

## **Learning Competencies, Innovation and Attitudinal Change as Determinants of Entrepreneurial Development among Undergraduates**

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### **ABSTRACT**

Despite several decades of recognition as a distinct field, the full potential of entrepreneurship activities has not been fully tapped and this has resulted to increase graduate unemployment, high poverty rate and dwindling economic growth. This study examined the relationship between the independent variables - Learning Competencies, Innovation and Attitudinal Change on Entrepreneurial development among university undergraduates. Being an empirical investigation, a survey of three hundred and twenty (320) students was undertaken across four selected institutions with the aid of self-administered questionnaire while two hundred and eighty six (286) i.e. 89.4% were correctly, filled, returned and analysed. Simple percentage, regression and t-test, tools were used to carry out various analyses of the study with the aid of Statistical Package for Social Science (SPSS) V.16. Findings show that the independent variables have significant impacts on entrepreneurial development. Mores so, it was revealed that factors such as poor curriculum design, inadequate infrastructural facilities, and poor capacity development for facilitators contribute to under performance of entrepreneurship education delivery in the study area. The study recommends that proper funding of entrepreneurship education and regular training and capacity building programmes are very critical if the programme must achieve its intended purpose of stimulating students' desire towards entrepreneurial career pursuit.

**Keywords:** Learning Competencies, Entrepreneurship Education (EEd), Entrepreneurship Desirability, Capacity Building, Graduate Unemployment

### **Introduction**

Over the years, entrepreneurship has continued to grow in popularity, both as an educational and research discipline (Fayolle & Gailly, 2007; Kissi, Somiah & Ansah 2015). Entrepreneurship is important because of its economic and social roles in the areas of increasing economic efficiencies; bringing innovation to market; creating new jobs thereby reducing unemployment levels (Martins, 2013). However, despite several decades of recognition as a distinct field of study, the full potential of Nigeria entrepreneurial activities has not been fully tapped. This is evident viewed from the lenses of the various economic challenges bedeviling different sectors of the economy such as graduate unemployment, high poverty rate, high job loss, pay cut among

others. In an attempt to address these, the Federal Government of Nigeria through the Ministry of Education introduced Entrepreneurship Education Programmes (EEPs) across various higher institutions of learning with a focus on equipping students with the right knowledge and competencies necessary to create economic values and jobs. However, despite the increasing popularity of EEPs among both graduate and undergraduate students in Nigeria, and a well-researched benefits of such programmes on national economy, the focus of these programmes - learning competencies, innovation and attitudinal change in relation to stimulating students towards desire for entrepreneurial pursuit has remained largely unexplored (Sánchez, 2010; Musa and Adewole, 2015). In this context, it is of primary importance to understand whether students' learning competencies, innovation and entrepreneurial attitude determine entrepreneurial development or business intentions among undergraduates, which is the focus of this study.

### **Problem of the Research Statement**

Education is considered as a tool for securing economic value and emancipation of people through the provision and acquisition of necessary knowledge and skills to make lives more flourishing (Abubakar, 2013). However, the focus of the inherited educational system under the colonial master was to teach the nationals how to read and write, thereby enabling them to serve the colonial administrations. Hence, the colonial education policy was to create a medium of being employed in the civil service as against developing student's competencies for innovative opportunities (Aderohunmu, 2011; Musa & Adewole, 2015). As such, the congenital educational system destroyed self-reliance and entrepreneurial capacities of young Nigerians as they permanently depend on monthly pay rather than being creative and innovative (Akanbi, 2013). This poor orientation (wrong attitude) has led to education-for-employment syndrome among graduates i.e. a psyche of acquiring certificates in order to seek for paid jobs in established corporate organisations or government ministries as against for personal development, self-reliance and economic autonomy. The consequential effect of this is poor learning competence which manifested in various forms of studying to pass and not to know. The absence of enterprise education in the educational policy had continued until recently when Entrepreneurship Education (EEEd) was introduced. Though EEEd has been introduced, studies have revealed its major challenges among which are: poor infrastructure, poor curriculum design, insufficient funding, poor facilitators' development (Abubakar, 2013). Several authors have further investigated EEEd and its effects on graduate employment e.g. (Adejimola and Olufunmilayo, 2009; Musa and Adewole, 2015). Others have also explored EEEd and Career intention e.g. (Akanbi, 2013, Aderohunmu, 2011). However, close to none has investigated EEEd as focused on learning competencies, innovation and attitudinal change as determinants of entrepreneurial development. This study intends to fill this gap through an empirical investigation, as its objective is to examine the relationship between learning competencies, innovation, attitudinal change (which are the core of EEEd) and entrepreneurial development among undergraduates. Consequent to the aforementioned problems; the following research questions were raised.

### **Research Questions**

- i. Does students' learning competencies and innovation stimulate entrepreneurial consciousness and development in the studying area?
- ii. Are there major challenges that impede the delivery of effective entrepreneurship education in Nigeria?

### **Research Hypotheses**

- i. There is no significant relationship between learning competencies and students' innovation on entrepreneurial development in the studying area.
- ii. Challenges of EEd delivery in Nigeria is not in any way related to funding, infrastructure, capacity development and curriculum design.

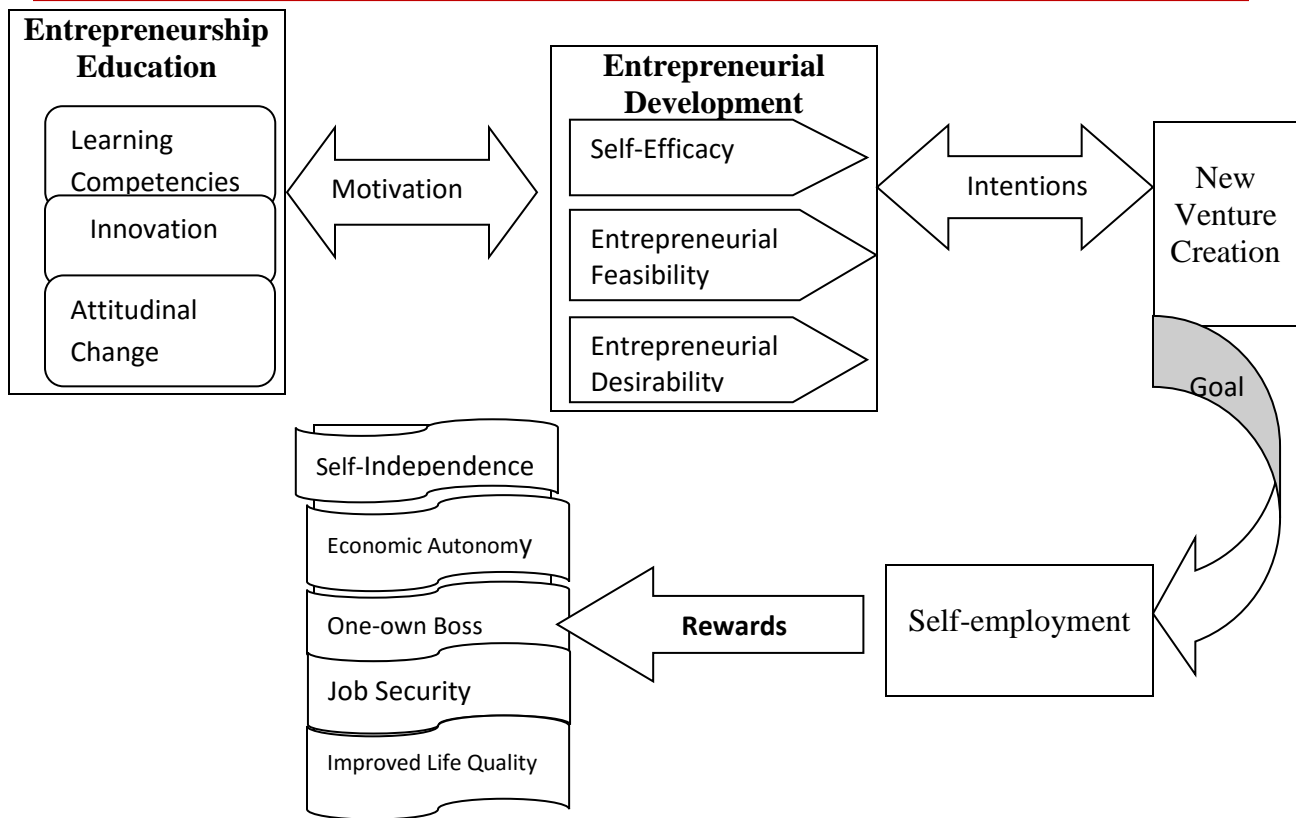
## **Conceptual Clarification and Literature Review**

### ***Entrepreneurial Learning Competencies***

Learning is the process by which people acquire new knowledge, including skills and specific competencies, from experience or by observing others, and assimilate and organise them with prior knowledge in memory to make them retrievable for use in both routine and non-routine action (Holcomb, 2009). Learning competencies involves specific knowledge and skills in self-management, planning, market orientation, networking, leadership, problem analysis, negotiation, conceptual thinking, vision, persuasiveness, value clarification, teamwork, general awareness and strategic orientation European Union (EU, 2006). Entrepreneurial Learning has recently emerged as a new practice involving both entrepreneurship and higher education processes. In the same vein, Rae (2009) describes entrepreneurial learning as learning to recognize and act on opportunities, and interacting socially to initiate, organise and manage ventures. Entrepreneurial learning competencies therefore centres on what a person should know, understand and be able to do in the context of initiating, developing and managing enterprises for personal and communal gains. Hence, researchers have linked entrepreneurial learning competencies as a major focus of EEd (Martins, 2013).

### ***Innovation***

Drucker (2001) viewed innovation as the tool or instrument used by entrepreneurs to exploit change as an opportunity. From Drucker's perspective, systematic (entrepreneurial) innovation consisted of the purposeful and organised search for changes, and in the systematic analysis of the opportunities such changes might offer for economic or social innovation. He argued that innovation, as a core area of entrepreneurial activities, is capable of being learned, as well as practiced. Innovation is the creation of new values i.e. the process of transforming new ideas into new value. Cope (2005) explained that the three major features of innovators are knowledge, skills and attitudes; and in most formal education systems, knowledge and skill are thoroughly covered while attitude is poorly addressed. Similarly, Gurol & Atsan (2005) found out that entrepreneurially oriented students are found to have a higher risk taking propensity, an internal locus of control, need for achievement and highly innovative than other students. It can be inferred from the above that individual innovativeness goes a long way to determining ones entrepreneurial capabilities. In this respect, Drucker (2001) submits that the most critical focus of any entrepreneurship education programmes is to initiate, develop and foster students' innovativeness through series of experimental and case learning.



Source: Author's Conceptual Model, 2015

### ***Attitude***

Entrepreneurial attitude and personal traits like risk taking, creativity, quick decision making are integral part of entrepreneurial activities (Holcomb et al, 2009). The focus here, however, is to examine the role of EEd in forming students' entrepreneurial attitudes, as the first form of learning is personal transformation which involves a change in one's self understanding. As emphasized by Kuratko (2003), entrepreneurship courses, acquiring entrepreneurial skills and fostering new business start-ups are important for economic independency of individual. Bandura (2001) identified the three major elements that determine entrepreneurial intention as self-efficacy, feasibility and desirability. Self-efficacy or self-confidence in a given domain is based on individuals' self-perceptions of their skills and abilities. This concept reflects an individual's innermost thoughts on whether they have the abilities perceived as important to task performance, as well as the belief that they will be able to effectively convert those skills into a chosen outcome. On the other hand, entrepreneurial desirability is the personal attractiveness of starting a business while entrepreneurial perceived feasibility is a perceptual measure of personal capability with regard to new venture creation (Krueger & Dickon, 1994). A person with a high degree of perceived desirability will feel very enthusiastic about starting a company and highly value the benefits connected with running a business.

### ***Challenges of Entrepreneurship Education***

As the world moves from a natural resource based economy to knowledge based, different types of skills and knowledge such that complement the evolving scientific, technological and socio-

economic changes are increasingly demanded (Abubakar, 2013). This appropriate human capital or resource is the ideal educational movement for producing individuals with a mindset of self-reliant, creativity and highly productive. However, in Nigeria and in other developing nations, infrastructure is a major challenge. In this sense lack of a sizable and vigorous entrepreneurial class, ready to and willing to accumulate capital and initiate production are grossly inadequate. In addition, entrepreneurship educators/trainers could significantly contribute in the change process if they are thoroughly developed for the task. Generally in Nigeria, education sector is poorly funded (Aderhounmu, 2011). The same poor funding transcends to entrepreneurship education as institutions lack infrastructure, poor capacity development for facilitators and funds for various entrepreneurial activities. Due to its multidisciplinary in nature, perhaps the pedagogical issue of entrepreneurship is always unfinished discussion (Sanchez, 2010). In the same vein, Cooney & Murray (2008) posit that the major challenge of entrepreneurship in relation to education is the appropriateness of curriculum and teaching methods in developing students' entrepreneurial competencies and skills (Gurol, et al. 2006).

### **Theoretical Framework**

Different theories have been used in literatures to advance the understanding of EEd on entrepreneurship inclination such as theory of planned behaviour by Ajzen 1975 and personality theory by Gordon 1963. However, this study is guided by action learning theory propounded by Revans in 1971. It provides a framework for examining the impact of acquired substance such as education, learning and experience on career outcomes. Action learning theory is found useful to this study on the premise that it focused on learning by reflecting on actions that solve real problem of an organization. Dickson (2008) raised a number of questions that assist in generating understanding about relationship between education and entrepreneurship. These questions revolve round how entrepreneurship programmes increases the level of individual's choice. It was concluded that in both developing and industrialized countries there is evidence to support a positive and significant relationship between education and entrepreneurial performance. In this respect, entrepreneurship education supports students' recognition and exploitation of opportunities that exist around them (Arogundade, 2011).

### **Methodology**

This study adopts a survey design to generate data for hypotheses testing. The questionnaire was designed to generate responses on relevant variables - Learning Competencies, innovation and Entrepreneurial Development. Hence, it was based on a 5-point Likert attitude scaling ranging from Very Low to Very High. The population of this study consists of 3,158 business/management related final year students obtained from the various issues of school bulletin in the four selected institutions – University of Ilorin, Kwara State University, Kwara State Polytechnic and Kwara State College of Education, Ilorin, Kwara state. The sample size consists of 320 students selected through a combination of stratified and purposive sampling procedure while a total of 286 i.e. 89.6% were correctly filled, collected and analyzed. Samples were drawn from four disciplines – Business/Management; Accounting/Finance; Marketing/Purchasing and Supply; and Business/Management Education. The reliability of the data using Cronbach's Alpha Reliability Test showed 0.635 which means that the instrument used in gathering the data was reliable and therefore exhibited internal consistency among items (questions) measuring each construct in the questionnaire.

### Test of Hypothesis I. (Using Regression Analysis)

To answer the question “if there is a significant relationship between students’ learning competencies, innovation and entrepreneurial development, the model is specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + E$$

Where:

Y = Dependent variable representing entrepreneurial development

X= 1 and 2 represent dependent variable representing learning competencies and innovation

X<sub>1</sub> = Learning Competencies (LC)

X<sub>2</sub> = Innovation (In)

E = Error term, (0, 1) normally distributed with mean 0 and variance 1.

$\beta_0, \beta_1, \beta_2, \beta_3$ , are the parameters to be estimated to fit the regression line.

$\beta_0$  = is the intercept on the Y- axis.

Model summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .854 <sup>a</sup> | .830**   | .722              | .79678                     |

a. Predictors: (Constant), LC & In

b. Dependent Variable: ED

The table above reveals that the coefficient of multiple determination 0.830; the implication of this is that about 83.0% of the variable in entrepreneurial development is explained by the variables in the model; Learning Competencies (LC) and Innovation (In) while the remaining 17% is explained by other factors that are not included in the model. The regression equation appears to be useful for making predictions since the value of  $R^2$  is close to 1.

ANOVA<sup>b</sup>

| Model        | Sum of Squares | df  | Mean Square | F       | Sig.               |
|--------------|----------------|-----|-------------|---------|--------------------|
| 1 Regression | 435.424        | 3   | 45.441      | 827.606 | .0000 <sup>a</sup> |
| Residual     | 326.694        | 283 | .088        |         |                    |
| Total        | 217.118        | 286 |             |         |                    |

a. Predictors: (Constant), LC & In

The calculated ANOVA table is analyzed to see if *any* of the variables are significant. The F-statistic is compared with 3 and 283 degrees of freedom using stats tables. From the ANOVA table,  $F = 827.606$ ,  $p$ -value = 0000 < 0.05 (sig.). Since  $p$ -value < 0.05 (critical value), the null hypothesis is rejected and the alternative accepted. This implies that at least one of the predictors is functional for entrepreneurial development in the study area. Therefore the model is useful.

Table 4 The **Coefficients** table

### Coefficients<sup>a</sup>



| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
|              | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant) | 4.816                       | .492       |                           | 9.797 | .000 |
| LC           | .266                        | .098       | .196                      | 1.695 | .004 |
| In           | .372                        | .091       | .107                      | 2.915 | .002 |

The co-efficient table above provides information effect of individual variables (the “estimated coefficient” or “beta”) on the dependent

a. Dependent Variable: ED

variables. The coefficient of Learning Competencies (LC) is 1.695 with p-value of 0.004 less than 0.05 (critical value). The coefficient of Innovation (In) is 2.915 with p-value of 0.002 less than 0.05 (critical value). This implies that each of the variables has contributed to the model. Hence there is significant relationship between entrepreneurial development, learning competencies and students’ innovation. Furthermore, we can use the values in the "B" column under the "Unstandardized Coefficients" column, to present the regression equation as:  $ED = 4.816 + 0.266(LC) + 0.372(In)$ .

**Test of Hypothesis II** (Using T-Test)

H0i: Challenges of EEd delivery in Nigeria is not in any way related to funding inadequacy, infrastructure, capacity development and poor curriculum design. From the T-Test Result below, the average response is above 4.02 and standard error of the mean is 0.000 i.e. not significant. Five-point Likert-style rating scale of 5 = Very High, 4 = High, 3 = Fair, 2 = Low and 1 = Very Low were used to scale the responses.

**One-Sample Test**

|                      | $\alpha = 0.05$ |     |                 |                 |   |       |
|----------------------|-----------------|-----|-----------------|-----------------|---|-------|
|                      | T               | Df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                      |                 |     |                 |                 | Lower                                     | Upper |
| Funding              | 4722.870        | 285 | .000            | 4.340           | 4.16                                      | 4.52  |
| Infrastructure       | 4713.152        | 285 | .000            | 4.275           | 4.09                                      | 4.46  |
| Capacity development | 5635.110        | 285 | .000            | 4.325           | 4.17                                      | 4.48  |
| Curriculum design    | 4416.846        | 285 | .000            | 4.200           | 4.02                                      | 4.38  |

We reject H0 if the p-value for two-tailed test is less than value for  $\alpha = 0.05$ , otherwise accept. Since p-value of 0.000 for two-tailed test is less than  $\alpha$ -value of 0.05, we reject the null hypothesis and accept the alternative.

**Discussion of Findings**

From the findings above, it is clearly demonstrated that EEd through learning competencies, innovation and attitudinal change enhances desirability for entrepreneurial development among undergraduates. However, it is evident that certain striking factors such as teaching methods, financial inadequacy, poor infrastructure, poor capacity development and sub-standard curriculum design militate against optimum EEd delivery. This supports the views of (Cope, 2005 and Akanbi, 2013) who have found out that entrepreneurial learning competencies and entrepreneurial attitude are major to EEd. More so (Okoli, 2011; Akanbi, 2013) emphasized on the need for more appropriate curriculum design, better financing and facilitators' capacity building for more effective delivery of EEd in Nigerian educational system. Another major finding is that learning competencies, innovation and attitudinal change (EEd) have significant impact on entrepreneurial development (self-efficacy, entrepreneurial feasibility and desirability) among undergraduates. From the findings, it was revealed that learning competencies constitutes 26.6%, and innovation constitutes 37.2% of intention to start-up an enterprise among undergraduates. Other factors as identified by Akanbi, (2013) and Onifade, (2008) such as environment, exposure, role model, parental influence etc. constitutes the remaining percentage that are not part of the model formulated.

### **Summary of Findings**

This study focuses on learning competencies, innovation and attitudinal change as determinants of entrepreneurial development with a focus on undergraduates. Two hypotheses were formulated to guide and direct the study. A survey research design was adopted and a sample size of 320 respondents was selected for the study. A total of 286 questionnaires (i.e. 86.7% retrieval rate) were correctly filled, returned and analyzed using one sample t-test and regression analysis. The result from the findings reveals that:

- i. There exists a significant relationship between learning competencies, innovation, attitudinal and entrepreneurial consciousness among undergraduates in the study area.
- ii. There exists a significant relationship between innovation and attitudinal change on entrepreneurial feasibility and desirability.
- iii. There are certain striking factors that mitigate the delivery of entrepreneurship education in Nigeria and prominent among these are: infrastructural inadequacy, poor curriculum design deprived capacity development for facilitators and poor funding.

### **Conclusion and Recommendations**

Grounded on the findings obtained from the hypotheses tested, it could be concluded that entrepreneurship education which centres on learning competencies, innovation and attitudinal change significantly impacted on entrepreneurial consciousness and development among undergraduates. This implies that the more robust the EEd and its delivery are, the more likelihood undergraduates will develop a career choice around entrepreneurship. More so, the study concludes that there are certain limitations against entrepreneurship education delivery in Nigeria and among such are poor funding, poor infrastructure, inadequate facilitators' capacity development and poor curriculum design. Driving by the findings of this study, the following recommendations were made:

- i. There is an urgent need for immediate and continuous reviewing of EEd Programmes such that will emphasize more on students' innovation and change of attitude towards appreciating entrepreneurial career.



- ii. The government through the ministry of education at federal and state levels should design a more appropriate entrepreneurship curriculum such that are practical-based and enhance students' participation through group work and case study.
- iii. Regulatory bodies such as National University Commission (NUC) and National Board for Technical Education (NBTE) must maintain strict compliance and monitoring of entrepreneurial-related activities to ensure quality control.
- iv. Finally, special entrepreneurship fund created under Tertiary Education Trust Fund (TETFUND) should be monitored specifically to provide infrastructure, capacity building and financing entrepreneurial activities in various tertiary institutions. This to a large extent will assist in achieving the main goal of EEd which is value creation and self-independence of graduates.

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