



EXPERIENTIAL INSTRUCTIONAL DESIGN FOR ELECTRONIC BUSINESS (E-BUSINESS) COMPETENCIES DEVELOPMENT AMONG BUSINESS EDUCATION STUDENTS IN COLLEGES OF EDUCATION IN NIGERIA

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Abstract

This study provided an experiential instructional design for electronic business (e-business) competencies development among business education students in colleges of education in Nigeria. To achieve its major purpose, literature evidences on the need of e-business competencies amongst Business education students and the poor state of technologies for learning e-business operations were reviewed. Additional literature on effective instruction, instructional strategy, experiential instructional strategy, experiential learning theory and model which form the basis of the instructional design were also reviewed. The experiential instructional design for e-business competencies development based on Kolb's 4-stages of experiential learning model was provided for use. After a cursory examination of the content of the instructional design, it was concluded that the learning activities suggested and their outcomes would meet diverse learning needs and styles of Business education students. It was also concluded that experiential instructional design would help them develop confidence for online buying and selling, thus, providing them with opportunity for self-employment after graduation. Based on the benefits derivable from this instructional design, the following recommendation was made amongst others: Business educators who want to utilize this instructional design should take into consideration all the conditions/ethical issues for its effective utilization as outlined in the design.

Keywords: *education, competencies, e-business courses, instructional strategies and learning activities*

Introduction

Education as a significant tool for socio-economic development has continued to remain at the centre of most academic discussions. The desire of most educators especially at the tertiary education level is to equip the students with learning experiences for self-reliance, by bridging the gap between content knowledge acquisition and practical application of knowledge for socio-economic survival (Abdulkarim, Pac & Ugbaja, 2017). This is in order to meet up with the primary objective of graduates of any tertiary institution, Colleges of Education inclusive, which is, to be able to adapt to changes in their immediate and global environment so as to earn a livelihood after graduation.



To assist Business education graduates especially those from Colleges of Education attain their primary objective of enrolling for the programme, Abdulkarim (2018) opined they must be assisted to develop competencies in different business courses and technology application in business through effective instruction, since competency drives the performance of tasks in accordance with laid down standards. Judy and Chris in James (2014) defined competency as the combination of knowledge, attitudes, values and skills required to perform tasks in determined situations. Mitchelmore and Rowley (2010) described business competencies as generic and specific knowledge, skills and attitudes needed to create, sustain and grow business ventures successfully. Thus, electronic business competencies are knowledge, attitude and skills required to effectively and efficiently carry on electronic business operations such as e-commerce, e-payment and e-marketing. Ozuruoke and Abdulkarim (2016) noted that with the advancement of technology and its integration in doing businesses, traditional methods of instruction such as: lecturer and demonstration methods alone cannot be utilized to assist Business education students develop e-business competencies. Therefore, the authors suggested that the development of e-business competencies such as: the knowledge of technological tools utilized in business operations, skills of utilizing these technological tools to perform business operations, and ethical issues related to the utilization of technological tools in performing business operations can be guaranteed through the utilization of other instructional strategies.

There are many instructional strategies that can be selected, designed and utilized by Business educators to assist their students develop e-business competences related to e-related topics in Business education courses. According to Gayla (2015), instructional strategy which is concerned with the approach the teacher intends to take in order to help their students to learn can be classified as: direct, indirect, interactive, experiential or independent. Each of these instructional strategies differs in their design, the learning materials required, the learning environment(s), mode of assessment, as well as in promoting effective learning (Abdulkarim, 2018). For instance, the direct instructional strategy is known to be effective for equipping students with content knowledge of any course. It is easily used to give information in the classroom setting because it is highly teacher-centered. However, when it comes to knowledge, skills and attitude acquisition related to the content, the direct instructional strategy is deemed ineffective (Gayla, 2015). Gray, Stein, Osborne, and Aitken (2013) noted that when it comes to knowledge, skills and attitude development in any course, instructional strategies that immersed students in learning activities such as: indirect, interactive or experiential are best utilized.

To immerse students in learning activities using indirect or interactive instructional strategies in Colleges of Education when handling courses or topics that require the use of electronic digital technology, in and out of classroom activities may be required. Hence, activities such as: visiting and utilizing the computer laboratory, model office technologies or the College internet centres to learn may be required since both students and their teacher would be involved in the learning process (Ramana, Padmaja & Rajeshwar, 2014).

Unfortunately, earlier researches (Ordu & Mbaba, 2012; Ezenwafor, 2012; Ukor, Agwezie & Ayemhenre, 2014) have revealed that most Colleges of Education in Nigeria lack



the requisite computer laboratory, model office technologies or College internet centres needed to expose Business education students to technology utilization in business operations. Thus, these situations which have not changed hamper the utilization of technology in promoting e-business competencies development amongst Business education students, especially for: e-commerce, e-marketing, and e-payments operations. This is despite the existence of policy for the full integration of electronic technologies in teaching and learning of Business education course that requires the use of technology at the Colleges of Education level (National Commission for Colleges of Education, (NCCE), 2012). One of the options available for Business educators to facilitate learning experiences in e-business operations and help their students to develop e-business competencies for e-commerce, e-marketing, e-payments, e-reporting and others is the use of experiential instructional strategy.

Experiential instructional strategy provides a total paradigm shift from all forms of instructional strategies used by most Business educators in Nigeria, especially in the College of Education. Gayla (2015) defined experiential instructional strategy as that which engages students in circle of real life learning experiences to enable them reflect and develop greater levels of understanding that are tested through active experimentation in any field of human endeavour. The author further noted that this instructional strategy is aimed at connecting classroom learning to real life situation where the learning will be utilized. Approaches to experiential instructional strategy are numerous. According to Wurdinger and Carlson (2010), those used in business programmes include but not limited to: case studies, reality-based learning, hands-on participation, inquiry-guided learning, client-based projects, real-life projects, internship, mentoring, business games and simulations in business activities, action learning, and authentic learning. According to Okafor (2014), any approach to experiential instructional strategy can be designed to suit any of the different models of experiential learning theories. These models include but not limited to 1 stage model, 2 stages model, 3 stages model and 4 stages model. The learning activities to be used in creating these models for business students differ. In the light of the foregoing discourse, it is obvious that utilizing experiential instructional strategy approaches to assist Business education students acquire e-business competencies would require diligent planning and designing the instruction in such a way that would facilitate the actualization of the experiential learning activities' objectives outlined. For the purpose of this study, the 4 stages experiential instruction model which is a product of David Kolb's experiential learning theory would be used to design instructions centred on development of e-business competencies for e-commerce, e-marketing and e-payment as outlined by James (2014). The e-business competencies are: ability to search for products and prices online using applications such as kongka, Jumia and kaymu; ability to compare prices online, ability to place online order, ability to make online payment, ability to design online advert, ability to sell online and ability to track customers' order online.

David Kolb (1984) Theory of Experiential Learning

Experiential learning theory as propounded by David A. Kolb in 1984 integrated the work of prominent 20th century theorists such as John Dewey, Kurt Lewin, Jean Piaget, Carl Jung and Carl Rogers who gave experience a central role in their theories of human learning and development. Experiential Learning Theory (ELT) states that knowledge is created through the transformation of experience(s). The theory is a dynamic view of learning based on a spiral learning cycle driven by the resolution of the dual dialectics of action/reflection and experience/abstraction. According to Kolb the experiential learning process involves a creative tension among the dual dialectics of action/reflection and experience/abstraction that are responsive to contextual demands. Kolb further explained that knowledge is formed as a result of grasping experience and transforming it.

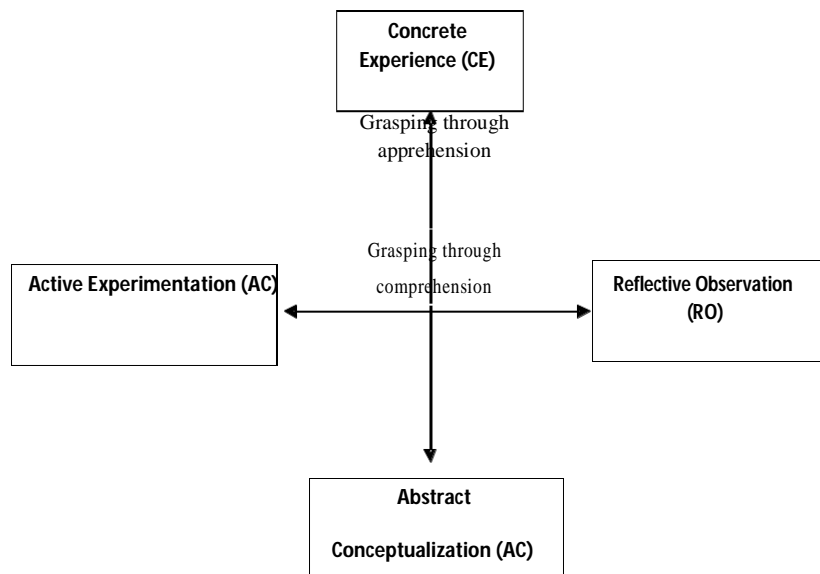


Figure 1: *Experiential Learning Cycle 4- Stages Model*
Source: Kolb (1984)

A closer examination of the ELT learning cycle as depicted in figure 1 suggests that learning requires activities that are polar opposites. These activities are those of concrete experience/abstraction and reflective observation/active experimentation. At the first stage of while grasping experience, the ELT 4-stages model shows that some students may perceive information through Concrete Experience (CE) involving tangible things; while others tend to take information by Abstract Conceptualization (AC) through analysing, thinking about or synthesizing the information. Immediate or concrete experiences are the basis for reflection and active experimentation in this learning process. The model depicted that in transforming the experiences gained through the stages of CE and AC, some students carefully observe their colleagues and reflect on the observation outcomes in order to learn



Reflective Observation (RO), while others may learn during the active application of the experience in doing things Active Experimentation (AC). These four stages through Kolb's dual dialectics of experience/abstraction and reflection/action, provide students with knowledge construction in four phases which can help to reinforced the learning experiences into the long term memory due to repetition and enhancing future recall and utilization.

Experiential Instructional Design for e-business Competencies Development

Learning Objectives:

At the end of the learning activities, students should be able to:

- i. Define what online stores do.
- ii. State the technologies needed for navigating any online store.
- iii. State the knowledge needed for buying from online store.
- iv. State the skills needed for navigating from one online store to another.
- v. Explain the procedures of buying from an online store.
- vi. Purchase from an online store item(s) not worth more than N2,000.
- vii. Make payment using any e-payment platform e.g. mobile banking, inter-switch or ATM
- viii. Explain the logistics associated with buying online.
- ix. Create e-marketing advert for reselling what they bought from online store.
- x. Market product using social media platform e.g. Facebook, WhatsApp, instagram.
- xi. State the challenges associated with buying and selling using electronic digital technology.

Learning Activities

For the purpose of grasping the knowledge students would be required to carry out the following learning activities in a team of five:

Concrete Experience (CE): Each member of the group would:

- i. Download three online stores' application on his/her smart phones e.g. Jumia, Konga and Kaymu or visit the websites of the three online stores.
- ii. Navigate through each of the online store's application and define what they offer to the public.
- iii. Purchase an educational item(s) not more than N2,000 from any of the online stores after comparing the price, quality and ease of delivery.
- iv. Design an e-marketing advert to sell the educational item(s) to colleagues at affordable prices.
- v. Collect the data of request for the items sent in by your colleagues.
- vi. Sell to Colleagues who meets the conditions of sales ensuring they make payment directly using e-payment platform.



Abstract Conceptualization (AC): Each member of the group would:

- i. Analyse and discuss how he downloaded three online stores' application on his/her smart phones e.g. Jumia, Konga and Kaymu or Visit the websites of the three online stores.
 - ii. Discuss how to navigate through each of the online store's application and define what they offer to the public.
 - iii. Discuss the procedures followed in purchasing an educational item(s) not more than N 2,000 from any of the online stores after comparing the price, quality and ease of delivery.
 - iv. Discuss and analyse his/her design of e-marketing advert to sell the educational item purchased to colleagues at affordable price.
 - v. Discuss how to collect the data of request for the items sent in by colleagues for purchase .
 - vi. Discuss how the items were sold and how payment was received from colleagues.
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- i. Observe other members talking and reflect on how he/she downloaded three online stores' application on his/her smart phones e.g. Jumia, Konga and Kaymu or visit the websites of the three online stores.
 - ii. Observe other members talking and reflect on how he/she navigates through each of the online store's application and define what they offer to the public.
 - iii. Observe other members talking and reflect on the procedures he/she followed in purchasing an educational item (s) not more than N2,000 from any of the online stores after comparing the price, quality and ease of delivery.
 - iv. Observe other members talking and reflect on how he/she designed e-marketing advert to sell the educational item he purchased to colleagues at affordable prices.
 - v. Observe member talking and reflect on how he/she collected the data of request for the items sent in by colleagues for purchase.
 - vi. Observe other members talking and reflect on how he/she sold the items and received payment from colleagues.

Active Experimentation (AC): Any member of the group who could not perform the tasks outlined at the CE stage would be asked to perform them after following what others did in the first three stages. The member would:

- i. Download three online stores' application on his/her smart phones e.g. Jumia, Konga and Kaymu or visit the websites of the three online stores.
 - ii. Navigate through each of the online store's application and define what they offer to the public.
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- i. Download three online stores' application on his/her smart phones e.g. Jumia, Konga and Kaymu or visit the websites of the three online stores.
- ii. Navigate through each of the online store's application and define what they offer to the public.
- iii. Purchase an educational item(s) not more than N2,000 from any of the online stores after comparing the price, quality and ease of delivery.
- iv. Design an e-marketing advert to sell the educational item to your colleagues at affordable price.
- v. Collect the data of request for the items sent in by colleagues.
- vi. Sell to Colleagues who meet the conditions of sales ensuring they make payment directly using e-payment platform.

Note: where all members are able to perform excellently well at all the first three stages of CE, AC, and RO, the entire group members would be required to:

Navigate the online stores for further learning and discussions.

Conditions/Ethical Issues for Using these Learning Activities.

- i. All students must have smart phones/laptops which can access the internet or download apps for browsing.
- ii. Students must be willing to spend not less than N5,000 for the purpose of buying online and selling.
- iii. Students must be willing to work in small team of five persons each.
- iv. Students must be matured at ages ranging from 16 years and above.
- v. Student must have a social media account with Facebook, WhatsApp or Instagram.
- vi. Two hours must be provided weekly for groups to meet and discussions based on the learning tasks must be given.
- vii. Four weeks must be provided for the entire learning activities.

Learning materials

The following learning materials are required of every student who will participate in carrying out these experiential learning activities:

- i. Pen
- ii. Note book or Jotter
- iii. N5000 in a dedicated bank account.

Learning tools:

The following learning tools are required of every student who will participate in the experiential learning activities:

- i. Smart phone with camera/laptop with internet connectivity.
- ii. Play Store for downloaded online stores app
- iii. Graphic apps for designing e-marketing adverts.



Learning environments:	<p>For the purpose of these learning activities, the learning environment are as follows:</p> <ol style="list-style-type: none">i. Online environment.ii. Classroom for group discussions.iii. The real world for picking and distributing items bought and sold online.
Teacher's activity	<p>The teacher is to carryout the following activities:</p> <ol style="list-style-type: none">i. Organise students in smaller groups of five persons each.ii. Provide each group with the learning activities to be carried out at each stage.iii. Monitor groups' discussions during meeting hours.iv. Receive complaints and address them immediately to ensure harmony within group.v. Design instruments for assessing students' e-business competencies and for assessing knowledge development.vi. Assess the students at the end of the forth week for examination purpose.
Formative assessment:	<p>At end of the forth week, each student would be required to fill self-evaluation form on the abilities he/she has developed through the experiential learning activities. Abilities to be assessed are:</p> <ol style="list-style-type: none">i. ability to search for products and prices online using applications such as konga, Jumia and kaymu;ii. ability to compare prices online,iii. ability to place online order,iv. ability to track order online,v. ability to make online payment,vi. ability to design online advert,vii. ability to sell online, andviii. ability to track customers' order online.
Summative Assessment:	<p>The teacher is to assess the students by administering a test based on the learning objectives testing knowledge comprehension or development covering the following questions:</p> <ol style="list-style-type: none">i. Define what online stores do.ii. State the technologies needed for navigating online stores.iii. State the knowledge needed for buying from online stores.iv. State the skills needed for navigating an online store.v. Explain the procedures of buying from an online store.vi. Explain the logistics associated with online buying.vii. State the challenges associated with buying and selling using electronic digital technology.



Conclusions

It can be concluded from the experiential instructional design for e-business competencies development given in this study that the learning process is highly student centred. This is because the students' control how they learn and what they learn in line with the predefined learning objectives and learning activities outlined. It can also be concluded that experiential instructional design aims to take care of the diverse learning needs and styles of students through learning activities cutting across the 4-stages of CE, AC, RO and AE. Hence, students who could not develop e-business knowledge and skills at one stage will eventually be taken care of at another stage of the experiential instructional design.

The implications of the foregoing conclusions are numerous. Firstly, the problem of not having well-equipped computer laboratory with internet connectivity for promoting the development of e-business competencies in Colleges of Education offering Business Education programme would be addressed. This is due to the fact that students would use their smart phones or laptops with internet connectivity to bridge such gaps. Secondly, e-business competencies related to online business transactions and e-payment can be developed by students through one-shot learning activities. Thirdly, students' confidence would simultaneously be developed in buying and selling through online platforms as they synchronously carryout some of the learning activities.

Recommendations

Within the context of the above write up and the conclusions drawn, the following recommendations were put forward:

- i. Business educators who want to effectively utilize this instructional design for teaching e-business should ensure that the conditions and ethical issues outlined in the design are met.
- ii. Business educators who want to utilize this instructional design can enhance the learning activities taking into consideration the duration of time students have and other topics to be learnt before the end of the semester.
- iii. Business educators should only use this instructional design for courses or topics that have real life application in order to enable their students develop knowledge and skills through real life learning activities.

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