EFFECTIVE ENTREPRENEURIAL DEVELOPMENT CENTRES: GATEWAY TO SUSTAINABLE FINANCIAL INDEPENDENCE OF NIGERIAN TERTIARY STUDENTS AND GRADUATES

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Abstract
Faced with lots of socioeconomic challenges, which range from mass unemployment to high rate of inflation, dwindling foreign direct investments, and steady depreciation of the naira ultimately culminating in widespread poverty, massive entrepreneurship through effective entrepreneurial education of the undergraduate population, tend to be the way to go, for Nigeria to surmount her overwhelming socioeconomic quagmire. Consequently, this paper sought to: Identify practical and viable entrepreneurial skills that can be acquired by Nigerian tertiary students through campus entrepreneurial development centers (EDCs); examine basic requirements and standards for the effective transfer of entrepreneurial knowledge and skills to the trainees; proffer models for trainees' business start-up, financing, promotion and long term sustainability. Using a structured literature review approach, some past related studies were x-rayed to establish the relationship between entrepreneurship education and economic emancipation especially as it has to do with financial independence of the undergraduate and graduate population. Subsequently, viable entrepreneurial and vocational areas were identified as skills that Nigerian undergraduates can be trained in through their respective entrepreneurial development centers (EDCs) on campus. However, for achievement of effective entrepreneurial knowledge and skills transfer to trainees, adequate funding, standardization and equipping of the EDCs were identified as being paramount in addition to the fulfillment of other certain requirements. Finally, feasible and efficient models for trainees' business start-up, financing, promotion and long term sustainability were proffered, and thus initiating a sustainable model for the financial independence of Nigerian tertiary students and graduates through practical and effective entrepreneurial education using the campus EDCs.

Key words: *Entrepreneurial development, undergraduate population, financial independence, sustainability.*

Introduction

Entrepreneurship has been widely acclaimed to be a primary panacea for sustainable economic growth and development, as it has been the major source of job growth and economic development in developed and emerging economies. A country's economic performance is highly dependent on successful entrepreneurship in such society.

Having acknowledged this truth, the Nigerian federal government years ago, decided to embark on several entrepreneurial development programmes, with the primary objective of steering the entrepreneurship development of Nigerian graduates (Faloye & Olatunji, 2018). It was obvious as at the time even as it hasn't changed unto this day, that entrepreneurship is a form of education, a move towards self-reliance, a reasonable channel that will greatly assist in curbing unemployment problems as it emphasizes on the acquisition of skills and capacities to be self-employed and economically self-reliant.

Problem Statement

The competitiveness of an economy and well-being of individuals therein, are increasingly dependent on the level of education of the society, in which the tertiary institutions and their staff play a crucial role in the learning process of students (Uvarova et al., 2021), which include entrepreneurial knowledge transfer. According to Madugu et al. (2023), entrepreneurship education is designed to equip students with the skills and knowledge required to start and run successful businesses, and to foster an entrepreneurial mindset in them. Through entrepreneurial courses, students are expected to learn how to identify market opportunities, develop business plans, and acquire the necessary intangible resources to bring their ideas to fruition. They also learn about risk management, financial management, and marketing strategies, which are essential for any entrepreneurial success.

In Nigeria, entrepreneurship education in higher institutions was introduced with the aim of inculcating entrepreneurial skills and attitudes in students to motivate them to take up entrepreneurship as a career. However, despite entrepreneurship education being a major course in these institutions, the aspirations for white collar jobs by tertiary graduates has continued (Yusuf et al., 2020). But faced with lots of socioeconomic challenges, which range from mass unemployment to high rate of inflation, dwindling foreign direct investments, steady depreciation of the naira against global currencies, ultimately culminating in widespread poverty and poor standard of living amongst majority of the people, the way to go for the Nigerian nation tend to be nothing but Entrepreneurship! Entrepreneurship!! Entrepreneurship!!! This begins with overhauling and making entrepreneurship education more comprehensive, practical and effective. And also by transmitting it through various entrepreneurial development centers (EDCs) which must equally be sited in all tertiary institutions in the country.

As economic leaders of tomorrow, the students of various higher institutions across the country remains the nucleus for driving any form of sustainable entrepreneurial objective as a nation. These are youthful and innovative minds burning with the desire and passion for personal and career success. If such passions are promptly and

appropriately harnessed and channeled, the nation and her economy at large stands to benefit. However, if nothing meaningful is done by the appropriate authorities (government and tertiary authorities) towards economically empowering these youths, the economy will continue to bear the brunt of persistent unemployment, widespread poverty, youthful vices and other socioeconomic problems. These underlying problems underscores the facilitation of this paper, in order to come up with practicable blueprint towards tackling the aforementioned phenomenon.

Objectives

Consequent on the problem above, the aim of this paper is to:

1. Identify practical and viable entrepreneurial knowledge and skills that can be acquired by Nigerian tertiary students through the campus EDCs.
2. Examine basic requirements and standards for effective transfer of the entrepreneurial knowledge and skills to trainees.
3. Proffer models for trainees' business start-up, financing, promotion and long term sustainability.

Literature Review

Entrepreneurship

Entrepreneurship activity has been described as the process of seeking and identifying an opportunity for the creation of needs - satisfying values, which leads to starting a new venture on that basis, or improving on an existing one. It is the ability and readiness to develop, organize and run a business enterprise, along with any of its uncertainties in order to make profit (Kobani & Douglas, 2022). Entrepreneurship thus involves a dynamic process of creating incremental wealth by individuals who assume the major risks in terms of equity, time and career commitment in the course of providing a value, product or service (Oguntimehin, 2016). According to Rashid (2019), entrepreneurial activities are vital drivers of employment growth as they are able to strengthen economic dynamics and innovation in countries. Hence, entrepreneurship has the potential to reduce poverty, stimulate economic growth and boost innovation, in addition to enhancing social and environmental sustainability.

Entrepreneurship Education

Kobani and Douglas (2022), described entrepreneurship education to include all teaching, awareness, training and support activities in the discipline of entrepreneurship, intended to develop the mind of an individual into becoming an entrepreneur, with the view of making economic profit. Going further, Oguntimehin (2016) identified entrepreneurship education as a major means of assisting youths and adults to acquire desired skills and capacities, to be self-reliant or self-employed, towards setting up and managing their own ventures profitably.

Furthermore, a number of nations have gone through certain economic challenges especially in terms of job creation for her population. But higher education according to Cai et al. (2022), has been helpful in this regard in driving their national economic development by creating social wealth, playing a key role in the sustainability of future development, and contributing to the achievement of the United Nations Sustainable Development Goals. Thus, the focus of entrepreneurship education in various countries is gradually shifting from the scale of the education to the improvement of the quality of education. The reason being that innovation and entrepreneurship goes together as key factors of national competitiveness (Herman, 2022).

It has been argued that in Nigeria, graduates are merely produced for wage employment which scarcely exist in the formal sector. This huge gap can be substantially bridged through effective entrepreneurial education, which will help influence self-reliance, create employment, wealth, and finally through the youths, build a virile economy, as entrepreneurship education shoots them from obscurity to business limelight (Olanipekun, 2017).

Practical and Effective Entrepreneurship Education

The researchers' conception of practical and effective entrepreneurship education simply involves the intensive use of practical procedures and processes in the transfer of entrepreneurial knowledge, towards complementing theoretical foundations already gotten from verbal instructions, textbooks, journal articles, manuals etc. It is important to state here that by this, modern and advanced processes must be employed in order to meet up with current day trend required in the particular skill, field or vocation for which the knowledge is being passed across. In other words, the consistent use of manual, obsolete or sub-standard equipment and facilities in the dissemination of entrepreneurial knowledge, is bound to negatively affect the level of effectiveness of such vocational training. The fourth sustainable development goal emphasizes on the delivery of quality education (Samoilikova et al., 2022), thus entrepreneurship education if properly articulated, structured and implemented, will produce quality recipients and graduates who will foster job creation, reduce unemployment and alleviate poverty in Nigeria. The creation of sufficient job opportunities, will aid in taking many youths away from crimes, prostitution, violence, hard drug usage, and several other social vices (Kobani & Douglas, 2022).

Entrepreneurial Development Centers (EDCs) in Tertiary Institutions in Nigeria

Entrepreneurial Development Centers (EDCs) in higher institutions in Nigeria, are basically established for the purpose of imparting practical entrepreneurial knowledge and skills on students of the institutions in particular, and then to some other members of the larger society. Though this vision is partly being achieved in a number of higher

institutions, nevertheless, the overall achievement of effective entrepreneurial development through these centers is far from being reached, due to very obvious and systemic factors. A typical entrepreneurial development center, ought to be fully equipped, operated and managed in the highest standards in order to meet trainees' needs and invariably be fulfilling the mandate. Therefore, the center must be completely given the required facilitators, facilities and support which may flow from the institutions' management, government and other private individuals or firms. Furthermore, and most importantly, all staff and facilitators at the centers are expected to put their hands on deck to see that the purpose for which the center was established fully come to light and blossom consistently.

Theoretical Framework

Human Capital Theory

This paper is fundamentally tied to the Human Capital Theory. The theory tends to be relevant in term of the focus, pursuit and goal of this paper. The Human Capital Theory which was basically developed by Gary Becker and Theodore Schultz between the 1950s and 1960s, explains that possession of higher levels of knowledge, skills and relevant competencies is positively correlated with labor market productivity, thereby underscoring the importance of investment in human capital to enhance economic development. In terms of entrepreneurship education in particular, it has been asserted that proper education at secondary and post-secondary levels enhances the formation of a creative and inventive population with the necessary business start-up skills (Rashid, 2019).

Empirical Review

Olanipekun (2017) examined the effects of entrepreneurial education on undergraduates in Olabisi Onabanjo University, Ago-Iwoye, Nigeria. Data was gathered from one hundred and thirty-eight (138) respondents, using a questionnaire. The study revealed that entrepreneurial interests among students is high**.** It was concluded that institutions must stimulate the interest of the students by creating an enabling environment for learning, making entrepreneurship education more fascinating, especially in the areas of procurement of facilities for training.

Okeke et al. (2019) examined disruptive innovation and sustainable entrepreneurship in selected telecommunication industries in South East Nigeria. Descriptive survey design was used with a sample size of 201 from a population of 917. Using regression analysis and Pearson's Product Correlation Analysis, the study's findings showed a significant positive effect of new market disruptions on sustainable entrepreneurship opportunities.

Ibitomi and Adeleke (2020) conducted an analysis of entrepreneurship education on entrepreneurial intention among undergraduate students in Nigerian universities. A sample of 469 undergraduates were investigated in Nigeria through a cross-sectional survey while analysis was carried out using simple and multiple regression analysis. The findings indicated that there is a positive significant relationship between entrepreneurship education and entrepreneurial intention among undergraduate students in Nigeria. However, entrepreneurship skills and knowledge were identified as the determinant of entrepreneurial intention. This development gives credence to having an optimum model for entrepreneurship education. The study therefore recommended that adequate pedagogical approaches and tools be employed in universities and other tertiary institutions, that will emphasize on critical entrepreneurship education. Furthermore, effective management and policy framework for entrepreneurial activities is required

Yusuf et al. (2020) examined the impact of entrepreneurship education on polytechnic student's inclination to entrepreneurial practice, with special reference to Kaduna Polytechnic, Kaduna State. The study used survey research design, the study found that students with knowledge of entrepreneurship are more inclined to entrepreneurial practice, with male students more inclined to becoming entrepreneurs than female students. Therefore, the study recommended that students be given more exposure to entrepreneurship education in order to develop their entrepreneurial knowledge and skills to reduce graduate unemployment in Nigeria.

Madugu et al. (2023) examined the influence of entrepreneurship education on students' innovation and creativity. Multiple regression analysis was employed to analyze the data collected from 244 undergraduate students in federal universities in North-Central geo-political zone, Nigeria. The findings revealed that (1) there is a positive significant relationship between entrepreneurship education and students' innovation; (2) entrepreneurship education has a significant influence on students' creativity. Therefore, it was broadly recommended that universities should not see entrepreneurship education as the courses that must be passed through test, presentations and examinations, rather it should be assessed based on success recorded by practical evaluation of students in their chosen areas.

Udemadu et al. (2023) in a study focused on entrepreneurship innovation for sustainable development in the era of disruption in Nigeria. The objectives of this study were to examine entrepreneurship and innovation as essential drivers of development in times of disruption in Nigeria. Findings showed that entrepreneurship and innovation are essential drivers for sustainable development, addressing socioeconomic challenges, and holds the potential to shape a more sustainable and resilient future for the global

world. It was recommended that government should make policies that will favor small, medium and large-scale businesses in order to reduce unemployment rate and increase gross domestic product (GDP). Government should also create conducive industrial environment by providing the rural and urban sectors with basic infrastructures such as industrial zones; affordable, steady and reliable electricity; water supply; education; health services; and security.

Abubakar et al. (2024) examined the effect of entrepreneurship education on the entrepreneurial intention of 375 final year students of Federal University Dutsin-Ma (FUDMA), Nigeria. The study adopted a cross-sectional survey research design, The study concluded that entrepreneurial intention of the FUDMA students is strongly influenced by the combination of the graduate's personal inclination (i.e., interest, knowledge, ability, and self-confidence) and motivation from the family, relatives, friends, and known successful entrepreneurs. It was recommended that the Nigerian Universities Commission (NUC) should continue to ensure and enforce vigorously, the compulsory teaching of entrepreneurship, which focused shall be on practical skills acquisition aimed at training students to be self-reliant amongst other recommendations.

Adeyemi and Bamire (2025) examined the level of entrepreneurship skills possessed by students and their perception of entrepreneurship education; it further investigated the career choice of the students and finally examined the effect of entrepreneurship education on students' intentions towards entrepreneurship. The sample size was 540 students from three (3) universities. Having analyzed via the descriptive and logistic regression methods, the study found that fifty-two percent (52%) indicated their intentions toward self-employment after graduation while forty-two (42%) did not. Furthermore, it was found that entrepreneurship education has a positive impact on students' entrepreneurial intentions but it was not significant. The study recommended urgent government intervention in providing enabling environment for entrepreneurship education policy to thrive in Nigeria.

Entrepreneurial Knowledge and Skills Transmittable at the EDCs

Several entrepreneurial knowledge and skills that can be learnt at various EDCs in Nigeria's tertiary institutions. For the purpose of this paper, the following skills have been identified:

i. Poultry farming
ii. Snail farming
iii. Fishery
iv. Bee keeping
v. Sachet and bottled water production

vi. Cleaning agents' production
vii. Cosmetics production
viii. Deodorants and perfume production
ix. Paint production
x. POP production
xi. Packages production
xii. Ice block production
xiii. Soap production
xiv. Cake making
xv. Bread and snacks making
xvi. Cocktail making
xvii. Basic catering
xviii. Tailoring
xix. Shoe making
xx. Bags Making
xxi. Belt Making
xxii. Caps and head gear making
xxiii. Woodworks
xxiv. Welding and metal works
xxv. Hair dressing and barbing
xxvi. Photography
xxvii. Graphics and design
xxviii. Block molding
xxix. Food processing
xxx. Professional cleaning
xxxi. GSM repairs
xxxii. Electrical and electronic repairs
xxxiii. Automobile repairs
xxxiv. Tiling etc.

Note: The skills identified here are not exhaustive as there several others that can be incorporated therein.

Basic Requirements for Effective Transfer of Entrepreneurial Knowledge and Skills to Trainees at the EDCs

a. **Sufficient funding of the centers-** This is a very fundamental requirement as no organization can effectively operate to its full potential and capacity if faced with paucity of fund. The amount of fund required in the operation of this form of project will always be beyond what the schools can provide. Hence, external funding is required from government and other corporate entities, as a way of performing their corporate social responsibilities.
b. **Availability of power supply-** Consistent power supply is of critical importance in carrying out of entrepreneurial training and activities. On the premise that there is continual shortage in regular power supply in Nigeria, an entrepreneurial development center ought to have an independent power source, which could be in the form of diesel powered generator or comprehensive solar electricity system for the entire complex.
c. **Availability and commitment of professional facilitators/vocational instructors-** Having an appropriate organizational structure in place, is a pre-condition for the long term success of any organization (Agu et al., 2023). Thus, the responsibility of successfully imparting sound entrepreneurial knowledge and skills, requires a team of dedicated professionals operating in a well-structured system. Hence, the EDCs need to have sufficient and qualified human resources who must be professional facilitators and trainers as well as other backroom staff for effective service delivery. Without commitment from these set of individuals, the mandate of the EDCs will never be realized even with the best of facilities being provided.
d. **Mechanization of production processes-** Consequent on funding constraints, several EDCs around the country have continued in the use of manual, semi standard and relatively obsolete production facilities and equipment. In some cases, very vital and lucrative vocational skills are not being taught at all due to the absence of the learning tools and equipment. This issue must be addressed via the provision of mechanized production facilities either through public-private partnerships between the institutions, government and private organizations.
e. **Availability of storage facilities-** Certain raw materials, intermediate and finished products, requires specialized storage procedures and facilities for effective preservation especially for future usage or for final processing. Non availability of storage facilities can greatly impede the operational efficiency and performance of any given EDC.
f. **Deployment of information technology and digitalization facilities -** Technological innovation with digitalization and intelligence as its core features is the key force driving economic growth, the transformation and upgrading of industrial structure, and sustainable development of enterprises today (Zhou et

al., 2022). Thus, the application of digital technologies such as 5G technology, big data, cloud computing, and artificial intelligence has significantly boosted social productivity and brought new opportunities for the sustainable development of traditional industries around the world (Zhou et al., 2022). The EDCs in Nigeria's tertiary institutions, must align with these emerging global trend for functional entrepreneurial education, composed of digitally oriented vocations, curriculums and processes. A conscious and concerted effort is therefore required with the government as the lead, in conjunction with other relevant stakeholders, to utilize this game changing parameter.

g. **Research and development facilities -**There is no gainsaying that the most industrialized and developed countries of the world got there, majorly as a result of placing high premium on investments in research and development activities. Invariably, research facilities need to be put in place within the EDCs for the purpose of promoting research and development activities, and as a support structure for the entrepreneurial development centers.
h. **Management Board -** The establishment of a statutory board/committee to oversee, advice, support and assist the management of the center.

Models for Trainees' Business Start-up, Financing, Promotion and Sustainability

To properly position the entrepreneurship development centers (EDCs) for practical effectiveness, a number of initiative need to be adopted and implemented. Some of these are:

A. Start-up model

i. In terms of the business start-up, trainees who have successfully completed the entrepreneurial trainings, will first prepare and submit a formal business plan based on the field trained in. The proposal will be examined by professionals to ensure it is scalable, viable and achievable. Furthermore, there will be need to ascertain whether such venture is the type that can be combined with academic studies or the type that can only be embarked on after graduation. Whichever be the case, the coordinating authority of the program will take the necessary decisions, and the trainee will be well advised to that effect.
ii. It will also be considered to assist the intended businesses in the obtaining of business and products registrations/licenses where necessary.
iii. There also need to be intensive training and follow-up in the area of product standardization, packaging, branding, storage, pricing, marketing, book keeping etc.
iv. Guidance and assistance in the adoption and deployment of relevant modern technology especially in the area of ICT, as this will aid efficiency in the intended business operations.

v. Rendering of other necessary start-up support services.

B. Financing model

i. Funding is a very critical, challenging and salient aspect of starting a new business venture, hence there will be need to substantially support trainees, at the point of commencing the business, for which the relevant skills have been acquired at the EDCs. And as opined by Tu et al. (2023), individuals and organizations play an active role in addressing social and environmental issues, thereby eliminating roadblocks to future development. Therefore, a public-private initiative involving the government, medium and large private organizations, and the tertiary authorities, will be required across board for the purpose of supporting the funding aspect of these projects. Moreover, since the issues of unemployment and entrepreneurship development are national issues, both the federal and state governments, will respectively inaugurate committees of competent individuals, who will work out feasible and efficient models for the financial empowerments of trainees so they could practically start-up and finance their business plans.

ii. The financial empowerment of trainees can be galvanized, effected and managed through the establishment of trust funds both at federal and state levels. These financial empowerments may not necessarily be for all trainees. Rather, it will be done based on an individual trainee's formal request for it, at the completion of the entrepreneurial training, that he/she do not have the required start-up capital to effectively commence business.

iii. Lastly, to ensure the funds accessed are actually put into the purpose for which they were provided, a sub-committee may be set up to guide, assist and engage in the direct procurement of start-up operational facilities, equipment and materials, on behalf of the beneficiaries.

C. Promotional model

i. Building of campus community product lines.

ii. Creation of a local market for graduates and students' entrepreneurs. This could be in the form of;

- Seasonal placement of embargos on competing external brands from being supplied into the campus community, in order to promote campus oriented brands.
- Organizing of campus oriented product fairs periodically, to showcase, promote and stimulate mass purchase of such products.
- Use of moral suasion in encouraging the campus community to patronize the products of graduated trainees and campus based products.

D. Sustainability model

i. Each trainee at the end of the training period, should be attached to a facilitator or mentor in his/her field of interest, who will be responsible in seeing that the business start-up survives and grow into the long run. The mentor will continually guide and exercise periodic oversights on the business operations to ensure that due processes and compliances that will enhance the business sustainability are observed and maintained. The specific mandate will include funding advisory, recruitment advisory, assessment of the business books and records, financial and liquidity management advisory, capacity building, identification of operational breaches followed by collaborative rectification, potential risks assessment and issuing of other advisory services where necessary etc.

The collective adoption and implementation of these aforementioned models cannot be overemphasized, as this integrated approach will surely promote the achievement of their environmental and socioeconomic goals (Nesterenko et al., 2020).

Conclusion

The provision of practical and functional entrepreneurship education for youths, specifically for Nigerian tertiary students by various higher institutions through their respective entrepreneurial development centers (EDCs), is certainly expected to have direct positive and significant impact on the financial independence and well-being of participants both in the short and long term. The skills acquired if properly utilized, also have the tendency of positioning trainees into becoming entrepreneurial giants and major employers of labor in the long term, thereby aligning with some of the United Nations Sustainable Development Goals (SDGs). These include the goal of poverty alleviation (SDG1), economic development and unemployment reduction (SDG 8), enhancement of infrastructure and innovation (SDG 9), social equality and inclusion (SDGs 5 and 10) and sustainable production and consumption (SDG 12). This is because empowering individuals with sufficient academic education creates the necessary human capital to enhance product and process innovation, while specialized entrepreneurial education and training, enhances entrepreneurship-related human capital, skills and behaviors. Thus, the entrepreneurial development centers will have to provide practical and functional entrepreneurship education, involving the use of modern vocational learning facilities and facilitators, technologically driven equipment, advanced processes, applications and procedures, and state of the art learning environment amongst others. This will surely propel entrepreneurship education into achieving its full potential in higher institutions in Nigeria by producing graduates capable of being sustainably self-employed, financially independent and prosperous, and also contributing to the socioeconomic wellbeing of the nation at large.

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