



Development of a Learning Management System for Teaching Entrepreneurship Education using Flip Learning Model for Sustainable National Development.

Dr Ifeoma Chukwuorji

Department of Computer Science Education Faculty of Education and Arts Madonna University Nigeria Tel.: +2348064004246 Email: <u>ifeoma.chukwuorji.pg02560@Unn.edu.ng</u>

Believe Igbunu Akpobroka

Mathematicics Unit, Department of Physical Sciences Faculty of Science, Dennis Osadebay University, Asaba, Delta State Tel.: +2348167647846 E-mail: believe.akpobroka@dou.edu.ng

Gusen Nandom Joseph,

Department of Science & Technology Education, Faculty of Education University of Jos

Abstract

The general term for the platform process which provides a cohesive and integrated learning experience through a framework of learning process and assessment in a specific context is Learning Management System. The development of Learning Management System for Entrepreneurship Education using Flip Learning Model is needed

because of the necessity required to shift from normal classroom instructional environment to the one interactive and technology driven activities in education system and sustainability of National Development is the objective. The Study adopted Research and Development (R & D) design to produce the developed Learning Management System for Entrepreneurship Education using Flip learning model. The findings revealed that respondents' opinion, supports the development of Learning Management System for entrepreneurship education, conclusions drawn that Learning Management System for Entrepreneurship Education should be adopted for teaching and learning of Entrepreneurship Education to improve sustainability of National Development.

Keywords: Learning Management System, Development, Entrepreneurship Education, Flip Learning Model.

Introduction

The Information and Communication Technology (ICT) revolution has provided many unique benefits to teaching and learning. Students have the opportunity to learn depending on their own ability and the speed they need, such that smart student learn faster and takes less time while average students learn more slowly and take more time as well.

According to Hornby (2001), development is the gradual growth of something so that it becomes more advanced and stronger. It is the process of producing or creating something new or more advanced. A Learning Management System is a platform that provides a cohesive and integrated learning experience through a framework of processes of learning and assessment in a specific context or generic form. The Learning Management System development is very vital in order to facilitate teaching and learning of Entrepreneurship Education. Freitas and Jameson (2012) states that Instructional System Design (ISD) aims at maximizing the effectiveness of instruction and learning experiences.

Entrepreneurship Education is a technical subject because it requires the use of machines which need special skills to operate them during creation of new products. The process of performing the roles of planning, operating and assuming the risk of a business venture, (Inegbenebor & Igbinomwanhia, 2010). According to Flipped Learning Network, FLN) (2014), Flipped learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. The purpose of this study demonstrated how developing of Learning Management System for Entrepreneurship Education using flip learning model could facilitate sustainable National Development through improved method of teaching and learning could increase students' interest. The research was guided by the following questions:

- 1. What are the objectives suitable for the development of a Learning Management System on Entrepreneurship Education using FLIP learning model?
- 2. What are the delivery systems required for the development of a Learning Management System on Entrepreneurship Education using FLIP learning model?

Literature

The pursuit of lucrative opportunities by enterprising individuals (being) inherently about innovation - creating a new venture where one did not exist before. (Bateman & Snell, 2011). The concept of entrepreneurship development is a process which could be considered to begin with knowledge and skill accumulation to sufficiently predispose the individual learner to entrepreneurial pursuit. Entrepreneurial education is focused on developing youths as well as individuals with passion and multiple skills (Izedonmi & Okafor, 2010). It aims to reduce the risks associated with entrepreneurship thought and guide the enterprise successfully through its initial stage to the maturity stage. According to Brown (2000). There are various Contribution of Entrepreneurship in a Developing Economy like Nigeria. The role of entrepreneurship in a developing society is presented as follows: Employment generation; Entrepreneurship has remained the most important tool for solving them. Increase in productivity through innovation: Innovation which has been described as a process by which entrepreneur convert opportunities (ideas) into marketable solution (Kuratko, 2009), Facilitation of technological transfer/adaptation: This facilitates the absorption of all kinds of workers skilled, semi-skilled and unskilled.

Increase in resource utilization: Entrepreneurs harness these resources, and put them into productive and profitable use. They contribute to the mobilization of domestic savings and utilization of local resources including human resources: The greater the number of small-scale entrepreneurs that exist in the downside of a particular sector, the greater the market, and by extension, the greater the capacity utilization. It brings about encouragement and sustenance of economic dynamism that enables an economy to adjust successfully in a rapidly changing global economy. Entrepreneurship is making individuals to enhances effective and efficient use of their potentials and energies to create wealth, independence and status in the society. The National Development sustainability of this economic dynamism would be facilitated by the use of Flipping Learning Model.

The Flipped Learning Model can enable educators to make the shift from teacher – driven instruction to student – centered learning. Lage, Platt, and Treglia (2000) described a similar approach as the inverted classroom and reported its application in an introductory economics course. The Flipped Learning Network along with Pearson's School Achievement Services (2013) identified the key features or pillars of Flipped classrooms that allow Flipped Learning to occur. The four Pillars of Flipped Learning are Flexible Environment, Learning Culture, Intentional Content, and Professional Educator would assist in proper teaching of Entrepreneurship Education skills for Sustainable National Development.

The labour market is already favouring the skilled worker highly, while very little space is kept for the unskilled, hence there is need to use Entrepreneurship Education to train all the young students in Nigeria for sustainable National Development because there would be creation and enhancement of skills which will reduce underemployment and unemployment in Nigeria and equally reduce the crime rate also. The individuals in developing countries are not formerly disposed to a life of criminality and loitering, but due to their lack of skills, they end up in contributing less in their societies. Olaitan (2009) posited that vocational education is that type of education designed to prepare skilled personnel at lower levels of qualification for one or group of occupations.

The task of technical and vocational education which Entrepreneurship Education is part of is to impart appropriate skills and competencies to the learners to enable them combat unemployment, poverty and further contribute to social transformation. Entrepreneurship education is important for the technological and economic advancement. These institutions must explore the relationship between Entrepreneurship education and the labour market as they mould future students and the educators for Sustainable National Development.

Research Design / Method

The Research and Development (R & D) design, according to Gall, Gall and Borg (2007) is an industry based development model in which the findings of the research are used to design new products and procedures that would be systematically field – tested, evaluated and refined until they meet specified criteria of effectiveness, quality or similar standard. Procedure for Developing Flipped Learning Management System, Some of the (R & D) design steps that are to be used in this study because they are relevant are listed below: Identification of goals for the instructional Programme; procedures and learning tasks that are involved in reaching the goals of instruction; Develop Specific Instructional Strategies for assisting learners with their effort to achieve each performance objective; Translate need and goal of instruction into specific performance objectives;

The Stages in the developmental process of the FLIP learning programme are broadly grouped into three; Before class, Within class and After class. According to Guangran Liu, Yucai Zhang and Hongfang Fan (2013), in Design and Development of a collaborative learning platform supporting flipped classroom, Before class for teachers involves: Identification of problem/subject matter and need knowledge transmission, resources providing, task announcing and question replying. For the students: it involves resources learning, tasks executing and question asking. Within class involves: knowledge internationalization, teacher organizing, student collaborative communication and group reporting. After class involves: Capacity enhancement; teacher performing communicative guiding and comprehensive evaluating. Students at After Class, perform work sharing study and study summarizing. In order to tap into the advantages FLIP learning can offer in technical subject matters like Data processing. It is imperative that a learning programme should be developed, as a guide in the learning process. Population was ten teachers of Business studies, drawn from Nsukka L. G. A. Enugu State. The number of items on instrument for data collection was nineteen (19) A criterion mean of 2.50 was adopted as the cutoff point (agreement level) for the items. Consequently, any mean that ranged from 2.50 and above was accepted while below 2.50 was rejected.

Results

The result of the Study is discussed in respect to the research questions.

Research Question One: What are the Objectives suitable for the development of a Learning Management System on Entrepreneurship Education using Flip learning model?

Table 1: Mean rating of the responses of Business Education teachers on the objectives suitable for the development of a Learning Management System on Entrepreneurship Education using Flip learning model.

S/N	Items Statements	(X)	SD	Remarks
1.	To equip Entrepreneurship Education teachers and students with sustainable skills in resource management in Entrepreneurship Education subject.	3.51	.63	Highly Needed (HN)
2.	To develop the interest of teachers and learners in resource management skills in Entrepreneurship Education.	3.63	.69	HN
3.	To provide teachers and learners with applicable knowledge in resource and time management during teaching and learning proc ess in Entrepreneurship Education	3.46	.74	HN
4.	To provide learners with adaptable knowledge of economic benefit in Information management	3.39	.78	HN
5.	To provide teachers and learners with dynamic technical skills.	3.47	.98	HN
6.	To provide equal learning opportunities for all manner of learners through the learning cycle	3.48	.91	HN
7.	To provide the needs of the learners, teachers and in turn the needs of their society for sustainability.	3.57	.93	HN
8.	To improve the learning outcome for Entrepreneurship Education students.	3.68	.89	HN
	Cluster Mean	3.52	.35	HN

Research Question Two: What are the delivery systems required for the development of a Learning Management System on Entrepreneurship Education using FLIP learning model?

Table 2: Mean rating of the responses of Business Educationteachers on the delivery systems required for thedevelopment a Learning Management System on

	mouel.			
S/N	Items Statements	(X)	SD	Remarks
1.	To host lecture contents on the Internet	3.36	.93	Highly Needed (HN)
2.	To create lecture notes on Video tape	3.27	.88	HN
3.	To post lectures on Intranet	3.33	.82	HN
4.	To post lectures on the Extranet	3.33	1.03	HN
5.	To create lecture notes on Audio tape	3.42	1.04	HN
6.	To post lectures on satellite TV	3.42	1.07	HN
7.	To record lectures on DVD-ROM or CD-ROM	3.51	1.10	HN
8.	To streamline video and audio	3.33	.81	HN
9.	To prepare MS-Powerpoint animation presentation	3.50	.98	HN
10.	To prepare and host Learning Management System on Facebook	3.44	.87	HN
11.	To use Podcasts	3.37	.78	HN
	Cluster Mean	3.39	.00	HN

Entrepreneurship Education using FLIP learning model.

The data presented in Table 2 showed eleven items which had their mean values ranged from 3.27 to 3.51. The indication is that eleven delivery systems items are highly required for the development of a Learning Management System on Entrepreneurship Education using Flip Learning Model. This indicated that the respondents were not too far from the mean and were close to one another in their responses.

Findings of the Study

The following findings emerged from the study based on the Research Questions answered.

Objective suitable for the development of a Learning Management System on Entrepreneurship Education using Flip learning model. It was found that the eight Objectives were suitable for the development of a Learning Management System on

Entrepreneurship Education using Flip learning model.

Delivery systems required for the development of a Learning Management System on

Entrepreneurship Education using FLIP learning model. It was found out that the eleven

items in Delivery Systems were required for the development of a Learning Management

System on Entrepreneurship Education using Flip learning model. **Conclusion**

Method of teaching and learning of Entrepreneurship Education in a normal traditional classroom setting becomes cumbersome due to the technical nature of the subject. Technology influences the way students learn and how educators teach, this creates a fundamental change that solicit for a need to shift from normal classroom instructional environment to the one encompassing interactive and technology driven learning activities in the education system.

This Study embarked on the development of a Learning Management System on Entrepreneurship Education using Flip learning model in order to improve the method of teaching and learning and also improve learning outcome. The Study has provided a developed Learning Management System on Entrepreneurship Education using Flip learning model which will help Entrepreneurship Education teachers to organise lessons in Entrepreneurship Education.

Recommendation

It was recommended that Enugu State Ministry of Education should adopt the Learning Management System on Entrepreneurship Education with Flip learning model for teaching and learning of Entrepreneurship Education. The entrepreneurial education as the vehicle for sustainable development in Nigeria through vocational and technical education and skills, there remains a dire need for real orientation of concerned institutions towards building entrepreneurial mind-set in the youths. Entrepreneurial education and development are considered, often there is encountered challenges of

entrepreneurial education These include, among others, a call on all relevant authorities to make fresh commitment towards entrepreneurial development by refocusing the education policy towards entrepreneurially eliciting programmes.

References

- Abdullahi, S. A. (2009). Entrepreneurship skills development as an economic empowerment and poverty reduction strategy in Nigeria. *Nigerian Academy of Management Journal, 3*(1), 46-65.
- Ahiauzu, A. (2009). Entrepreneurship and economic development in Nigeria: The way forward. *Nigerian Academy of Management Journal*, *3*(1), 1-18.
- Akinoglu, O. & Tandogan, R. (2006). The effects of problem-based active learning in science education on student's academic achievement, attitude and concept learning. *Eurasia Journal* of Mathematics, Science & Technology, 3, 71-81.
- Bateman, T. S., & Snell, S. A. (2011). *Management: Leading and Collaborating in the Competitive World* (9th Edition). New York: McGraw-Hill, Irwin Companies, Inc
- Baker, Celia. (2012, November 25). Flipped classrooms: Turning learning upside down: Trend of "flipping classrooms" helps teachers to personalize education. *Deseret News*. Retrieved on S e p t e m b e r 8th, 2016, from http:// www.deseretnews.com/article/765616415/Flippedclassrooms-Turning-learning-upside-down.html?pg=all
- Baker, J. W. (2000). The "Classroom Flip" using web course Management tools to become the guide by the side. *In selected papers form the 1th International conference n College Teaching and Learning* Retrieved on September 8th, 2016 ...Available online at <u>Http://works.bepress.com/j-wesleybaker/u/</u>
- Bergmann, J. & Sams, A. (2012). Flip Your Classroom: Reach Every Student in Every Class Every Day. *International Society for Technology in Education*.

- Berrett, D. (2012, February 19). How 'flipping' the classroom can improve the traditional lecture. *The Chronicle of Higher Education*. Retrieved on April 20 2016, from http://chronicle.com/article/How-FlippingtheClassroom/130857/
- Brown, C. (2000). *Entrepreneurship education teaching guide*. Kansas City: Kauffman Centre for Entrepreneurial leadership Clearing House on Entrepreneurship Education.
- ClassroomWindow and Flipped Learning Network. (2012). Flipped Classrooms: *Improved test scores and teacher satisfaction*. Retrieved on April 10, 2016 from Classroom Window website: http://classroomwindow.com/ flipped-classrooms-improvedtest-scores-and-teacher-satisfaction/
- Clintondale High School (2013). *About Clintondale High School*. Retrieved on April 10, 2016 from Clintondale High School's website: <u>http://flippedhighschool.com/</u>
- Coates D. & Humphreys B.R. (2001). Evaluation of Computer-Assisted Instruction in Principles of Economics. *Educational Technology & Society 4 (2)*
- Driscoll, Tom. (2012). Flipped Learning and democratic Education: *The Complete Report.* Retrieved on March 6, 2016 from http:// www.flipped-history.com/2012/12/flipped-learning-democraticeducation.html
- EDUCAUSE, Center for Applied Research (ECAR) (2012). Dahlstrom, Eden, with a foreword by Charles Dziuban and J.D. Walker. *ECAR Study of Undergraduate Students and Information Technology, 2012 (Research Report).* Louisville, CO: EDUCAUSE Center for Applied Research. Retrieved on April 10, 2016 from: <u>http://www.educause.edu/ecar</u>.

- Estes, M.D, Ingram, R., & Liu, J. C., (2014). A Review of Flipped Classroom Research, Practice, and Technologies. *International HETL Review, Vol. 4, Article 7,* Retrieved on July 03, 2016 from URL:https://www.hetl.org/feature -articles/arevieew-of-flipped-classroomresearch-practice-andtechnologies
- Federal Republic of Nigeria, 2004, *National Policy on Education*, Abuja 4th edition.
- Federal Republic of Nigeria, 2013, *National Policy on Education*, Lagos 6th edition.
- Finkel, E. (2012) Flipped the Script. *District Administration (28-35)*. Retrieved on April 10, 2016 from www.DistrictAdministration.com
- Flipped Learning Network (FLN). (2014) *The four Pillars of* F L I- P^{TM} : Retrieved on June 2016 from: www.Lippedlearning.org/deLnition
- Freitas, Sara de & Jameson J. (2012): *The e Learning Reader*: London Continuum International Publishing Group
- Hornby, A.S., 2000, Oxford Advanced Learner's Dictionary of Current English, 6th Edition, New York: Oxford University Press.
- Gall, M.D., Gall, J.P., & Borg, W.R. (2007). *Educational Research: An Introduction. (Eight Edition).* Boston, New York: Pearson International Inc.
- Garba, A.S. (2010). Refocusing education system towards entrepreneurship development in Nigeria: A toll for poverty eradication. *European Journal of Social Sciences*, 15(1), 140-

150.

Hamadan, N. Mcknight, K, Mcknight P. (2013) A Review of Flipped Learning. *Flipped learning Network*, 1-21. Retrieved on June 14th, 2016 from <u>Http://www.flippedlearning.org/reearch.</u>

Https://www.researchgate.net/publication/306099461 Entrepreneurial Education for Sustainable Development **Article** · June 2015 CITATIONS 0 READS 6,7063

- Inegbenebor, A. U. (2006). Education for entrepreneurship: Experience of the University of Benin, Benin City, Nigeria. *Nigerian Academy of Management Journal.*
- Inegbenebor, A.U. (2012). Entrepreneurship development as a strategy for enhancing private sector led growth in Nigeria. Unpublished manuscript. University of Benin, Benin City.
- Inegbenebor, A.U. (Ed). (2006). You can be an entrepreneur. In *The fundamentals of entrepreneurship* (Pp. 1-14). Lagos: Malthouse Press Limited.
- Inegbenebor, A.U., & Igbinomwanhia, O.R. (2010). Entrepreneurship in a developing society. In Izedonmi, P. F., & Okafor, C. (2010). The effect of entrepreneurship education on students' intentions. *Global Journal of Management and Business Research*, 10(6), 49-60
- Kuratko D. (2009). *Introduction to Entrepreneurship* (8th Edition). USA: South-Western Centregate Learning.
- Lage, M., Platt, G., & Treglia, M. (2000). Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment *Journal of Economic Education*, 31(1), 30 43. Retrieved on June 20th, 2016
- Mandara, B. M. (2012). Entrepreneurship education: A panacea to economic development. Journal of Business and Organizational Development, Vol. 4
- Nagpal, D.P. (2015) *Computer Fundamentals*; First Edition: India. Nirja Publishers & Printers PVT. Ltd.. NERDC press, Jibowu, Yaba, Lagos State.

Nworgu, B.G. (2006) Educational Research basic Issues and

International Journal of Education and Arts Vol.1, N0 4 Nov. 2023 *Methodology*: Ibadan Wistom Publishers Ltd

- OECD. (2009). PIAAC literacy: *A conceptual framework*. OECD Education Working Papers No. 34.Paris:OECD Publishing/
- Okhakhu, C.O., & Adekunle, S. A. (2012). Entrepreneurship education and development. Unpublished M.Sc Seminar Paper. Department of Business Administration, University of Benin, Benin City.
- Olaitan, S.O. (2009). The potentials of vocational and technical education for empowering youths and vulnerable adults with work skills of poverty reduction in Nigeria. Being a keynote address presented at 3rd National Conference of school of vocational education federal college of education (Tech) on vision 20-20-20 on home capacity building and empowerment of vulnerable groups in Nigeria 8th-11th June Akoka, Yaba, Lagos.
- Osalor, P. (2014). Vocational and technical education a key to improving Nigeria's development part 2 inv Vanguard 11th August, 2014.
- Princeton, R.A (2009). *Development* Retrieved on December 14, 2 0 1 0 f r o m <u>Http://www.wordnet.edu/princeton/Perl/webion?=development.ht</u> <u>ml</u>.