at present tend to provide avenues for students to think critically in articulating and giving lurid expressions to their worldviews that could add value with the capacity of bringing about socio-economic and political transformation of the society, the requirements to secure high moral reasoning and ability to communicate and live with diversity in globalizing world remain imperative. Without prevarication, the requirements needed to beef up economic viability of LIS profession go beyond the present situation of offering one or two courses in entrepreneurship or

entrepreneurial education. If people or societies are satisfied with where they are in terms of knowledge or skills acquisition, they will not learn and progress will become retarded.

At the postgraduate level, emphasis is usually on specialized and higher level training leading to the production of exemplar skilled and creative practitioners that could easily harness available knowledge to improve on the marketability of LIS profession within the matrix of entrepreneurial studies. So far, lack of clear cut commitment of professionals to the revitalization of the discipline and inappropriate domiciliation of LIS Departments in some universities are inimical to the corporate image of the profession. This issue of domiciliation has to be decisively addressed to enable the profession to be effectual in driving national development.

Contemplating effective delivery on the promise of entrepreneurship education and training in librarianship and information science, the three-point enablers enunciated by Rosen (2011) become handy. “First is to have a curriculum oriented toward experiential learning (including such activities that help students practice the skills and mindset of negotiation) and high academic standards particularly in mathematics and related content areas such as economics. Second, instruction must be delivered by effective educators who have completed training in entrepreneurship and experiential learning and continue to pursue ongoing professional development. The third enabler is the need for volunteers giving their time to reinforce experiential learning through building business-plan, coaching, and field trips to businesses”. Computer assisted learning can also be integrated into the process of teaching and learning of entrepreneurial skills to facilitate sustainable viability of the LIS profession in a cost effective manner.

There is no doubt that LIS within the prevailing socio-political and economic milieu in Nigeria contends with some disciplines like computer science and related disciplines to retain academic and professional relevance in the face of heightened unemployment, low public recognition, and dwindling funding; to the extent that the profession is compelled to seek empowerment to deliver on self-employment skills.

#### **4.0 ENTREPRENEURSHIP EDUCATION AND TRAINING FOR LIS PRACTITIONERS**

From the perspective of the professional association and the experts that educate and prime new entrants for professional undertaking, there are numerous benefits that could be derived from a well-planned, funded and implemented entrepreneurship education and training. Some of the outstanding benefits were couched by Abianga and Hamza (2008) as motivators. According to



them, “the specific motivators for entrepreneurship education include the need for subsistence, the need to innovate to survive, and the need to quickly recognize and exploit opportunities brought about by developments in the environment. At the moment, sustainability is being perceived as a major challenge to LIS profession as a result of the changing corporate environments of the twenty first century where every profession operates and competes one with another”. This perspective may have underpinned Hill’s (1993) conviction to aver that “there are multiple professional claims for jurisdiction over problem and service areas and that more than one view exist on how to diagnose the problems and prescribe the cures”.

Hill (1993) maintained that there are three elements of professional practice and they are diagnosis, inference, and treatment. To assert expertise, a profession claims to hold the keys to the identification of the real problem, to have the knowledge to analyse the risks and the benefits of treatments, and to develop treatment systems and prescribe appropriate treatments. In a competitive environment there are vulnerabilities for any profession in each of the areas. In many instances, librarians with inadequate expertise have had to lay claims to being specialists in information science, information management, and quite recently knowledge management. In considering all that it takes to manage information and knowledge in digital environment of present age, majority of LIS professionals will barely have what it takes to diagnose, infer and prescribe treatment to the myriads of challenges within and without in the absence of robust curriculum.

Through entrepreneurship education and training that is predicated on a balanced curriculum earlier mentioned, the profession is likely to reposition itself to lay firm claim to its professional space without vacillation; and also to be able to contribute to the development of the nation by bringing about desirable social changes in which new ideas and mechanisms of doing things are introduced. In order words this will originate a social system that could guarantee and sustain improved national per capita income and higher standard of living through efficient response to peoples’ increased demand and requirement for information products and services for self-development, health care, security, employment, entertainment, research, and so on. The spate of self-employment which entrepreneurial education is intended to produce for LIS professionals will not only guarantee high patronage from members of the society, it will also underpin economic viability of the profession irrespective of competing disciplines as well as assist the integration of the discipline into the socio-cultural and political mainstream of the Nigerian state. The inclusion

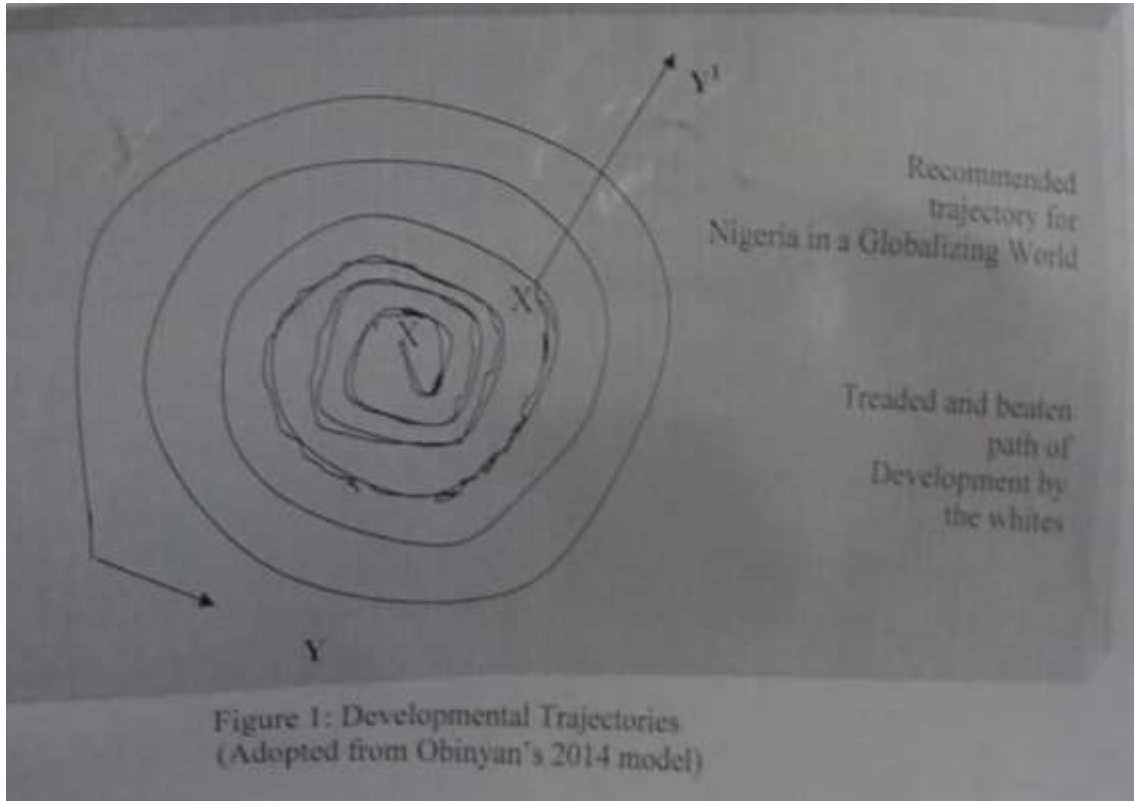
of entrepreneurship education and training in librarianship curricula in Nigeria will have the following benefits:

- i. Open up and expand the career prospects for modern LIS professionals;
- ii. Afford the graduates the opportunity to be managers of their own enterprises;
- iii. Repositioning the profession to take its pride of place in the emerging knowledge economy in Nigeria; and
- iv. Aid significant contribution to wealth creation in the country.

To guarantee this and more we need to adopt a radical and creative approach proposed and encapsulated in the developmental trajectory model put forward by Obinyan in 2014 (see Figure 1). In order to sustain the economic viability of the LIS profession in the country and beyond academia, the infusion of cultural values and expectations into the training process is recommended. In other words, to deliver on the expectations of entrepreneurship education in LIS education in general, “available curricula and teaching methodologies must be enhanced in order to guarantee the graduation of quality products from Library and Information Science schools that are equipped to perform on the boundary of their abilities in ways that test and push back personal limits, ... and in the workplace” (NCEE, 1983). In the model, two trajectories were mapped out to bring about human and societal development. Starting from the assumed origin of human developmental efforts as marked X at the centre of the model, began the outward spiraling of the trajectory of human efforts at development. Advancement along the spiral trajectory has gone so far for the whites with their thought patterns and epistemic worldviews. Presently they are at point Y.

The Black Race also made some remarkable progress with their traditional and indigenous education systems until the advent of the colonizing influence with its value systems and epistemic worldviews widely acknowledged of having a slowing impact on our development. To this end, the Black Race heavy reliance on borrowed models and borrowed epistemic worldview; (and coupled with internal problems of low self-esteem, corruption, weak educational systems, lousy governance, misplacement of priorities and wasteful spending without intelligent and informed adaptation) has not been able to progress beyond X<sup>1</sup> with all the economies and professed

assurances of becoming one of the twenty most developed nations of the world by the year 2020 – as encapsulated in the nation's famous vision 2020 contrivances and slogan.



If it took developing countries many years to arrive at point  $X^1$  from point X (the assumed origin), there would be so much of catching up to do for countries with a low level of educational development, poor scientific knowledge, technical know-how and entrepreneurial inclination to arrive at where the developed countries are at the moment with all their well-rooted epistemic worldviews birthed by the Western formulated paradigm predicated on educational systems with a virile library system and consolidated reading culture in combination with viable knowledge ecology and vibrant entrepreneurial culture. Even if developed countries at point Y remain static (an inconceivable situation), it will take years of commitment to doing it right for a nation like Nigeria with her endemic challenges of bad governance, corruption, insecurity and inadequate funding of her education system to get to point Y. The United States is already in the bind of operating smart schools and championing the course of building smart cities where means of transportation will be driverless cars amidst despite her worry of being a nation at risk. From the

seven paged archived document prepared by the National Commission on Excellence in Education (NCEE) in 1983 is the excerpt cited by Wyckoff & Schaaper (2006),

Competitors throughout the world are being overtaken our once unchallenged preeminence in commerce, industry, science, and technological innovation. The world is indeed one global village. We live among determined, well-educated, and strongly motivated competitors. We compete with them for international standing and markets, not only with products but also with ideas of our laboratories and neighbourhood workshops. America's position in the world may once have been reasonably secured with only a few exceptionally well-trained men and women. It is no longer. <sup>193</sup>

Nanotechnology is already available to them, and mobilization of Silicon Valley to join the process is underway; still, Americans recognized with all seriousness that “the American nation is at risk because reading seems to be declining among their youths and Japanese, Chinese, and South Koreans are pushing ahead with more efficient technological products in automobiles and steel mill”. History they say is not kind to idlers, and the Western world does not want to be caught in the idlers' bind, hence the effort to maintain preeminence in science and technology. For the Black Race, following trajectory  $X^1Y^1$ , will pave the way for desirable development using home fashioned blinkers to set viable and liberating agenda for their education; and the education and training of their information professionals that will assist in the identification, acquisition, processing, storage and dissemination of indigenous knowledge and technology for future development. This is far from happening. The seriousness of this is underpinned by the submission of wa Thiong'O (2007)<sup>285</sup>

...imperialism in its colonial and neo-colonial phases continuously press-gangs the African hand to the plough to turn the soil over, and putting blinkers on him to make him view the path ahead only as determined for him by the master ...

Borrowed epistemic paradigms and blinkers will be inadequate for the Black Race (of which Nigeria without a virile library system and well-trained library and information professionals is part) to see and effectively navigate the world ahead; in as much as over-dependent on capabilities distilled from without will heighten our deficiency in the new raw materials of international commerce, recognized by NCEE, (1983) to be Knowledge, learning, information, and skilled intelligence. At the moment, this recognition is spreading throughout the world as vigorously as miracle drugs, for disciplines, organizations, and societies.

The thinking at this point is when trajectory  $X^1Y^1$  is followed with entrepreneurial determination by the LIS profession or with cultural innovations by the Black Race as the case may be, liberation from obscurity into global limelight will be guaranteed. In other words, the new direction will provide an avenue for general expression and communication of value-laden consciousness and worldviews that could mediate gap closing in knowledge and scientific conduct between contending sides in the shrinking world of contemporary times. In revitalizing LIS profession in Nigeria through entrepreneurial education and training, the interest of the indigenous population must be catered for by looking at the Australian model where the government had to endorse the incorporation of indigenous knowledge into LibGuide as a move to increase the level of indigenous knowledge in higher education curricula so as to close the gap between indigenous and non-indigenous Australians (Ford, 2014).

### **Issues to be Addressed for a Functional Entrepreneurship Education and Training in LIS Schools**

Several issues are confronting functional entrepreneurship education and training in LIS schools in Nigeria are enormous. Some of which are addressed under this subsection:

- i. Short supply of qualified teaching staff with the desired entrepreneurial skills and professional capacity to anchor entrepreneurship education and training. A situation where those that are not qualified are employed by some heads of department in LIS schools is not only unethical and amoral; it is also inimical to the profession. Entrepreneurs are smart and creative people that are quick to recognized opportunities and act on them. Therefore according to Hisrich, Peter and Shepherd (2013),

“a key to understanding entrepreneurial action is being able to assess the amount of uncertainty perceived to surround a potential opportunity and the individual’s willingness to bear the uncertainty. The individual’s prior knowledge can decrease the amount of uncertainty, and his or her motivation indicates a willingness to bear uncertainty”<sup>6</sup>.

To be able to groom functional risk-takers that will through their activities, widen the future horizon and viability of the LIS profession requires a recruitment process that will not sacrifice merit and competence for national character and ethnic preferences.

- ii. Inadequacy of teaching and research facilities: This is another nagging problem because it is challenging to deliver on entrepreneurship education and training in LIS schools in Nigeria. The low response rate of LIS schools in the adoption of entrepreneurial education and training into existing curricula in the process of revitalization is antithetical to the proper repositioning of the profession in a rapidly globalizing world without losing its expertise and established professional niche.
- iii. Low public awareness and rating of LIS programmes in Nigeria: This situation seems to be aggravated by lack of jobs for graduates from LIS schools without the capability that would make it possible for them “to notice signals of changes in the society that represent possible opportunities” for them to act on. Not being able to opportunities arising from developments in the society that could be harnessed for profitability and comfort is a blight to the visibility the profession deserves to make a difference in the eyes of the public.
- iv. Lack of well-equipped computer laboratories with Internet connectivity in addition to the dearth of technical and specialized literature in print or digital form for the lecturers as well as the students;
- v. Lack of steady power supply in Nigeria is generally inhibitive and frustrating to the effective delivery of education in the nation's tertiary institutions. If nothing is done to prop and steadied power generation and supply in Nigeria, irrespective of the costly efforts made by organizations so far to generate electricity, entrepreneurship education and training will end up being a fad without the envisioned outcomes.
- vi. Lack of political and legislative support to the role the LIS profession could play in the actualization of national development programmes. This lack has turned the intended realization of most national visions to become shifting and the proverbial tomorrow – tomorrow affairs.

Part of the general problem in delivering entrepreneurship education and training in Nigeria was exposed by Siyanbola et al. (2012). They studied specific factors that influence students' entrepreneurial inclination to propose appropriate policy measures on entrepreneurship within tertiary institutions. The study utilized a sample of 7,560 students from a total of 25 tertiary institutions with 83% response rate. They, however, found that entrepreneurial interest among Nigerian students is quite high, and the expression of this interest in practice is rather low.

Therefore, it could be inferred that the confidence and financial basis required to actually put innovation and skills learned to work is weak.

## **5.0 CONCLUSION**

Entrepreneurship education and training will no doubt contribute to the repositioning of the profession to become less vulnerable to incursions from competing professions that often poach the diagnoses we are slow to utilize to proffer prescriptions and offer treatment that would easily situate LIS as the leading profession in the rapidly unfolding knowledge society. Holding on to the age-long routine operations librarianship has been associated with, will only disenfranchise the profession in the face of growing demand and high expectations for competent and efficient performances. Changing of nomenclature might be of help but without developing requisite content, change in nomenclature some practitioners are already advocating will be a chase in futility.

## **6.0 RECOMMENDATIONS**

The following recommendations are made based on the myriads of benefits LIS as a profession could derive from entrepreneurship education and training.

- i. LIS professionals should be adequately exposed to entrepreneurship education and training to be useful in operating in a globalized world.
- ii. The training should be well funded and properly implemented for the desired effect.
- iii. A robust and unified curriculum should be provided to ensure standards and professionalism for LIS in Nigeria.
- iv. Those that currently educate for the profession and have the frills for entrepreneurship education and experiential learning should be retrained to provide a pool of qualified teachers to future trainees.

## REFERENCES

- Abianga, E. U. & Hamza, A. A. (2008). Role of NOUN as ancillary to entrepreneurial development in Nigeria. Being paper presented at the 2nd African Council for Distance Education (ACDE) Conference and General Assembly 8 – 11 July, 2008, Lagos, Nigeria.
- Ajidahun, C. O. (2007). The training, development and education of library manpower in information technology in university libraries in Nigeria. *World Libraries*, 17(1).
- Cornelius, B. Landström, H. & Persson, O. (2006). Entrepreneurial Studies: The Dynamic research front of a developing Social Science. *Entrepreneurship Theory and Practice*. 375–398. 1042-2587.
- Dhiman, A. K. & Sharma, H. (2009). Services marketing mix in library and information centres. [http://crl.du.ac.in/ical09/papers/index\\_files/ical-78\\_246\\_697\\_1\\_RV.pdf](http://crl.du.ac.in/ical09/papers/index_files/ical-78_246_697_1_RV.pdf)
- Ford, P.L. (2014). The Incorporating indigenous knowledge LibGuide: Charles Darwin University embedding Australian Aboriginal and Torres Strait Islander knowledge, culture and language. <http://dx.doi.org/10.1080/00048623.2014.910859>.
- From ZION ZADOK, Abuja **Tuesday, February 8, 2011.**  
<http://www.nigerianbestforum.com/blog/?p=77640>
- Halder, S. N. (2009). Multimodal roles of library and information science professionals in present era. *International Journal of Library and Information Science*, 1(6), 092-099. <http://www.academicjournals.org/ijlis>



Henderson, R. & Robertson, M. (1999). Who wants to be an entrepreneur?: young adult attitudes to entrepreneurship as a careers. *Career Development International*, 5:279-387.

Hill, L. L. (1993). National Aeronautics and Space Administration, Scientific and Technical Information Program, Washington, DC 20546 LIBRARY TRENDS, 42(2), 225-31

Hisrich, R. D., Peters, M. P. & Shepherd, D. A. (2013). Entrepreneurship. McGraw Hill Education

Hisrich, R., Peter, M. & Shepherd, D. (2013), Entrepreneurship. 9th Edition, African Edition. USA: McGraw Hill Higher Education. <http://www.democracyjournal.org>

Igbeka, J. U. (2008). Entrepreneurship in library and information services. Ibadan: Stirling-Horden Publishers.

Joseph-Jestin, K. J. & Parameswari, B. (2002). Marketing of information products and services for libraries in India. Library Philosophy and Practice. <http://www.uidaho.edu/~mholin/1ppv5n1.htm>.

LaGuardia, C., Blake, M., Dowler, L., Farwell, L., Kent, C. M. & Tallent, E. (1996). *Teaching the new library: a how-to-do-it manual for planning and designing instructional programs*, Number 70. New York: Neal-Schuman Publishers.

McGrathe, S. (1998). Reforming South Africa technical and vocation and training: Linking national policies and institutional practices. Paper presented at the conference held in the centre for African studies, University of Edinburgh, 26-27.

Myburgh, S. (2010). Education directions for new information professionals. *The Australian Library Journal*. <http://www.alia.org.au/publishing/alj/52.3/full.text/myburgh.html>

NBF News (2011). Why we set up entrepreneurship studies in varsities –FG

NCEE (1983). A Nation at risk. *Archived Information*.  
from <https://www2.ed.gov/pubs/NatAtRisk/risk.html>

Ocholla, D. N. & Bothma, T. (2006). Trends, challenges and opportunities of LIS education and training in Eastern and Southern Africa.  
[http://mg.csufresno.edu/papers/forum\\_2/Ocholla\\_Bothma.pdf](http://mg.csufresno.edu/papers/forum_2/Ocholla_Bothma.pdf).

Rosen, A. (2011). Life lessons: educating the next entrepreneurs.

Shane, S. (2003). A general theory of entrepreneurship. Edward Elgar: Cheltenham, UK.

Siyanbola, W.O., Afolabi, O.O., Jesuleye, O.A., Egbetokun, A.A., Dada, A.D., Aderemi, H.O., Sanni, M. & Rasaq, M.A. (2012). Determinants of entrepreneurial propensity of Nigerian undergraduates: an empirical assessment. *International Journal of Business Environment*, 5 (1), 1-29.

Sredojevic, S. (2005). Entrepreneurship and entrepreneurship education as starters of economic growth, working paper ministry of International Economic Relations of the Republic of Serbia OECD LEED, Trento, Italy 23-24.

Technical Information Program, Washington, DC 20546 LIBRARY TRENDS, Vol. 42, No. 2, Fall 1993, 225-31.

The Consortium for Entrepreneurship Education. (2010). Entrepreneurship empowers everyone. Being a Proposal for Entrepreneurial Skills Building. <http://www.web.sba.gov/fags/fagindex.cfm?areaID=24>

wa Thiong'O, N. (2007). The Language of African literature. In Tejumola Olaniyan and Ato Quayson ed. African Literature : An Anthropology of Criticism and Theory. Carlton, Victoria Australia: Blackwell Publishing, 285-306.

Wikipedia (2011). Entrepreneurship education. [http://en.wikipedia.org/wiki/Entrepreneurship\\_education#cite\\_note](http://en.wikipedia.org/wiki/Entrepreneurship_education#cite_note)

Wyckoff, A. & Schaaper, M. (2006). The changing dynamics of the global market for the highly skilled. In Brain Kahin and Dominique Foray ed. Advancing Knowledge and the Knowledge Economy. Cambridge, Massachusetts: MIT Press. 193-216.