Library and Information Science Innovation and Entrepreneurial opportunities for Technical and Vocational Education Training (TVET) Promotion

OBAFUNMISO, Christiana Kehinde & ODUNEWU, K. O.
Email: kobafunmiso@gmail.com; larrykub96@gmail.com

Abstract

This paper review library and information science innovation and entrepreneurial opportunities for technical and vocational education training (TVET) promotion in Nigeria. Basically, emergence of Information Communication Technology bring changes to all sector, library and information science as a discipline is not excluded. However, responses to adoption and application of new technology, library and information science students and information professionals need to be innovative in order to remain relevant to their communities. Therefore, library and information science education is expected to train individuals to be relevant, dynamic, services oriented and responsive to the gradual and drastic changes taking place in information sector. This study revealed that development of catalog code and online catalogues, reference services, online databases, technological advances in library instructions, hybrid automated system were innovations in the library development. However, new application and inventions enable human to grow and develop as civilized nations. These could not be possible without entrepreneurs who are creative and innovative. Therefore, entrepreneurship, technical and vocational education and training play a prominent role to equip practitioners to take charge of their economic affairs rather than to depend on government or private organizations for employment. It can therefore be concluded that entrepreneurship education, technical and vocational education training aim to addressing the unemployment problems and eradicating poverty. Thus, it become imperative for entrepreneurship to be included in library and information science curriculum which will give ample opportunities for promoting technical and vocational education training. This paper recommends that, entrepreneurship should be added to academic curriculum, this could be an effective measure to ensure entrepreneurship education thrive in academic institution in Nigeria and promote technical and vocational education training.

Keywords: LIS, Innovation, Entrepreneurial, Technical and Vocational Education Training

Introduction

Advances in technology have changed things globally, especially in the area of information management, business and governance, so much that the effective use of information technology makes a difference between success and failure. There exist some levels of uncertainty about the future of libraries, occasioned by the competition poised by Google, Amazon, and Wikipedia etc., which are veritable sources of information. Understandably, libraries in Nigeria should be worried about their roles in the dynamic landscape of information provision or delivery that is shifting away from the traditional enterprise. The emergence of Information Communication Technology (ICT) also bring changes to library and information services. As a response to the adoption and application to the new technology, libraries are shifting from the old traditional role as a social agency for information generation, storage, retrieval and dissemination to the modern electronic information systems (Simisaye, Salisu & Awodoyin, 2018). Tabor and Meniwoze (2020), observed that many libraries have started accessing images of book-form materials in various formats and other materials in digital forms, storing them for retrieval from within and without their materials.

In this age of digital access, libraries are increasingly asked to justify their services and existence. In developed countries, entrepreneurial librarians are flourishing in the digital age, advocating social change, responding to patron demands, designing new services (Nwokocha & Chimah, 2015). One of the innovations in libraries overseas is embedded librarianship, which is a distinctive innovation that moves the librarian out of libraries and creates a new model of library and information work. Therefore, library and information science education is expected to train individuals to be relevant, dynamic, services oriented and responsive to the gradual and drastic changes taking place in information sector globally. By implication, the more there is continued change in information sector, the expectations of the society, information users' needs and behaviours also change. Consequently, the need for innovation and transformation in LIS education is a sine qua non. Innovation has to do with introducing new ideas,

knowledge, skills, and techniques to create a needed change for efficiency and dexterity in services delivery (Nwokocha & Ogwo, 2015).

However, development of catalog code and online catalogues, reference services, online databases, technological advances in library instructions, hybrid automated system all demonstrate innovations in library development (Akwang, 2017). Furthermore, another innovative service is the virtual reference services relating to chat and email service, collaborative service provision, services staffing, and staff training in university libraries which was reported by Shaw & Spink (2013); they revealed that email are increasingly supported by a Frequently Asked Questions (FAQ) and database are preferred cost-effective means for providing university virtual reference services. Meanwhile, world is facing an unprecedented challenges which never happened before. The challenges range from politics, social, economics, health, energy, connectivity, ethics, science and technology. Despite the challenges, there are opportunities bring about by these challenges. The economy liberalization and Internet technology have make the world as "global village". New application and inventions enable human to grow and develop as civilized nations. These could not be possible without those who are creative, innovative and think differently to overcome the above mentioned human challenges Thus, entrepreneurs turn ideas into action, creative, innovative, risk taker and able to plan and manage projects until the objective is accomplished (European Commission, 2009).

Entrepreneurship is a major driver of innovation, competitiveness and growth (Shamsuri, 2020). Many countries in the world incorporate entrepreneurship and innovation as two economic engines that can grow and transform their economies into knowledge-based economies (World Economic Forum, 2014). Education is seen as the primary asset in transforming a society into a knowledge society which in turn produce a knowledge-based economy (Sichiyako, 2012). Thus, entrepreneurship education and technical and vocational education and training (TVET) play a prominent role in producing human capital that is knowledgeable, skill and with sound attitudes and behaviour (Sichiyako, 2012; European Commission, 2009). Entrepreneurship education in Library and Information Science is, no doubt, a recent development. It is envisioned to equip practitioners to take charge of their economic affairs rather than to 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 (Shamsuri, 2020).

Hence, entrepreneurship education seeks to provide students with the knowledge, skills, and motivation to encourage entrepreneurial success in a variety of settings (Wikipedia, 2011). New students into the Library and Information Science profession have some forms of innovation and efficacy, waiting to be developed through entrepreneurial education, technical vocational education and training. Therefore, effort geared towards investigating library and information science innovations and entrepreneurial opportunities for technical vocational education and training (TVET) necessitates this study.

2.0 REVIEW OF RELATED LITERATURE

Concept of Library and Information Science

Library and information science is a multidisciplinary academic discipline primarily designed to prepare students for careers in information professions. Information profession include database design, librarianship (library science), information management, archival studies, information science, records management, and information policy analysis (Akwang, 2017). Library and information science encompasses information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation, analysis, interpretation, evaluation, dissemination and management (Nwokocha & Chimah, 2015). LIS programme is meant to provide students the opportunity to develop the right attitudes associated with progressive information services, and to develop an understanding of the value, role, and appreciation of modern technology as it relates to library operations and the transfer of information (Ugocha, 2011). In addition, it may be said that library and information science is concerned with information (print and non-print) and knowledge, services and technologies to facilitate its management and use.

LIS brings together and uses theories, principles, techniques, and technologies of a variety of disciplines towards providing solutions to problems related to information professions. As noted by Mabawonku (2011), the curriculum structure for LIS in Nigeria concentrates on major areas like collection development, management principles, information and communication technology, information organization, economic and marketing of information, publishing and book trade, research methods, general studies, current issues and trends in information practice, etc.

Concept of Innovation and Entrepreneurship in Library and Information Science

Innovation is derived from the Latin word *innovare* which means to renew or alter. Hornby (2011) defined innovation as the alteration of what is established by the introduction of new elements or forms to make something better than before. It refers to the ability to apply new ideas or individual initiatives, imaginations, intuitions, and insights to enhance the quality of products or services (Anyanwu, 2010). That means, innovation in library and information science involves the application of new ideas, knowledge, and skills to the entire teaching and learning process in order to enhance the activities of information generation, organization, dissemination and delivery of new ideas besides the old known ones. Innovation implies the modification and improvement of existing products, services, and process.

One of the innovations in libraries in the developed country like Canada is embedded librarianship, which is a distinctive innovation that moves the librarian out of libraries and creates a new model of library and information work. It emphasizes the importance of forming a strong working relationship between the librarian and a group or team of people who need the librarian's information expertise (Shumaker, 2009). Another innovative service is the Virtual Reference (VR) services relating to chat and email service, collaborative service provision, services staffing, and staff training in university libraries which was reported by Shaw & Spink (2013); they revealed that email are increasingly supported by a Frequently Asked Questions (FAQ) and database are preferred cost-effective means for providing university VR services (Oyedokun, 2014).

Entrepreneurship is the process of using initiative to transform business concept to new venture, diversify existing venture or enterprise to high growing venture potentials (Hoppenfields & Malafi, 2015). Entrepreneurship according to Eke, Igwesi and Orji (2011) is a programme that inculcates creative, innovative, productive and managerial skills needed in business enterprises for self-reliance and national development. Fitzgerald, Anderson and Kula (2010) simply affirm that entrepreneur takes calculated risks by investing in business opportunities and get compensations from the risk by enjoying high profit as the result of risk-taking. Business entrepreneurs typically measure performance in profit while social entrepreneurs and entrepreneurial librarians are not about profit alone but, also take into account positive returns to patrons in form of innovative services which ensures continuous patronage (Tabor & Meniwoze, 2020).

Innovative librarian could therefore be described as a librarian that uses creativity, strategic planning, targeted marketing and innovation to place his/her library on the part of success (Tabor & Meniwoze, 2020). However, successful entrepreneurial librarian looks for way to place his/her library in the best possible positions to take advantage of opportunities to meet the needs of community users, both present and future, and thereby be foundational in the success of the community served. Innovation sets in when a librarian adopts entrepreneurship skills in the provision and management if library and information services. Basically, the librarian has to be ready to take risks, invent and innovate in performing his duties which will raise the quality of services to library clientele. To be innovative and entrepreneurial means that library staff members use their energy and intellect to reinvent and enhance their works to heighten services to users and to preserve the collections (Simisaye, Salisu & Awodoyin, 2018). Entrepreneurial librarian assembles data and teach staff to analyze and improve services, physical spaces and digital environment. Entrepreneurial librarian question traditional ways of delivering services with a view of improving them. Thus, being creative and resourceful and seeks better answers to make the library a learning organization.

Concept of Technical and Vocational Education Training (TVET)

UNESCO (2015) defined Technical and Vocational Education Training (TVET) as those aspects of the educational process involving, addition to general education, study of technology and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life. TVET could include technical education, vocational education, vocational training, on-the-job training, or apprenticeship training, delivered in a formal and non-formal way (Abdullah, 2020). Recently skills development is another term used which is synonymous with this broad definition of TVET. The world is facing an unprecedented challenges which never happened before. The challenges range from social, economics, science and technology. Despite the challenges, there are opportunities bring about by these challenges. New application and inventions enable human to grow and develop as civilized nations. These could not be possible without those who are creative, innovative and think differently to overcome the above mentioned human challenges.

Thus, entrepreneurs are those who make things happen. Education is seen as the primary asset in transforming a society into a knowledge society which in turn produce a knowledge-based economy (Sichiyako, 2012). Thus, entrepreneurship education and technical and vocational education and training (TVET) play a prominent role in producing human capital that is knowledgeable, skill and with sound attitudes and behaviour (Sichiyako, 2012).

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 (Ford, 2014). It is a known fact that a society that consumes and generates the most of knowledge and information is the strongest society. According to Ajidahun (2007), 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 or meta data 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, editing services, abstracting and indexing services translation services among others (Siyanbola et al., 2012).

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. Thirdly, 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 (Babalola, Abifarin & Ahmed, 2015).

Importance of Entrepreneurship Education, Technical and Vocational Education Training

Entrepreneurship education is essential to producing an enterprising students (Abdullah, 2020). This is signaling that students are develop to acquire awareness and skills of entrepreneurs such as communication, creativity, critical thinking, leadership, negotiation, problem-solving, social networking and time-management skills. Entrepreneurship education focuses on encouraging students to apply enterprising skills and attributes to a range of different contexts, including new or existing businesses, charities, non-governmental organizations, public sector and social enterprises (Quality Assurance Agency for Higher Education, 2012). The ultimate aim of entrepreneurship among others are to produce graduates who are self-employed, catalyst for economic growth, create employment opportunities, be able to identify and exploit opportunity and inculcate the spirit of resilience and some of these aims can be achieved through technical and vocational education training (TVET).

According to Abdullah (2020), technical and vocational education training (TVET) is importance as outlined below:

TVET aid in provision of skilful human resource in commerce, technology and applied science especially at sub-professional level.

Provide manpower with vital technical knowledge and vocational skills relevant for industrial, commercial, agricultural and economic development.

TVET supply the industry with skilful manpower who can put scientific knowledge in practice to improve and solve environmental issues.

TVET serve as an introductory lesson to professional studies of various technologies.

TVET provide training of necessary skills for various skilled personnel.

TVET assist youths in having a good comprehension of technology and cope with its increasing complexity.

From the above explanation, it can be noted that entrepreneurship education and TVET complement each other in preparing students for a working life, including paid employment, work in cooperatives, self-employment, setting up businesses, family work, social work and voluntary work (Sichiyako, 2012). Entrepreneurship education could open up the scope for employment for TVET graduates and enterprising skills acquired through entrepreneurship education would help integrate TVET in general education as well as workplace learning (Badawi, 2013). Both entrepreneurship education and technical and vocational education training (TVET) provide solution to the problems of unemployment and as a means to poverty eradication. Badawi (2013) noted that a combination of entrepreneurship skills and occupation-specific skills should act as a major tool in mitigating unemployment and opening opportunities for self-employment and entrepreneurship development.

Innovation and Entrepreneurial Opportunities for TVET Promotion

Entrepreneurship is often considered within the framework of lifelong learning. It is relevant for students at all levels. Students in vocational training are prime candidates for entrepreneurship training because many follow a career in self-employment. However, a new reform on technical and vocational education training (TVET) emerge. The aim of the reform is use of TVET to qualify people and prepare them for the labour market and to improve technical and vocational training. More specifically, the reform sets out to improve the effectiveness and efficiency throughout the system by improving the quality of training and making it more relevant to the needs of business, individuals and society. Vocational training play a key role in developing entrepreneurship, innovation and sustainable economies. Entrepreneurship training is relevant in technical vocational training as self-employment is a realistic option for many TVET students' of library and information science discipline, who can end up establishing their own businesses (Anyanwu, 2010). Technical and professional skills gained in vocational training form the basis for setting-up a new business, but professional skills alone do not help a company survive and succeed. Entrepreneurial mind-sets, skills and competences are also needed to maximize the benefits of professional skills and expertise for company success, growth and innovation (Zahari, 2010).

Information is a marketable commodity and a social wealth. Technological innovations and new ideas are borne out of information sourcing, processing and dissemination; thereby empowering and creating opportunities for libraries and information centres (Ugwu & Ezeani, 2012). According to Onaade (2012), with the recent revolutions in ICT, knowledge in societies has been expanded, modified and exemplified. Thus, ICT has changed and enhanced the library and information profession around the world. The revolution in ICT has led to an expansion in the roles of information professionals in diverse ways. Among the opportunities in library and information profession, is online entrepreneurial services in which is an innovative services that libraries that libraries and information centres could render online with modern emerging technology which library clientele might pay or subscribe to. They are services that provided with the new model of operations, different from the traditional ways that libraries were known for. It involves libraries looking inward for opportunity, taking risks and coming with innovations in rendering services that are worthy and valuable to users' community using emerging information and communication technology (Ugwu & Ezeani, 2012).

In addition, entrepreneurial librarianship offer specific techniques for creating an entrepreneurial environment in library and information service. Libraries and information centre are now applying new business models to traditional service; they eagerly embrace entrepreneurship in response to patrons' demands, funding declines, changing resource formats, and other challenges (Tabor & Meniwoze, 2020). Some of the type of innovation and entrepreneurial online service that could be rendered in Nigeria libraries in the digital age are: online business support service for starts-up; web design services; blogging service; podcasting service; electronic publishing services; online information search service; short message alerts services; online training and workshops; digital references services; database production/distribution services; online entertainment services; mobile application services and digital marketing service (Tabor & Meniwoze, 2020).

Problems facing Entrepreneurship Education, Technical and Vocational Education Training

Entrepreneurship is not embedded in all Academic Programs

Recent data from certain European countries show that the majority of entrepreneurship courses are offered in business and economic studies. However, it is questionable whether business schools are the most appropriate place to teach entrepreneurship. Innovative and viable business ideas may be more likely to originate from technical, scientific and creative studies. In Germany, most spin-offs are from universities of applied sciences and technical universities. Therefore, the real challenge is to build inter-disciplinary approaches, making entrepreneurship

education accessible to all students, and where appropriate creating teams for the development and exploitation of business ideas, mixing students from economic and business studies with students from other faculties and with different backgrounds (European Commission, 2008).

Curriculum is not Integrated and no Coherent Framework

According to Abdullah (2020), numerous initiatives on entrepreneurship education are under way at all levels in educational system, most of them are neither integrated into the curriculum nor form part of a coherent framework, and that as a result most students cannot yet take part in entrepreneurship courses and programmes. At times, entrepreneurship education is neither integrated into the curriculum nor part of a coherent framework. Initiatives are often isolated, taken by individual institutions. Entrepreneurship is more likely to be taught as a separate subject or seen as an extra-curricular activity (Anaele et al., 2014). Research by Singer, Amoros and Moska (2015), entrepreneurship education in many universities in Nigeria found out that most universities lack of systematic entrepreneurship education curriculum.

In contrast, some countries have already link entrepreneurship education and TVET. For example Kenya is among the first countries in Africa to introduce aspects of entrepreneurship education in its education and training system (UNEVOC, 2010). Some decades ago, Kenya established Technical, Industrial and Vocational Entrepreneurship Training (TIVET) where entrepreneurship is made as the guiding principle for TVET. The objective is to equip student's sufficient knowledge and skills to enter labour market including self-employment once they leave school (UNEVOC, 2010).

Weaknesses in the Delivery of the Entrepreneurship Education

Research conducted by Abdullah (2020), observed that delivery of entrepreneurship education is weak. For example, teaching methods are ineffective, the practical element of entrepreneurship is missing and teachers are not fully competent (European Commission, 2009). Teachers do not have personal experience in entrepreneurship thus transpired in their teaching which is too theoretical (Abdullah, 2020). Traditional classroom model still predominantly practice in teaching entrepreneurship, limited number of entrepreneurship courses offered in universities and shortage of qualified teachers. Zahari (2010) concerned entrepreneurship education in polytechnics showed that the entrepreneurship curriculum is not effective in molding student's entrepreneurship skills and behaviour. Teaching methods are not relevant and many lecturers do not have relevant knowledge, skills and training relevant to entrepreneurship. Hence, effectiveness of entrepreneurship education in many polytechnics to nurture entrepreneurial behavior can be questioned.

Limited Students Participation

According to Abdullah (2020), students' participation in technical and vocational education are limited. Findings from Singer, Amoros and Moska (2015), revealed that more than half of students at higher education level do not even have access to entrepreneurial education. Even, more than half of the polytechnics graduates would like to become entrepreneur but the limited percentage attending entrepreneurship programme can be observed.

Inadequate deployment of Information and Communication Technology

The state of deployment of information and communications technology is a great challenge for the success of online entrepreneurial services and technical and vocational educational training in the country. This is in tandem with Sheme, Yahaya and Bappa (2017), that most libraries do not have access to modern information technologies or ICT infrastructure, such as telephone lines, computers and internet connectivity. Where these facilities are available there is always electricity power failures which inhibit their optimum usage. Oyedokun (2014) also supported this finding that most Nigerian libraries and institutions are yet to deploy adequate information technology needed for innovation and entrepreneurship education in their operations and services. Manual operations are still very common, libraries that have fully automated services are still very few, electronic resources are yet to be imbibed fully and most of them are yet to have websites.

Ways to improve Entrepreneurial Education, Technical and Vocational Education Training Adequate Funding

Adequate funding is a major constraint to educational sector in Nigeria. Government at all levels should fund educational sector in Nigeria adequately by making budgetary provision for library development in order to facilitate entrepreneurial education, technical and vocational education training. If libraries and information centres are well

funded the practitioners would initiate and execute innovative programmes. In addition, there is need for Nigerian tertiary institutions to look inward and seek for funding through innovations to ensure entrepreneurial education, technical and vocational education training.

Adequate Training of Library and Information Professionals

Adequate training of staff is a major prospect to entrepreneurial education, technical and vocational education training in Nigeria. All librarian in university libraries in Nigerian need training and re-training in order to be able to use technology effectively and to be able to pass on the skills to students. This can be accomplished by attending seminars and workshops on use of information and communications technologies. Baro and Zuokemefa (2011) stressed that university management, the libraries, nongovernmental organizations, and ETF (Education Trust Fund) should organize such seminars or workshops to equip librarians with the skills needed in this digital age.

Provision of ICT Infrastructure

The need for adequate provision of information and communications technology in Nigerian institutions so as to utilize cope with innovations in library and information science profession in order to ensure entrepreneurial education, technical and vocational education training in Nigeria cannot be undermine. Adequate provision of required ICT facilities is a major prospect in Nigeria institutions for training of technical and vocational education of students. Abdullah (2020) noted that many Nigerian university libraries are not computerized, and are not internet enabled, and where some ICT facilities exist they are guarded like an egg. Abdullah (2020) stressed that the application of ICTs in Nigerian tertiary institutions revealed that there is some consciousness of the significant role ICT can play in training of technical and vocational education of students.

Conclusion

The emergence of Information Communication Technology also bring changes to library and information science. As a response to adoption and application of new technology, library and information science students and information professionals need to be innovative to remain relevant to their communities. Therefore, library and information science education is expected to train individuals to be relevant, dynamic, services oriented and responsive to the gradual and drastic changes taking place in information sector globally. However, development of catalog code and online catalogues, reference services, online databases, technological advances in library instructions, hybrid automated system all demonstrate innovations in the library development. However, world is facing an unprecedented challenges especially in terms of science and technology. New application and inventions enable human to grow and develop as civilized nations. These could not be possible without entrepreneurs who are creative and innovative. Therefore, entrepreneurship, technical and vocational education training (TVET) play a prominent role to equip practitioners to take charge of their economic affairs rather than to depend on government or private organizations for employment.

Conclusively, it should be noted that entrepreneurship education and technical and vocational education and training (TVET) aim to addressing the unemployment problems and eradicating poverty. Thus, it becomes imperative for entrepreneurship to be included in library and information science discipline which ample opportunities for promoting technical and vocational education training (TVET).

Recommendations

This study recommend inclusion of entrepreneurship education in library and information science profession in an integrated way. However, entrepreneurship should be added to academic curriculum because many universities in Nigeria curriculum is void of entrepreneurship education. This could be an effective measure to ensure that entrepreneurship education thrive in academic institution in Nigeria and gives opportunities for promoting technical and vocational education training (TVET).

References

Abdullah, S. (2020). Entrepreneurship Education in Technical Vocational Education and Training (TVET) and Models of Implementation. *Conference Paper,* Commerce Department, Politeknik Ungku Omar, Ipoh, Malaysia, 2-22

Ajidahun, C. O. (2007). The training, development and education of library manpower in information technology in university libraries in Nigeria. *World Libraries, 17*(1), 12-23.

Akwang, N.E (2017). Approaches to Innovation and Transformation in Library and Information Science Education in Nigeria. *International Journal of Library Science*, *6*(3), 58-67

Anaele, E. O., Adelakun, O. A., Dem, I. I., & Barfa, G. I. (2014). Strategies for Revitalizing the Implementation of Entrepreneurship Education in Technical, Vocational Education and Training (TVET) to Enhance Self-Employment in Nigeria. *British Journal of Education*, *2*(4), 50-62.

Anyanwu, F. A. (2010). *Practice of entrepreneurship and youth empowerment*. Owerri: Uzopietro Publishers.

Anyanwu, F. A. (2010). *Practice of Entrepreneurship and Youth Empowerment*. Owerri: Uzopietro Publishers.

Babalola, G.A., Abifarin, F.P. & Ahmed, A. O. (2015). Productivity, profitability, and entrepreneurial skills needed in setting up and maintaining library and information firms: a study of Abuja, Nigeria. *Paper presented at the Annual Conference of the National Association of Library and Information Science Educators (NALISE),* University of Uyo, Uyo.

Badawi, A. A. (2013). *TVET and Entrepreneurship skills in revisiting Global Trends in TVET*. http://www.unevoc.unesco.org/fileadmin/up/2013_epub_revisiting_global_trends_in_tvet_chapter8.pdf

Baro, E.E. and Zuokemefa, T. (2011). Information literacy programmes in Nigeria: a survey of 36 university libraries. *New Library World* 112(11/12):549-565.

Eke, H.N., Igwesi, A. & Orji, D I. (2011). Information Professionals as Agents for Promoting Entrepreneurship and Technology Education and Actualizing Vision 2020 for Nigeria. Library *Journal of Philosophy and practice (e-journal).* Paper 561. Available at http://digitalcommons.unl.edu/libphilprac/561

European Commission (2008). *Entrepreneurship in higher education, especially within non-business studies*. Retrieved from http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/entr_highed_en.pdf

European Commission (2009). *Entrepreneurship in Vocational Education and Training Final report of the Expert Group.* http://ec.europa.eu/enterprise/policies/sme/files/smes/vocational/entr_voca_en.pdf

Fitzgerald, K., Anderson, L. & Kula, H. (2010). Embedded libraries promote an innovation agenda: University of Toronto Libraries and the MaRs Discovery District. *Journal of Business & Finance Librarianship,* 15:3-4, 188-196.

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.

Hoppenfields, J. & Malafi, E. (2015). Engaging with Entrepreneurs in Academic and public libraries. *Reference Services Review, 43*(3), 379–399.

Hornby, A. S. (2011). *Oxford advanced learner's dictionary of current English*. New York: Oxford University Press.

Mabawonku, I. (2011). *Teaching information ethics in Nigerian library schools and some tertiary institutions: overview, challenges, and prospects*. Retrieved on 10 June, 2017 atwww.africainfoethics.org/pdf/2010/presentations/Ma bawonku.

Nwokocha, U. and Ogwo, O. (2015). Training for self-reliance: an analysis of entrepreneurship in ABSU library school. *Paper presented at the Annual Conference* of the National Association of Library and Information Science Educators (NALISE), University of Uyo, Uyo.

Nwokocha, U., & Chimah, J. (2015). Commoditization of knowledge and information for sustainable development: imperative for entrepreneurial librarians and information scientists. *Paper presented at the Annual Conference* of the National Association of Library and Information Science Educators (NALISE), University of Uyo, Uyo.

Onaade, O.J. (2012). Information brokerage: An entrepreneurial approach to information services in Nigeria. *Global Journal of Management and Business Research, 12*(20), 13-19.

Oyedokun, A. (2014). Information literacy competence of libraries in South-west Nigerian University libraries. *African Journal of Library, Archival and Information Science*, 24 (1), 67-90.

Rosen, A. (2011). *Life lessons*: Educating the Next Entrepreneurs. http://dx.doi.org/10.1080/00048623.2014.910859.

Shamsuri A (2020). Entrepreneurship Education in Technical Vocational Education and Training (TVET) and Models of Implementation. *Conference Paper,* Commerce Department, Politeknik Ungku Omar, Ipoh, Malaysia, 2-22

Shaw, K. & Spink, A. (2013). University library virtual reference services: best practices and continuous improvement, *Australian Academic & Research libraries, 40*(3), 192-205.

Sheme, M., Yahaya, A. & Bappa, H. (2017). Role of Library and Information Professionals in Promoting Information Literacy in Nigeria. *Information Trends*, *16*(17), 15-23

Shumaker, D & M. (2009).*Models of Embedded Librarianship: Final Report*. Alexandria, VA: Special Library Association.

Sichiyako, C. (2012). *TVET and entrepreneurship education (EPE)*. Retrieved from http://mutame.blogspot.com/2014/02/tvet-and-entrepreneurship-education-epe.html

Simisaye, A., Salisu, T. & Awodoyin, A. (2018). Developing Innovative Services in Libraries and Information Centres in Nigeria. *Nigerian Libraries, 51*(1), 24-39.

Singer, S., Amorós, J. E., & Moska, D. (2015). *Global Entrepreneurship Monitor 2014 Global Report*. Global Entrepreneurship Research Association. Retrieved from http://www.gemconsortium.org/report.

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.

Tabor, E.A, & Meniwoze, Z.C., (2020). Innovative Library Services (ILS) in Nigeria: Challenges and Way forward. *International Journal of Research and Innovation in Social Science*, 4(6), 87-94.

The Quality Assurance Agency for Higher Education (2012). *Enterprise and entrepreneurship education: Guidance for UK higher education providers*. Retrieved from http://www.qaa.ac.uk/en/Publications/Documents/enterprise-entrepreneurship-guidance.pdf

Ugocha, O. C. (2011). *The history of Nigerian libraries*. Owerri: Whytem Publishers.

Ugwu, F.N & Ezeani, C.N. (2012) Evaluation of Entrepreneurship Awareness and Skills among LIS Student in Universities in South East Nigeria. *Library Philosophy and Practice*. Retrieved 22/7/17 from: http://digitalcommons.unl.edu/liphilprac/1

UNESCO (2015). Technical Vocational Education and Training. Retrieved from http://www.unesco.org/new/en/newdelhi/areas-of-action/education/technical-vocational-education-and-training-tvet/

UNEVOC (2010). Entrepreneurship Education as a Tool to support Self-Employment in Kenya. TVET Best Practice Clearinghouse. Issue 2. Germany: UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.

World Economic Forum (2014). *The Global Competitiveness Report 2014-2015*. Retrieved from http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf

Zahari, M. I. (2010). *Developing entrepreneurship education:* Empirical findings from Malaysian Polytechnics. *PhD. Thesis* University of Hull, Hull, UK.