

Exploring New Digital Technologies for Teaching and Learning Entrepreneurship: An Issue for Human Capital Development in Nigeria

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Abstract

In Nigeria, entrepreneurship education programme being a skills development programme seem to be worst hit by the dearth of requisite technological tools on the one hand and the skills needed to effect the integration on the other. The consequence is that the programme is faced with the challenge of producing the needed manpower for the world work. The Common Wealth of Learning (COL) initiatives and several organizations like Africa America Initiative have responded positively to training various group of Africans to acquire functional education as a response to the united nation call for inclusion in technological, vocational and functional education. The number of students these bodies can train vis-à-vis over educational institutions are limited by space, infrastructure and number of teachers. The COVID-19 pandemic of the year 2020 has also made matters more complicated by completely putting a hold in education as all schools were under lock and key. The objective of the study is to explore new digital technologies for teaching and learning entrepreneurship. Qualitative contents analysis was used as the methodology. Therefore, documentaries such as books, journals and other periodicals were used to developed theme related to the subject matter. The findings revealed that digital technologies for learning maximize the active participation of the learners. The study concluded and recommended that government, private, corporate and the society should motivate teachers to change their teaching habits and strategies to match the existing digital technological trend with their teaching delivery.

Keywords: Entrepreneurship education, Digital technologies, Human capital, Learning management system, Teaching.

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Background to the Study

Nigerian government came up with an educational policy that mandated the need to incorporate computer science discipline into its curriculum in the respective higher institution of the state because of the growing impact of the essential role of information and communication technologies in the building and nurturing of political and socio-economic life. It further asserted that “the overall philosophy of education in Nigeria among others should be directed to building a united, strong and self-reliant nation by educational activities being geared towards scientific and technological progress” (Federal Republic of Nigeria National Policy on Education, 2004). The recent global technological innovations in the business world have brought about radical change in the entire system of education in the world. Moreover, with the sheer amount of technology available, it comes as no surprise that schools have faced several challenges involving cloud computing, cyber security, internet connectivity, information technology (IT) procurement, as well as emerging concepts like gamifications: virtual learning, augmented learning, blended learning and alike all of which if properly provided will help schools to enhance students' learning opportunities. In developed countries, technology has become an integrated part of the instructional process resulting in the development of new concepts in the logistics of instruction. Thus, technologies are applied in classroom situation to enhance teaching and learning processes, because of increase attention and engagement and supporting students' understanding (Meriaux, 2020). When properly used, technology will help students acquire the skills they need to survive in a complex, highly technological knowledge-based economy.

Statement of the Problem

Entrepreneurship education is required to provide solution to the alarming problems that threaten national security of Nigeria and other developing nations of the world. Some of these challenges include unemployment and under-employment, kidnapping, militancy, terrorist, examination malpractice, internet crimes, indecent dressing and prostitution, bullying and other acts of violence (Eneremadu, Onwuagboke and Nnennaya, 2012). Entrepreneurial education programme being a skills development programme seem to be worst hit by the dearth of requisite technological tools on the one hand and the skills needed to effect the integration on the other. The consequence is that the programme is faced with the challenges of producing the needed manpower for the world work. However, for digital technology to be successfully useful and deliver the goods expected of it such as making entrepreneurship education graduates global workers it should be made part of the education delivery of learning. Therefore, with the continuing spread of new digital technologies in every sector, continuing to teach entrepreneurship education as usual in Africa is no longer an option (Mehrpenya, 2019). Therefore, for entrepreneur education programme to sustain its relevance in providing the needs of individual and that of the society, it must embrace current trends in modern technologies in the academic and economic demand of the society.

The commonwealth of learning (COL) initiatives and several organizations like Africa America institute have responded positively to training various group of Africans to acquire functional education as a response to the United Nation call for inclusion in technological, vocational and functional education (UNESCO, 2016). The number of students these bodies can train vis-à-vis our educational institutions are limited by space, infrastructure and number

of teacher. This in itself is a challenge. The COVID-19 pandemic of the year 2020 has also made matters more complicated by completely putting a hold in education as all schools were under lock and key because of the pandemic, yet we must continue to learn.

Objective of the Study

To explore new digital technologies for teaching and learning entrepreneurship

Research Methodology

The researchers adopt a qualitative contents analysis. This emanates from a desk research. The researchers manipulates documentaries such as books, journals and other periodicals. Various themes were developed for the purpose of addressing the issue of entrepreneurship education, new digital technologies, theories on the subject matter were identified and reviewed, conclusion and recommendations were made based on findings.

Literature Review

Entrepreneurship Education

Entrepreneurship education is defined as the courses and lectures that are part of the curriculum scope that offer entrepreneurial capabilities, expertise and understanding to students, so that they can follow the entrepreneurship path as a profession (Ekpoh and Edet, 2011). Entrepreneurship education has to do with the application of enterprise behaviours, attributes and competencies into the creation of cultural, social or economic value. It consist of “any pedagogical (program) or process of education of entrepreneurial attitudes and skills” (Fayolle, Gailly and Lassas-clerc, 2006).

Politis (2005) defined entrepreneurship education as a continuous procedure taken to simplify the development of required acquaintance and skills for starting a business. It is believed that entrepreneurship education has the capacity to inculcate the appropriate skills and values orientation to enable the individual to understand his environment and develop into a useful member of the society. Thus entrepreneurial education is a kind of education which is expected to be provided that which meets the need of the local markets or stakeholder consequently, institutions and institute are saddled with the multifarious roles to be accomplished through research, teaching and development dissemination of knowledge and information discovery. Therefore, entrepreneurial education should be pursued in order to satisfy the goals and objectives of skills development and survival orientations as well as an objective view of society. Entrepreneurial education can only play these roles if it is fit for the purpose that produces graduates with the appropriate knowledge and skills needed to support social an economic transformation.

The Concept of New Digital Technology

Ukata and Silas-Dikibo (2019) assert that digital technologies for learning maximize the active participation of the learner. In fact, such technologies are developed so that they can work for any learner regardless of the motivation or ability of the particular learner. The term “new digital technology or technologies” as pointed out by Jegbefume, Utebor and Kifordu (2014), originated from earlier terms such as information technology (IT) and information and communication technology (ICT), which deal with accessing, gathering, manipulating and

making available or communicating information. They added that such technologies can be found in a host of devices, software application, computers connectivity, as in accessing the internet, local networking, teleconferencing among others. These technological resources that are available for teaching and learning of business education content include: e-mail, internet, intranet, extranet, computer, radio, youtube, satellite TV, video phone system, video conferencing and teleconferencing.

Learning Management System (LMS)

Hadullo, Oboko and Omwenga (2018), pointed out that learning management system (LMS) can be programmed to operate in synchronous mode or asynchronous mode. When students are accessing their materials with the lecturer delivering the lecture in real time, it is said to be synchronous mode of delivery. When the lecturer makes a video, text material or audio material and uploads to the website on the internet so that students are able to access these materials at their own time and pace, it is referred to as asynchronous mode. Tools like zoom, skype, instagram and other social media teleconferencing platforms are incorporated into LMS to aid the synchronous mode delivery. The synchronous mode has the advantage of enforcing the discipline of class attendance and the psychology of satisfaction as questions and answers are given in real time. However, the bandwidth and data issues are drawbacks of this method of delivery for now in Africa. The asynchronous mode has a number of authoring tools used in delivering. Video recording, pdf and other Microsoft office tools like power point are compatible for use. Most LMS have their integrated development environment (IDE) which gives a robust environment for presentation of learning materials available to students who register with the class. Iboyi and Ikiakuma (2020), noted that the techniques used in preparing an e-course for this IDE is a departure from that used in preparing the traditional course materials. This is because the features of an LMS are sometime different from the traditional classroom setting.

The use of LMS versus Traditional Classroom for Entrepreneurial Education

Tularam and Machisella (2018), pointed out the major difference between LMS and the traditional classroom setting being part of a study into traditional and non-traditional teaching and learning strategies:

Table 1.

S/N	LMS	Traditional Classroom Setting
i	Participation is all encompassing	Participation of both sexes is sometimes limited because of cultural and religious beliefs.
ii	There are no temporal and locational services	Is bounded by walls of classroom
iii	Personalizing learning path based on learning's needs and using simulation and games.	Difficult to personalize learning to a particular student.
iv	Interactivity for geographically or temporally separated students.	Interactivity limited to geographic region, students are locally clustered.
v	Persistent availability of all course materials (typically through the use of electronic document achieving or similar).	Course materials not persistently available.
vi	Accessibility to a large and varied body of prospective students.	Limited accessibility and carrying capacity due to limited physical facility.
vii	Ease of administrative management and maintenance.	Cumbersome management.

Note, LMS involves the use of the internet: it must have a cross-platform facility to accommodate various authoring tools; it should have modules for management of students, materials, contents flow, assessment and results. Therefore, every lecturer is expected to log into an LMS as a teacher while the students log in as students. The teacher usually has access to a number of resources of the LMS for the purpose of preparing their e-course, monitoring progress and assessing the students. A course is a process that represents a workflow of learning activities. It could be content centric or activity centric. An e-course like entrepreneurship would mean an interaction of an entrepreneurship course with digital learning resource. A better approach of developing an e-course would be to concentrate on the pedagogy as concerns learning objectives, learning resources and instructional strategy (Savic, Segedinac, Milenkovic, Hrin and Segedinac, 2018). Preparing an e-course, therefore, requires some skills as considering the various elements and variables that interplay with respect to content, activities, design and management of the course. The intention of the e-course must not be ambiguous and the subject matter expert (SM) must be involved for proper development of the components. Brown and Voltz (2003) noted that three components are necessary for a standard e-course. They are content (training materials), experience activities (games, exercise) and feedback (comments, assessment among others). Some content are better presented to ensure change in behaviour (learning) at the end of the course).

Human Capital Development:

For sustained economic development to occur the gains must be complemented by value creating autonomous productivity changes in the particular economy, savings and investment must rise and economy policy must be favourable to private initiative, capital inflows and efficient use of resources. Effiom (2012) assert that tertiary institutions managers are expected to manage available human resources for optimal results, ensure effective utilization of material resources, maintain and sustain regular flow of information among stakeholders, enhance, protect and project positive image of the institutions, interpret, apply and enforce rules and regulations for well-being of the institutions and manage crisis.

The most important components in the input of an administrative process in any organization is human resource. Human resource training is one of the most important aspects of every organization which has a great impact on the effectiveness of human resource, because no matter how carefully job applicant are screened before employment, definitely, a gap is always left between what employees know and what they should know (Salah and Musa, 2014).

Mograbi (2008), observed that human capital development are set of activities aimed at assisting an employee to acquire new knowledge, skills and attitudes necessary for the effective performance of a specific task or job. Training in relation to the school system is the process designed to enhance the professional knowledge, skills and attitudes of staff so that they may in turn, improve the teaching and learning setting. It is an important part of staff preparation programmes especially in the aspects of teaching so that important aspect of teaching could be nurtured through reflective strategies and experiences.

Theoretical Framework

Human Capital Theory (HCT):

Human Capital Theory (HCT) prescribes that education, training, knowledge, experience and skills acquisition are mechanisms for attaining productivity, efficiency and innovation. The human capital model of Robert (1991) advocates education as a tool for improving human capital, stimulating labour productivity and enhance entrepreneurship spirit and innovation level. Van Den Berg (2001) establishes a correlation between the level of education and new product development in knowledge-based economies that invested massively in education, technology and related developmental practices. Human capital attributes such as education, training and experience have been found to be critical to entrepreneurial practice and innovation (Odekunle, 2001).

Human Capital Theory of Entrepreneurship (HCTE)

Dr. Gary Becker an American Economist at the University of Chicago concocted human capital theory in 1975. This theory emphasizes on aspects of education, technology, training and skills that can improve wellbeing, earnings and appreciation, it stated that expenditures on education and training are investments in human capital (Njoroge and Gathungu, 2013). According to Becker, human capital is different kind of capital from financial and physical resources, the knowledge gained from education and training represents a resource that is central to understanding of opportunity identification and exploitation which is keen to business performance. However, this theory postulated that job creation and scalable business starts with education, training and practical skills that could foster creativity enterprising mindsets, positive risk-taking and problem-solving skills. Identification of particular needs of group of individuals and designing of learning programmes that include extra-curricular training is critical in creating jobs through business start development (United Nation, 2014). An individual or group of individual that is stock with knowledge through training such as investment and project analysis as well as practical skills training which include creativity that could be usefully applied to an economic purpose, thus considered to be a type of wealth. However, this theory concluded that groups of individual with greater human capital are expected to be better able to accomplish in a scalable business or goal that will bring about economic development (Becker, 1994).

Findings and Discussions

The study found that entrepreneurship education has the capacity to inculcate the appropriate skills and values orientation to enable individual to understand his environment and develop into a useful member of the society. Entrepreneurship education has the goals and objectives of skills development and survival orientations as well as an objective view of society. Digital technologies for learning maximize the active participation of the learner. The techniques are developed so that they can work for any learner regardless of the motivation or ability of the particular learner. Technological resources that are available for teaching and learning of business relate course include; e-mail, internet, intranet, extranet, computer, radio, youtube, satellite TV, video phone system, video conferencing and teleconferencing. Learning management system (LMS) can be programmed to operate in synchronous mode or asynchronous mode. Every lecturer is expected to log into an LMS as a teacher while the students log in as students. An e-course like entrepreneurship would mean an interaction of an entrepreneurship course with digital learning resource. The most important components in the input of an administrative process in any organization is human resource. Human capital development are aimed at assisting an employee to acquire new knowledge, skills and attitudes necessary for the effective performance of specific task or job.

Conclusion and Recommendations

Findings from the study indicated that government's support is not only desirable but imminent to rebuild our educational system. There is an urgent need for a deliberate policy on the part of government to train and retrain the country's human resources which have been abundantly neglected, expand infrastructure and enhance her economy power to be able to rise to the challenges of the 21st century. Practical skills training as one of the important predictors of entrepreneurial training should be given much attention so as to be able to explore its benefits. The study shows that practical skills training play an important role on start-up development. Proper guide that include enhancement of individual creativity identification of opportunities, innovations, how to manage risk should be part of the training so as to turn such opportunities to income generation. Government, private, corporate and the society should motivate teachers to change their teaching habits and strategies to match the existing digital technological trend with their teaching delivery.

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