

The Synergy between Informal and Formal Education in Entrepreneurship Education: Rivers State Universities in the 21st Century

By

Stella Ofor-Douglas Ph.D

Institute Of Education, Rivers State University, Port Harcourt, Nigeria

Faculty of Education

Mobile No: 08033097472, Email: stellaofor031@gmail.com

ORCID: <https://orcid.org/0000-0002-6855-2106>

Abstract

In the 21st century the significant impact of entrepreneurship education has been seen, it has reached greater heights due to economic changes and technological advancement. This paper looks at the synergy between formal and informal education in enhancing entrepreneurship education. Formal education is an organized, structured form of learning, while informal education tends to focus on application of real-world experiences through skills, knowledge acquired. Entrepreneurship education involves teaching and learning skills, acquiring knowledge necessary to be an entrepreneur. The synergy that exists between these two can bring about a holistic approach to understanding entrepreneurship in today's dynamic business environment. This paper aims to investigate the synergistic relationship between formal and informal education in entrepreneurship education and its influence in entrepreneurship in the 21st century. The objectives of this paper include how to achieve a synergistic relationship between formal and informal education, addresses the impact of the synergistic relationship between formal and informal education. Several problems were highlighted in the form of learning inequities, lack of resources and appropriate suggestions were proffered. It was concluded that in today's world, institutions offer education beyond the four walls of university, and useful suggestions were made.

Keywords: Synergy, employability, skills, development.

Introduction

In the present era there is a rapid change in technology and a simultaneous economic growth, the university environment has benefitted the most from entrepreneurship education. Formal and informal education are two sides to a coin in their different approach and the various ways they complement each other. In this paper, the different ways a synergy exists between formal and informal education and how their combined effect has a holistic approach to enhancing entrepreneurship education in the 21st century in universities will be explored. Ogudo cited in Offem and Ononiwu (2020) rightly said that for a nation to grow and develop. Thus, for a nation to progress and witness development, she must give the right values and education that can develop the youth into a sound and effective citizen and fully integrate the individual youth into the community. OECD (2017) seconded that by saying educational

effectiveness can be seen as the potential of a particular combination of school resources to provide desired outcomes. With organizational effectiveness included as a priority of Nigerian Universities, there will be a massive change in the quality of graduates as such a more productive workforce of which they will eventually be part. One must, thus, think of how organizational effectiveness can be used to achieve quality university education in Nigeria (Ofor-Douglas, 2022). The administrators of Nigerian universities must thus adapt to the current trend of innovation in society and the world to be up-to-date in knowledge and skills to achieve the goals and objectives of university education and sustainable development. For the administrators to achieve these goals and objectives effectively, they must adapt to the current changes in society and the world best practices globally. Students must be self-reliant, independent and be able to contribute to their National Gross Domestic Products (GDPs)). The adaptation of current global trends so that the students can be marketable locally and internationally in the labour market. Because of the innovative and competitive nature of the world, there is a need to give students good and qualitative education to adapt to changes in curriculum and trends in society. This is to prepare them (students) for new and future jobs without compromise (Ofor-Douglas), 2023). The federal government directs all higher education institutions (university education inclusive) in the country to run entrepreneurship studies programme as a compulsory course for all students irrespective of their disciplines with effect from 2007/2008 academic session (Okojie,2009) as cited in (Ofor-Douglas, 2022). The same scholar Okojie said the government of Nigeria announced the introduction of entrepreneurship education as entrepreneurship studies, to be integrated in the higher education curriculum as a compulsory course for students in respective of area of specialization. In the same vein, entrepreneurship education was introduced to provide students in tertiary institutions with the knowledge, skills, and motivation to encourage entrepreneurial success in a variety of venture (Agbonlahor, 2016). Ifediti (2014) sees it as the process of ensuring that the educational outputs graduating (students) are processed with required personnel and quantity programme, facilities and materials to meet global acceptance. Different individuals will have a different mix of capabilities for demonstrating and acquiring entrepreneurial behaviours, skills, and attributes. The 21st century is the age of knowledge and information. The age characterized by the capacity to regenerate, develop, employ and protect new and innovative ideas, which particularly comes into play in those industries that base their competitive advantages on advanced technologies. Abdul (2020) is of the opinion that graduates equipped with 21st

century skills play a vital role in supporting organizations to outperform their counterparts, both in terms of competitiveness and as well as sustainability performance. These skills include creativity, critical thinking, collaboration, leadership, perseverance, and social skills combined with performing effectively as part of a team represent important categories of 21st century skills. There are the skills which are rooted in entrepreneurship education and in the present context, entrepreneurship education, with its focus on innovation, has become an attractive strategy for policymakers to drive growth through socio-economic activity and create jobs (Komarkova, Conrads, & Collado, 2015). Entrepreneurship education for a long time has been recognized as vital, although a gap exists in how best to integrate formal and informal education in achieving better entrepreneurship outcomes. This paper is precisely to address this gap.

Synergy

Synergy is an interaction that exist between two different parts or components which work together to create something more beneficial than the original components existing independently. It can be seen as interlocking of two concepts to a whole. Synergy can also be referred as the symbiotic relationship of two concept for mutual benefits of each other to achieve goal and objectives. In the context of formal and informal education, it is a beneficial relationship that can exist when two different modes of learning are brought together. Creating synergy in the education sector should be encouraged especially in the university as it will bring about a great deal of outcomes to the students and the labour market alike for productivity. For an organization to sustain its success, it must secure a competitive edge, which in turn demands strategic alignment and creativity.(Dobni, 2010) as cited in Aldaihani and Alshemary (2019). Adetula and Dele-Oyo (2018) extensively carried out a study and investigated marriage between formal and informal education and their possibilities for quality education in Nigeria. This study explored the potential implications of synergizing formal and informal education in Nigeria to enhance the quality of education. The research emphasizes the importance of recognizing and valuing informal learning, integrating it into the formal education system, and ensuring teacher preparedness, curriculum relevance and community involvement for sustainable education development. The Synergy approach leads to desirable results that are related to the capabilities and resources of the institution (Varanavicius & Navikaite, 2015) cited in Aldaihani and Alshemery (2019). The synergy system has countless advantages such as self-regulation, self-development, and high quality (Smironv, 2016) cited in Aldahani and Alshemery (2019).

Education

Education is a formal and informal process of impacting knowledge and skills on individuals. Education serves as a means to not only impart academic knowledge and abilities, but also to mold the character, attitude, and perspective of pupils (Prastyaningtyas et al., 2023). Education plays an important role in shaping individuals into educated, cultured members of society and possessing relevant skills.(Fauzi, Tuhuteru, Sampe, Ausat, & Hatta 2023). Education is a formal and systematic process that aims to transmit knowledge, skills, values and cultural norms from one generation to the next (Cahyono et al., 2023). Education can be a powerful tool for individual self-determination (Guay,2021) . The aim of education is to build human character and to make young generation so that they might assist in achieving the democratic values (Ekwealor & Orizu, 2021). The United Nation Decade for ESD (DESD, 2005-2014) encouraged innovative approaches to education in order to contribute to the societal transition towards sustainability through both the formal education system and non-formal learning settings (Buckler & Creech, 2014).

Okoro and Afuruobi (2014) mentioned that education is a formal or informal process of assisting an individual to develop his capabilities using adequate guidance and direction. Tibury (2003) in Duru and Opara (2017) is of the view that education is designed to motivate, equip and involve individuals and social growth in reflecting on how they currently live and work. In making informed decisions and creating ways to work towards a more sustainable world. Education has a vital role in cultivating a positive outlook and fortitude, as it enables individuals to reframe setbacks as valuable occasions for personal development and advancement (Manafe., 2023).

Duru and Opara (2017) clearly stated that education is an instrument with which to change structures and ideologies that keep people subordinate. It helps people gain access to resources, contribute to decision-making, gain control over their lives, and improve on their societal values. The importance of education as a comprehensive and interconnected system is of utmost significance in establishing attitudes and values that are pertinent to entrepreneurship (Ausat., 2023). The importance of education cannot be overemphasized going by the various definitions as it is very important for growth and development in society.

Informal and Formal Education

Informal Education is a mode of learning that outside the traditional learning environment and is usually carried out through workshops, seminars, internships and is applicable in problem-solving and real life applications. Informal education includes all the socio-human and cultural actions that occur spontaneously, often as daily activities and without an organized framework, which enable acquiring knowledge, skills, and competence (Manolescu, Florea & Arustei, 2018).

Informal education encompasses a range of traditional and community-based learning methods that have been passed down through generation (Izeuma, 2015). Informal education includes traditional practices, cultural knowledge and practical skills that are rooted in the local communities (Limsay, 2017 as cited in Movchan (2023); Jegede, 2016). This knowledge and skills are a means of empowerment. Movchan (2023) clearly stated that informal learning is an important notion, particularly for individuals who need to keep up with fast-paced technical and economic advancements.

Informal education happens outside the classroom, at homes in after-school programmes, community-based organizations, museums, and libraries. Informal education is the learning that goes on in daily life, parents and other caregivers, for example, may show children how to prepare family food or tie their shoelaces. Casgrain (2015) is of the opinion that this knowledge encompasses the information acquired from our parents, elders, and surroundings. Collaborative learning can happen in an informal way in the work place where two or more individuals strive for a joint outcome by working and building a shared understanding (Kaendler, Wiedmann & Rummel, 2015 as cited in Hewko, 2023). Informal education is education that is practice based and task-oriented learning (Decius, Damowsky & Schaper, 2022).

Hewko (2023) affirmed that this shape has the capacity to adapt to the demands and requirements of diverse persons or groups. Its purpose is to address the deficiencies and inconsistencies in the conventional educational system (formal learning) and fulfil the pressing requirements that are overlooked by formal education. This is informal education. Friends may encourage each other to talk about things that have happened in their lives, through which they learn how to process their feelings and arrive at appropriate actions and reactions (Ololube & Egbezor, 2012). Non-structured education has provided several entrepreneurs with the opportunity to create successful businesses (Sahut, 2013). Participant use their own work experience and knowledge to start up their business (Sharafizad, 2018). Cedefop (2014) clearly articulates the distinction between informal and formal education as

follows: Informal learning is results from daily activities related to work, family, or leisure. It is not organized or structured in terms of objectives, time, or learning support.” Informal learning is in most cases unintentional from the learner’s perspective” (Cedefop. 2014).

Formal education is a mode of learning that involves a comprehensive, structured education in the four corners of a school, university. It is usually programmed to a curriculum or certain standards. Formal education is a planned and organized. Learning concept that is carried out under the guidance of a trained professional. It is a lesson that takes place inside the four walls of a classroom with a defined curriculum context (Johnson, 2017). Likewise, Stefanidi (2020) posited that formal way of learning that is highly organized and follows certain criteria, requiring learners to adhere to these norms.

Formal education involves the training and developing of a population’s knowledge, skills, and character in a structured and certified programmed that take places in a school setting. Formal education is classroom-based and delivered by qualified teachers. Formal education includes elementary schools, secondary schools, and post-secondary schools (colleges, trade or technical schools, and universities (Ololube,2011) as cited in (Stefanidi, 2020). Law insider (2023) averred that formal education infer to as instruction in structured learning environments that follow a prescribed curriculum. Oliha (2019) opined that in a formal education setting, students typically progress through a predefined sequence of subjects and grade levels, gradually acquiring knowledge and skills in a hierarchical and cumulative manner. Akubuilu et al. (2014) as cited in Oliha (2019) affirmed that more emphasis is place on formal education in Nigeria with adult and non-formal education being neglected. Abbas (2016) acknowledged that formal schooling is one of several important contributors to the skills of an individual and to human capital. Formal education is typically characterized by the use of standardized assessments, fixed schedules, designated learning spaces, and the awarding of recognized qualifications of degrees (Oliha, 2019). **Likewise**, Formal learning occurs in an organized and structured environment such as in an education or training institution or on the job and is explicitly designated as learning (in terms of objectives, times, or resources) Formal learning is intentional from the learner’s point of view. It typically leads to certification (Cedefop, 2014).

Entrepreneurship Education

Entrepreneurship education is education that includes the incorporating of skills, knowledge, and attitudes necessary for creating, managing and exploring new ventures. Its purpose is to enhance students’ mindset with the tools to innovate, identify opportunities, and navigate the

entrepreneurial landscape. Entrepreneurship education can be delivered through both formal courses and informal programs. Entrepreneur education can be referred to as any or a collection of teachings, workshops, and seminars to create an awareness in business, entrepreneurship skills or in development of a business (Ofor-Douglas, 2022). Additionally, according to Ogundele (2015), as cited in Ofor-Douglas (2022), entrepreneurial education is a program or component of a program that prepares people to undertake the formation and operation of business functions related to a product or service with an emphasis on the social responsibilities, legal requirements, and risk for the sake of profit involved in the conduct of private education given to a group of people in order to be able to instill in them the principles, skills, and practices to see and evaluate business opportunities along with the necessary resources and the desire to take advantage of them, as well as the appropriate action to ensure success in any unexpected profession or occupation. Jones and English (2004) as cited in (Kamis et al., 2017) rightly put it that entrepreneurship education is the process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge, and skills to act on them Entrepreneurship education can be conceptualized as the type of educational process geared towards equipping students with creative and innovative ideas that will enhance self-employment and job creation (Ibe, 2014). Essien (2014) explained entrepreneurship as the totality of self-asserting attributes that enable a person to identify latent business opportunities. The capacity to organize need resources with which to profitably take advantage of such opportunities in the face of calculated risks and uncertainty.

Entrepreneurship has been identified as a key facet of any nation's economy and is the crucial driver for employment and economic growth; it touches human lives through introduction of new technologies, products, and services (Gautam & Singh, 2015; Balasubramanian, 2012). Maduiké (2013) opined that entrepreneurship education is the educational process that gives people the capacity and know-how to become independent and deal with the changing challenges presented by the harsh economy. Otoja and Obodumu (2017) observed that the Nigerian public has expressed dissatisfaction with the role that admission to a university play in the advancement of both the individual and the country.

Entrepreneurship education seeks to provide the knowledge, skills, and motivation to encourage owning one's business and managing it in order to succeed and be self-reliant (Ijaiya, 2014). Nkechi, Ej and Okechukwu (2012) emphasized that entrepreneurial success depends on an entrepreneurial ability to identify opportunity in the environment, take

initiatives towards desirable change and ensure value-based solution. Entrepreneurship education was introduced to provide students in tertiary institutions with the knowledge, skills, and motivation to encourage entrepreneurial success in a variety of venture (Agbonlahor, 2016)

Onwenoye (2019) is of the opinion that Nigerians have their way of imparting knowledge, skills, and attitude to the young ones and trainees under their control. Some of the methods they adopted among others were direct instructions, demonstration, and questioning. And the learners must pay attention, which carefully what the master craftsman is doing, answer and ask questions if any. Dabic and Potacan (2012) as cited in Ordua and Abule (2020) said we are living in a freckle world of systematic turbulences characterized by swift dramatic changes. This implies that Nigerian students' needs urgent skills upon graduation instead of relying on certificate for white scholar job so that they will be self-reliance and boost the economy of the country in the 21st century. Riskatu and Abdulfatah (2010) as cited in Ofor-Douglas (2022) that empowerment is removing obstacle for an individual and others. Entrepreneurship promotes human empowerment, which is an aspect of nation building and sustainability. Oluchi and Ahmed (2017) proposed that entrepreneurship education is a method for youth empowerment because it equips young people with the knowledge, skills, and capacities for self-employment, which promotes the generation of jobs among young people.

Lackeus (2015) is of the perception that the idea of entrepreneurship education has spurred much enthusiasm in the last few decades. This has resulted in a myriad of effects such as economic growth, job creation, and increased societal resilience, as well as individual growth, increased school engagement, and improved equality.

Issues

The hurdles identified in this paper consist of the following;

1. Limitations in the Curriculum

In Nigeria there is a focus on theory more than practice, and for the curriculum this means more on theoretical knowledge more than practical skills. This is detrimental as informal education focuses on real life applications based on knowledge and skills acquired. Therefore, this creates a mismatch in skills and the individuals involved are considered lacking in entrepreneurial skills which are vital to keep up with the changes in the business environment. As a result of this focus, the curriculum will not be regularly updated to meet up to emerging trends. When curriculum limitations and lack of engagement exist, the

learning experiences in formal settings may not align with the hands-on, practical, and innovative approaches found in informal education, leading to fragmented learning. Ogwu (2016) mentioned that many a time, most beautiful curriculum plans tend to fail at the implementation stage due to poor policies, human and material resources. Furthermore, the task of drawing up course content to be included in the curriculum of entrepreneurship-related education programme in Nigerian universities will require a very long educational process (Blenker et al., 2008 cited in Kayode & Olorundare, 2014).

2. Lack of Resources

This means that there is an unavailability, insufficiency, and absence of important materials, resources. Programs which can offer a comprehensive education on entrepreneurship are greatly underfunded. This resource constraint can be detrimental to training and retraining of lecturers, access to relevant materials and technology, leaving students at a disadvantage compared to those benefiting from informal education programs that leverage technology for learning and exploration. Kayode and Olorundare (2014) firmly believed that entrepreneurship education is capital intensive and both lecturers and students need money to practice the theory of initiating, establishing and running enterprises. This undoubtedly constitute constraints which subsequently frustrate the integration of the entrepreneurship in academic programs in Nigerian universities. Kire and Husayn (2014) rightly put it that formal and informal education is a capital-intensive expedition in terms of equipment, tools, laboratory, workshop, and manpower training and retraining. It, however, appears that most Nigerian governments at all levels do not realize this but rather take a wide deep into formal and informal education ventures only to be financial stricken midway. For this singular reason, most of the objectives of National Policy on formal and informal education are hardly realized.

3. Learning Inequity

Learning inequity referred to unequal distribution of learning opportunities, resources that hinder academic pursuit. Students from under-resourced universities may have fewer opportunities to engage in both informal and formal entrepreneurial education, leading to inequities in skill development and access to entrepreneurial resources as compared to students who have access to better learning opportunities. UNESCO (2012) stated that evidence suggests that young people with an inadequate level of skills further deprive equitable economic growth and social cohesion. Furthermore, there is evidence in Nigeria that a high rate of graduate unemployment exists, which is not due to a lack of jobs, but rather

a lack of employable skills that the labour market requires. There is also a skill gap and mismatch (Oladokun & Gbadegesia), 2017).

4. Inadequate job opportunities

Inadequate job opportunities is a situation where there are limited job openings, low paying jobs, lack of job security, a mismatch between skills and jobs and the available jobs do not meet the needs and expectations of jobseekers. Kire and Husayn (2014) asserted that most graduates from the vocational/technical institutions in the country find it hard to obtain job placement either in public or private establishments or to become self-reliant as entrepreneurs. The reasons are partly due to un-expanding labour market for these professionals and poor training received to equip them for self-employment, as opposed to the situation of artisan apprentices.

5. Employability skills

In the world of entrepreneurship, there is an increasing demand for skills that are not the focus of formal education. Therefore, there exists a gap between formal and informal education. Entrepreneurship involves critical thinking and problem-solving, and this is what informal education embodies. More often than not, there is not much of a collaboration between the institution and industries, where individuals will be exposed to real life working experiences. Employability is encouraged by a mix of formal and informal learning. It is therefore not advisable to restrict learning either to formal training or to participation in informal learning opportunities. When it comes to maintaining or increasing employability, it is not in the interest of employees to rely solely on increasing knowledge and skills pertaining to their current job (Beatrice ,van der , Jo , Marcel , van der & Ely, 2008).

Conclusion

Formal and informal education is important in the 21st century. It is imperative that a synergy exists between them. In this century, the economy has become more dynamic and needs critical thinkers and problem solvers. That being said, formal education involves a structured learning experience involving academic programmes, an organized curriculum and informal education requires vocational and technical know-how. A connection between these two approaches requires a conducive learning environment, especially in the digital age that is changing by the day. This could be in the form of online courses, webinars etc. In the course of engaging in the synergy between formal and informal education, there will be a shift in how entrepreneurship education is viewed to adapting to every unique changes globally.

Suggestions

The following suggestions are proffered to ameliorate the aforementioned issues;

1. Incorporating practical based entrepreneurship forms and concepts in the curriculum. Entrepreneurship education in universities should cover a wider range of practical skills which will involve critical thinking and creativity. This will expose students to real life experiences.
2. Cultivating a relationship between educational institutions and businesses. Partnership between institutions, businesses, and the government should be encouraged to provide an environment for better learning opportunities and sharing of resources.
3. Establishing proper funding policies for entrepreneurship programs. There should be an allocation of funds to cater to the needs of established entrepreneurship programmes, and free online courses should also be encouraged.
4. Entrepreneurship programmes should be designed in such a way that is accessible to any group of individuals, regardless of their educational background.
5. There should be a collaboration between industry and universities to gain real life experiences and further encourage enhancement of knowledge and skills.

References

- Abbas, T.A. (2016). Analysis of management practices in Lagos State. Tertiary institutions through total quality management structural framework. *Journal of education and practice*, 7(8), 1-14. Retrieved from www.iiste.org.
- Abdul, G. (2020). Convergence between 21st century skills and entrepreneurship education in higher education institutes. *International Journal of higher education*, 9(1), 30-45.
- Abule, Z. & Ordua, G. (2020). Innovative entrepreneurship and apprenticeship program of university students in River state. *International of Journal of innovations in accounting, management and social sciences*, 8(2), 22-29.
- Adegbuyi, A.A., Fadeyi, O.I., Olalele, J.K., & Adegbuyi, O.A. (2016). Nigerian socio-economic development: The roles and challenges of small and medium enterprises development agency of Nigeria (SMEDAN). A descriptive perspective 3rd international conference on African issues (CU-ICADI), Pp.220-235.
- Adetula, L.O. & Dele,-Ojo, J.O. (2018). The marriage between possibilities for quality education in Nigeria. *Journal of international cooperation in education*, 1(4), 35-43. <https://www.jstage.jst.go.jp/article/jice20>.
- Agbonlahor, A.A.(2016).Challenges of entrepreneurial education in Nigeria universities: towards a repositioning for impact. *Journal of education and social research*, 6(1), 208-215.

- Agu, O. & Chiaka, I. (2013). Entrepreneurial characteristics and competencies as determinants of corporate performance: A study on small enterprises in ruogadishu, Somalia. *International Journal of research*, Granthaalayah, 5(5), 243-254.
- Ajibola, A.L. & Habiba, A. (2014)/ Promoting Sustainable development in Nigeria via moral education. *Journal of education and practice*, 5(34), 119-125.
- Aldahani, S.G. & Alshemery, S. (2019). The reality of synergy between colleges of education and the ministry of education from the perspective of educational leaders. *International academic conference*, Barcelona. DOI: 10.20472/IAC 2019052: 002 <https://netproceedings/intern.atlc>
- Aldaihani, S.U. (2017). Synergy among school and district leaders in the application of quality standards in Kuwaiti public schools. *Journal of education and practice*, 8(14), 97-104.
- Aldaihani, S.G. & Alshemery, S(2019). The reality of synergy between colleges of education and the ministry of education from the perspective of educational leaders. International Academic Conference, Barcelona. DOI : 10.20472/IAC 2019052: 002. <https://netproceedings/international.atlc>
- Alkandari, E. (2013). Perceptions of the effectiveness of Kuwaiti's strategic education planning policy and processes. Doctorial disertation, University of Leeds, United Kingdom.
- Al-safran, E. Brown, D. & Wiseman, A (2014). The effect of principal's leadership style on school: Environment and outcome. *Research in higher education journal*, 22. 1-19.
- Amubode, A.A. & Goriola, O.R. (2015). Assessment of entrepreneurial traits and among undergraduates' students of clothing, textiles and interior decoration. *International Journal of marketing studies*,7(4), 94-104.
- Atakpa, R.A. (2016). Entrepreneurship education in tertiary institutions in Nigeria: Relevance, changes and strategies. *Online Journal of art, management and social sciences (OJAMSS)*.1(2), 84-88.
- Ausat, A. M. A., Ayesha, I. Rijal, S., & Saranani, F. (2023). "The Nature of Entrepreneur in the Perspective of Professor Musa Asy'arie's Philosophy of Existentialism," *International Journal of Professional Business Review*, 8(8).01364. doi: 10.26668/businessreview/2023.v8i8.1364.
- Ayatse, F.A.(2013).driving entrepreneurship education in Nigeria: Issues and challenges. *International Journal of business and management review*, 1(4), 83-90.
- Batool, H.; Rasheed, M.I., Mark, S., & Hussain, S. (2015). Application of partial least square in predicting e-entrepreneurial intention among business students: Evidence from Pakistan. *Journal of innovation and entrepreneurship*, 4(6),1-16.
- Beatrice, I.J.M., Van der H., Jo, B., Marcel R., Van der K. & Ely M.(2008). Does Informal learning Enhance Employability. Open University of Netherlands, Maastricht School of Management, Twente University.

- Buckler, C. & Creech, H. (2014), Shaping the future we want: UN Decade of education for sustainable development. Final report. UNESCO.
- Cahyono, A. S. Tuhuteru., L. Julina., S. Suherlan., S. & Ausat., A. M. A. (2023). "Building a generation of qualified leaders: Leadership education strategies in schools," *Journal on education*, 5(4), 12974–12979, 2023, Accessed: November. 23, 2024. [Online]. Available: <https://jonedu.org/index.php/joe/article/view/2289>.
- Casgrain, D. (2015). Difference between formal and informal education. Researchgate.net.
- Cedefop, (2014). Terminology of European education and training policy. A selection of 130 terms (2nd ed) Publications office of the European Union. <https://www.cedefop.europa.eu/en/events:-and-projects/projects/validation-non-formal-and-formal-learning/European.inventory/European-inventory-glossary#-text=learning%20occurs%20an.it%20typically%20leads%20an.It%20typically%20leads%20to20certification>.
- Decius, J., Damowsky, A., and Schaper, N. (2022). The casual within the formal education: A model and measure of informal learning in higher education researchgate.net.publication/360227343.
- Durowoju, S.T. (2014). Role of Entrepreneurship in small and medium enterprises development in Nigeria. *Renew of public administration and management*, 3(5), 1-14.
- Duru, V.M. & Opara, C.C. (2016). Strategies ways of achieving sustainable development in Nigeria through UBE programme. In G.S. Unachukwu, B.C. Ijoma eds. *Education and Sustainable development: The Nigerian Academy of Education*, 1(2), 113 -123.
- Ekwealor, F.N. & Orizu, N. (2021). Educational administration for national integration. *Journal of Assertiveness*. 15(1), 1-15.
- Essien, B.S. (2014). The Nigerian business environment and growth constraints of micro and small-scale manufacturing industries. *American International Journal of social science*, 3(6),67-76.
- Ezeani, N.S. (2014). Business education practice. Mentoring and technology alignment, *Nigerian Journal of business education*, 1 (3), 182-199.
- Ezenwafor, J.I. & Olaniyi, O.N. (2017). Rating skills needed business education graduates for entrepreneurial development in South-West Nigeria. *International Journal of entrepreneurial development education and science research*, 4(1), 165-177.
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A. M. A. & Hatta, H. R. (2023). "Analysing the role of ChatGPT in improving student productivity in higher education," *Journal on Education*, 5(4), 14886– 14891. doi: 10.31004/joe.v5i4.2563.
- Federal Republic of Nigeria, (2014). NADEC Lagos Press.
- Fink, S. (2012). School and District Leaders as instructional experts: What we are Learning. Washington: University of Washington College of Education Center for Educational Leadership. Available at: [http:// info. K-12Leadership.org/download-school- and – district-leaders-as-instructional-expertise-what-we-are-learning](http://info.k-12leadership.org/download-school-and-district-leaders-as-instructional-expertise-what-we-are-learning).

- Foster, P. Quarcoo, R., Ashong, L.E. & Ghanney, V. (2017). Views of teachers-trainees in clothing and textiles education in two teacher education universities in Ghana. *World Journal of education*, 7(1), 1-13.
- Gautam, M.K. & Singh, S.K. (2015). Entrepreneurship Education: Concept; Characteristics and implications for teacher education. Shaikshik Parisamvad. *An International Journal of education*. 5(1)21-35. Balasubramanian, A. (2012). Entrepreneurship education: The Hindu. Retrieved from <http://www.thehindu.com/todayspaper/tofeatures/toopportunities/entrepreneurshipeducation/article3860321.ece>
- Gribb, A. & Prince, A. (2014). A Compendium of Pedagogies for teaching entrepreneurship. Retrieved from <https://ncee.org.uk/wp-content/uploads/2018/01/compendium-of-pedagogies.pdf>.
- Guay, F. (2021). Applying self-determination theory to education: Regulation types, psychological needs, and Autonomy supporting Behaviours. *Canadian Journal of social psychology*, 37(1), doi.org/10.117/082957352110553
- Hewko, A. (2023). Formal versus informal education: Differences, similarities, and how to use both. Research gate.net.
- Hisrich, R. D. Peter, M.P (2020). Entrepreneurship (11th ed). McGraw-Hill education. <https://unesdoc.unesco.org/ark:/48223/pf0000218003>
- Ibe, U. A. (2014). The challenges of entrepreneurship education in Nigeria tertiary institutions. *Nigerian Journal of technology teacher education*, 4(1), 76-85.
- Ifediti, C. J. (2014). Instructional supervision and quality assurance in Nigeria schools. *European Journal of business and social science*, 4(9), 22-29.
- Ijaiya, B. S. (2014). *Addressing youth unemployment through entrepreneurship education*. University of Port Harcourt press.
- Izeuma, F. N. (2015). *Knowing the leadership Style in Organization*. Roney Publication.
- Jegede, O. (2016). Open and distance learning practices in Nigerian higher institutions of learning. Being an invited keynote address at the learning center distinguished lecture and stakeholders. Forum Held at the International Conference centre, University of Ibadan, Thursday 14th Friday, 15th July, 2016. Retrieved 16th September, 2024 from www.olugbemirojegede.com/odl.
- Johnson, C. (2017). The impact of information education in formal education in science: A symbolic relationship. A capstone submitted in partial fulfilment for the degree for Master of arts in education: Natural science and environmental education, centre for Global Environmental Education Hamline University, Saint Paul, Minnesota.
- Kamis, A., Alwi, A., Ismail, B.L.H., Zakaria, N., Yunus, F.A. N.Y. (2017). Integration of Green skill in sustainable development in technical and vocational education. *International Journal of Engineering research and application*, 7(12) (Part-3) 01-12

- Keith, N., Unger, J.M., Rauch,A., & Frese, M. (2016). Informal learning and entrepreneurial success: A Longitudinal study of deliberate practice among small business owners. *Applied psychology Journal*. 65(3), 515-540.
- Kire, C.G. & Husayn, M.M. (2014). Vocational and technical education: A reflection on formal and non-formal entrepreneurship education in Nigeria. *Research on humanities and social sciences*, 4(27), 1-14.
- Komarkova, I., Conrads, J., & Collado, A. (2015). Entrepreneurship competence: An overview of existing concepts. *Policies and initiatives*, JRC science hub.
- Lackeus, M. (2015). Entrepreneurship in Education: What, why, when, how. Paris: Centre for entrepreneurship, Organization for economic development and cooperation.
- Limay, N.S. (2017). *Providing Job satisfaction in a social organization*. Chakachi publishers.
- Maduiké, L.A., & Maduiké, I.M. (2013). The Role of agricultural entrepreneurship education on rural youths, capacity development and poverty reduction in Nigeria. *Journal of occupation and training*, 5(4), 138-149.
- Mafe, O. A. T. (2010). Effectiveness of SIWES with respect to chemical Engineering paper presented at the workshop on achieving the necessary standards on Chemical Engineering in our universities. University of Lagos.
- Maiyo, C. R., Abong, O. S. & Tuigon'g R. D. (2014). Establishing the training needs of Kenyan university fashion and apparel graduates. *International Journal of sciences, basic and applied research (IJSBAR)*, 13(1), 1-10.
- Manafe, M. W. N., Ohara, M. R., Gadzali, S. S., Harahap, M. A. K & Ausat, A. M. A (2023). "Exploring the Relationship Between Entrepreneurial Mindsets and Business Success: Implications for Entrepreneurship Education," *Journal on Education*, 5(4), 12540–12547, doi: 10.31004/joe.v5i4.2238.
- Manolescu, I. T.; Florea, N.; & Arustei, C. C. (2018). Forms of learning within higher education. Researchgate.net.
- Movchan, S. (2023). Difference between formal and informal learning. Researchgate.net.
- Muzenda, V. & Duku, N. (2014). Examining the relationship between the clothing and Textiles Curriculum and the world of work. *Mediterranean Journal of social sciences*, 5(16), 409-418.
- Nkechi, A., Ej, E.I., & Okechukwu, U.F. (2012). Entrepreneurship development and employment generation in Nigeria: Problems and prospects, 1(4), 88-102.
- Nzei, J.A. & Avubayi, D.O. (2023). An Assessment of the adequacy of the university clothing and textiles curriculum in equipping students with entrepreneurial skills for self-employment. *Delsu-Journal of educational research and development*, 20(1), 33-45.
- OECD (2017). The Funding of School Education: Connecting Resources and Learning. <http://dx.doi.org/10.1787/9789264276147-en>

- Offem, O. O. & P.N. (2020). Educational administration and exploring new trends in the funding strategies for improving entrepreneurship education for sustainable national development. *African Journal of educational management teaching and entrepreneurship studies*, 1(1), 24-32.
- Ofor-Douglas, S. (2021). Creative university educational management: A sine qua non for sustainable national development. *The intuition*, 9 (1), 1-15.
- Ofor-Douglas, S. (2022). Improving Quality University Education for Sustainable Growth, Security and Development in Nigeria. *African Education Indices*. 12(1), 1-18.
- Ofor-Douglas, S. (2022). Managing innovative university education for the attainment of sustainable development goals in Nigeria. *East African Journal of arts and social sciences*, 6(1), 282-292. <https://doi.org/10.37284/eajass.6.1.1201>
- Ofor-Douglas, S. (2022). Organizational effectiveness: A necessary tool for achieving quality university education in Nigeria. *East African Journal of interdisciplinary studies*, 5(1), 170-181. <https://doi.org/10-37284/eajis.5.1.760>.
- Ofor-Douglas, S. (2023). Nigerian university education and the global questions: Implications for sustainable development. *East African Journal of education studies*. 6(2), 72-84. <https://doi.org/10.37284/eajes.6.2.1231>.
- Ogwu, E.N. (2016). Challenges in implementing entrepreneurship education for youth's empowerment at the post-basic education level in Nigeria. *International Journal of studies in education*. 16 (1), 1-13.
- Okoro, I.F. & Afuruobi, A.O. (2014). Retrieved curriculum for refocusing education in Nigeria in the 21st century. West and Solomon publishing.
- Oladokun, S.O & Gbadegesin, J.J. (2017). Adequacy of core knowledge and soft skills in the performance of professional employees of real estate firms in Nigeria property management, 35(2), 132-149.
- Olagunju, Y.A. (2014). Entrepreneurship small scale business enterprises development in Nigeria. Ibadan: University press plc.
- Olayinka, A.I. (2015). Agenda for the Accelerated development of the university of Ibadan through consolidation and innovation. 2015-2020. University of Ibadan Press.
- Oliha, J. (2019). Educational policy and development in Nigeria past, present and future. *studies on ethno-medicine*, 13(1), 1-6.
- Oliobi, G.T. (2017). Assessment of the implementation of entrepreneurship education programme in public universities in South East, Nigeria. Unpublished Ph.D. dissertation, University of Port Harcourt.
- Ololube, N.P. & Egbezor, D.E. (2012). A critical assessment of the role/ importance of non-formal education to human and national development in Nigeria: *Future trends international Journal of scientific research in education*, 5(2), 71-93. from <http://www.ij sre.co>
- Olorundare, A.S. and Kayode, D.J. (2014). entrepreneurship education in Nigerian

- Oluchi, N. F., & Ahmed, B. I. (2017). "Entrepreneurship education: A strategy for youth empowerment and employment generation." *Nigerian Journal of business education (NIGJBED)*, 4(2), 55-66.
- Onwenonye, C. (2019). An approach of the development and functioning of vocational education and training in Nigeria. *International Journal of vocational and technical education research*. 5(3), 40-49. In I.N. Dokubo, (2021). Strategies for re-orienting vocational technical education for sustainable technological development advancement in Rivers State. *British Journal of contemporary education*, 1(1), 13-25.
- Otoja, R.I, & Obodumu, E. (2017). Access to university education in Nigeria: Issues and trends. *Journal of progressive alternative education (ASPROAEDU)*, 4(1).124-134.
- Oviawe, J.I. (2012). Repositioning Nigerian youth for economic empowerment through entrepreneurship education. *European Journal of educational studies*, 2(2), 1-14.
- Oyebamiji, M.A. (2012). "Meaning and scoping of adult education". In M.A. Hassan and M.A. Oyebaiyi (eds) *Introduction in adult education*. Gabesther Educational Publishers.
- Passaro, O. R., Scandurra, G. & TNomas, A. (2017). The emergence of innovative entrepreneurship: Beyond the intention-investigating the participants in an academic SUC. *International Journal of innovation and technology management*, 14(5), 1-22.
- Prastyaningtyas, E. W. Sutrisno, S. Soeprajitno, E. D. Ausat, A. M. A. & Suherlan, S. (2023). "Analysing the role of mentors in entrepreneurship education: Effective support and assistance," *Journal on education*, 5(4), 14571–14577, doi: 10.31004/joe.v5i4.2511.
- Riskatu, M. & Abdulfatak, M. (2010). Education and women empowerment for the attainment of millennium development goals in Nigeria. *Nigerian Journal of sociology of education*, 4 (1), 219-230.
- S. Ofor-Douglas. (2022). Revitalizing University Education for Sustainable Security and Economic Development in Nigeria. *Approaches in international Journal of research development*, 13(1), 1-13.
- Sahut, J.M. (2013). Small business, innovation, and entrepreneurship. *Small business economics*, 42(4), 1-13. Doi:10.1007/s11187-013-9521-1
- Scott, W. (2017). University and sustainable development. The necessary for barriers to change, perspective, policy and practice in higher education. *Journal of educational research*, 11(4), 107- 115.
- Sharafizad,J. (2018). Informal learning of women small business owners. Education+ training participants use their own work experience and knowledge to start-up their business. Researchgate.net.
- Stefanidi, M. (2020). The difference between formal, informal and non-formal education. <https://www.differencebetween.com>
- Turner, S. & Endres, A. (2017). Strategies for enhancing small-business owners' success rites. *International Journal of applied management and technology*, 16(1), 34-49.

- UNESCO. (2012). Youth and skills: Putting education to work. Retrieved from universities: a tool for national transformation. *Asia pacific Journal of educators and education*, 29, 155–175.
- Zhuo, M.& Haixia, X. (2012). A Review of Entrepreneurship Education for Colleges Students in China. *Administrative science Journal*.2,82-98.