
**WHAT MATTERS MORE IN DEVELOPING STUDENTS' ENTREPRENEURIAL
INTENTION IN TERTIARY INSTITUTIONS IN NIGERIA: DIGITAL
COMPETENCES OR ENTREPRENEURSHIP EDUCATION?**

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ABSTRACT

This study investigated what was more important in developing students' entrepreneurial intention between digital competences and entrepreneurship education in tertiary institutions in Nigeria. The survey research design was adopted in the study. The population of the study was 421 consisting of final year business students in tertiary institutions in the South South Zone of Nigeria while its sample size was 205. The questionnaire served as the main instrument for data collection. The instrument achieved a 74.15% response rate. Data analysis was done with percentage and regression methods. Findings of the study indicated that students of tertiary institutions of Nigeria offered entrepreneurship education as a course of study. However, the entrepreneurship education as presently delivered did not meet the expectations of the learners, hence failed in commanding entrepreneurial intention. Findings also indicated that digital competences were more influential hence has the potential to boost learners' entrepreneurial intentions. It was concluded that digital competences were more likely to trigger increased entrepreneurial intention. It was recommended that entrepreneurship educators in tertiary institutions in Nigeria should be made to undergo capacity building training in digital competences to enable them transfer same to their students. It was also recommended that there was an urgent need for tertiary institutions in Nigeria to develop a new entrepreneurship education curriculum tailored to meet the emerging digital opportunities in the world. It was further recommended that policy makers in education should consider creating supportive entrepreneurship ecosystem to enhance digital skills impartation in tertiary institutions in Nigeria.

**KEYWORDS: Digital Competences, Entrepreneurship Education, Students'
Entrepreneurial Intention, Tertiary Institutions, Nigeria**

INTRODUCTION

For many years, unemployment has been a topical issue of discourse in Nigeria prompting different administrations in the country to strategize and come up with initiatives targeting at addressing the challenge. Some of these initiatives include National Directorate of Employment (NDE), Capacity Acquisition Programme (CAP), Mandatory Attachment Programme (MAP), Youth Empowerment Scheme (YES), National Poverty Eradication

Programme (NAPEP), Graduate Internship Scheme (GIS) and introduction of entrepreneurship education as a compulsory course of study in universities in Nigeria, among others.

When entrepreneurship education was introduced as a compulsory course of study in the Nigerian university system, it was touted as a course of study that would empower students of students to acquire skills needed for identifying business opportunities in the environment, starting and managing business, planning and executing their business plans, building capacity to deal with business challenges and ultimately galvanizing students' intention to start business of their own, hence be self-relevant. Granted, education is believed to be one of the most visible ways out of poverty but this assertion, appears invalid in the case of Nigeria going by the worsening unemployment situation, particularly among business and non-business graduates who compulsorily offered entrepreneurship education and business-related courses (Yatu, Bell & Loon, 2018).

In the same vein, Onwushalu (2023) lamented that in spite of the awards won by Nigerian students globally in entrepreneurship such as Students for the Advancement of Global Entrepreneurship, World Technology Challenge, these outstanding laurels have not translated to positive outcomes in the country. The Author noted that Nigeria's unemployment situation was 33.3% in 2020, while Trading Economics (2022) reported that in 2017, 2018 and 2020, 27.2%, 25.7%, 53.42% Nigerians between the ages of 15-35 years of age were underemployed. In addition, 95% of graduates in Nigeria were said to be unemployable (Lawal, 2018). In the same period, Tunj (2022) quoted the World Bank as hinting that the number of poor people in Nigeria increased from 82.9M in 2018/2019 to about 85.2M in 2020 and 90M in 2022.

Presently, all tertiary institutions in Nigeria, namely universities, polytechnics and colleges of education offer entrepreneurship education courses. However, a major concern is that a greater percentage of graduates of these institutions have not translated their training exposure in entrepreneurship education to creating and managing entrepreneurial ventures, creating jobs and contributing to national economic development as envisaged in its conceptualization. Akpan (2021) observed that the spirit of entrepreneurship which is supposed to stimulate entrepreneurship activities is not developed in learners in the current approach to entrepreneurship education in Nigeria. This observation is strengthened by Okoye and Chinasa (2019) who argued that current entrepreneurship delivery in tertiary institutions in Nigeria merely educate about entrepreneurship and enterprise but fail in offering education for entrepreneurship.

As it stands entrepreneurship education in Nigeria has not effectively influenced its learners into entrepreneurial intentions which would then result in venture creation and management. However, Onwughalu and Ojakorotu (2020) reason that the disruptive change orchestrated by the digital age expanded the foci of entrepreneurship education. According to these authors, this has brought about opportunities for learners of entrepreneurship education to acquire new abilities and skills and to identify new opportunities presented by the digital world for exploration. In this regard, Fleaca and Standciu (2019) advised that educational institutions, particularly the tertiary institutions should embrace digital technology in its teaching and learning activities, empower students with digital skills in order to create innovation and jobs. Again, the European Union (2019) noted that lack of entrepreneurial role models and lack of digital skills contributed to youth unemployment.

Digital competence may be important in igniting the interest of students towards entrepreneurial pursuits. At the moment, it is unclear, what should be done to trigger students' interest in taking to entrepreneurship. It becomes necessary to ask what really matters in galvanizing students' intentions towards entrepreneurship in Nigeria today? Is it the entrepreneurship education or development of digital competence? This is a research topic worth investigation given the worsening unemployment situation in the country in spite of mounted entrepreneurship education in tertiary institutions in the country. The paper addresses two

questions. How do students evaluate entrepreneurial education in arousing their interest in entrepreneurial pursuits? What is the potential of digital competence development in galvanizing students' entrepreneurial intention in tertiary institutions in Nigeria? It is hypothesized that digital competence development has no significant influence on students' entrepreneurial intention in Nigeria.

LITERATURE REVIEW AND THEORY DEVELOPMENT

- **Digital Competence**

Digital competence is concerned with a set of skills which enables individuals to employ technology to improve everyday existence (Ferrari, 2012). Nambisan (2017) observed that the society has been radically transformed by emerging digital skills and competences. Five major areas of digital competence have been identified by Karnreungsiri (2023). These are communication and interaction, security and well-being, information and data processing, digital content creation and problem solving.

- **Entrepreneurship Education**

Entrepreneurship education is the form of education which offers insights on starting and managing businesses. Some researchers are of the view that entrepreneurship education encourages entrepreneurial aspirations of the learners (Shinngr et al., 2018, Maresch et al., 2016). In addition, Kim and Park (2019) stated that entrepreneurship education leads to transmitting knowledge, information as well experience from the facilitators to the learners in the course of the entrepreneurial learning programmes and activities.

- **Entrepreneurial Intention**

Entrepreneurial intention reflects the desire, hope or wish which influences a person to decide to go into entrepreneurship (Peng, Lu and Kang, 2012). It is that psychological condition which is instrumental to individuals' focus on some business aimed at achieving certain entrepreneurial results (Karnreungsiri, 2023).

This study was theoretically founded on two theories, namely, Theory of Planned Behaviour and Innovation Theory of Entrepreneurship. The former, Theory of Planned Behaviour is credited to Ajzen (1988). The Theory Advocates that learner of entrepreneurship education should be trained to develop their interest in entrepreneurship hence activate their behaviour to embrace and open businesses. The latter, Innovation Theory of Entrepreneurship was developed by Schumpeter (1939). According to the theorist, entrepreneurship involves creativity and innovativeness hence, innovativeness should constitute entrepreneurial endeavours, therefore, there should be new thinking in entrepreneurship delivery.

Many studies have been conducted in relation to entrepreneurship education and students' outcomes. For instance in recent time, Onwughaln (2023), studied entrepreneurship education and development of learners in Nigeria, Akpan (2021) examined entrepreneurship education in tertiary institutions in Nigeria, Okoye and Chinasa (2019) studied entrepreneurship education in tertiary institutions in Nigeria, Yatu, Bell and Loon (2018) investigated entrepreneurship education research in Nigeria, while Hakizi, Mana and Mualhe (2023) investigated digital transformation as a driver of entrepreneurship ecosystem in tertiary institutions.

METHODOLOGY

This study adopted the survey research design. The study's population was 421 final year business students in federal universities in the South South Zone of Nigeria. A sample size of 205 was determined through Taro Yamane sample size determination formular. Students of

business were selected for study given their exposure and training in entrepreneurship and business-related courses in the university. Only four federal universities met the researchers two criteria for selection, namely, the institution must have been in existence and offering entrepreneurship education for a minimum of twenty (20) years, and must have a functional entrepreneurship centre. These institutions were university of Uyo, University of Calabar, University of Benin, and University of Port Harcourt. The questionnaire was used in data collection and its administration was based on the proportional contribution of each selected institution to the study's population

Instrument validation was done with experts in Entrepreneurship and Business Administration with useful inputs duly included in the final copy. Furthermore, the Cronbach Alpha reliability test was conducted on the research constructs. This resulted in Alpha reliability of 0.74 which indicated it was reliable. Scoring of variables was based on a five –point Likert scale; Strongly Agree (SA=5), Agree (A=4), Disagree (D=3), Strongly Disagree (SA=2) and Undecided (UN=1). (UN=1). A mean score of 3.0 and above was taken as the acceptable benchmark for decision making. Further analysis was based on regression method. In total, 205 copies of the questionnaire were administered. Out of this number, 152 copies (74.15%) were properly filled and returned.

Table 1: Proportion of Sample Representation

S/N	Institution	Final Year Business Students	Proportional Representation
1.	University of Uyo	106	38
2.	University of Calabar	110	47
3.	University of Benin	91	33
4.	University of Port Harcourt	114	44
	Total	421	205

Source: Various Universities, 2024

RESULTS AND DISCUSSION

Table 2: Respondents' Evaluation of Entrepreneurship Education and Entrepreneurial Intention

Statement	N	Mean	SD	Decision
I have offered some entrepreneurship courses in the university	152	4.01	0.66	Agree
through entrepreneurship courses I have been exposed to different areas of business	152	3.84	0.52	Agree
I am satisfied with the quality of entrepreneurship education offered	152	2.13	0.14	Disagree
Based on institution entrepreneurship education I intend to go into entrepreneurship	152	2.47	0.37	Disagree

Table 2 presents analysis on respondents' evaluation of entrepreneurship and entrepreneurial intention in the South South Zone of Nigeria. The rule for acceptance was that a mean of score 3.0 and above on the statement should be accepted, otherwise, this was to be rejected. In the table,

respondents indicated that they have offered some entrepreneurship courses in the university (M =4.01) and that through entrepreneurship courses they have been exposed to different areas of business(M=3.84). However, the respondents were not satisfied with the quality of entrepreneurship education offered(M=2.13) and based on institution entrepreneurship education

they were not intending to go into entrepreneurship(M=2.47).

Table 3: Respondents' Opinions on Potential of Digital Competence in Influencing Entrepreneurial Intention

Statement	N	Mean	SD	Decision
I am aware that the digital age offers a number of entrepreneurial opportunities	152	3.02	0.51	Agree
More students would want more skills training and empowerment in digital competences	152	3.38	0.46	Agree
I am likely to support more emphasis on training students on digital skills in line with emerging digital opportunities	152	3.69	0.59	Agree
Compared to current approach, learners of digital skills are more likely to go into entrepreneurial start-ups	153	3.13	0.68	Agree

Some: Field Survey, 2024

Table 3 is used to present respondents' opinions on potential of digital competence in influencing entrepreneurial intention in the South South Zone of Nigeria. From the table, all statements were within the acceptance threshold with the mean values ranging from 3.02 to 3.69.

TEST OF HYPOTHESIS

H_{01} : Digital Competence Development has no significant influence on Students' Entrepreneurial Intention in Nigeria

Table 4: Regression Analysis Result on influence of Digital Competence Development on Students' Entrepreneurial Intention in Nigeria
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.821 ^a	.674	.607	0.83783

B: Goodness of Fit of the Model^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	36.139	1	71.338	40.613	.000 ^b
	Residual	27.985	150	.216		
	Total	39.124	151			

C: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.316	.102		1.832	1.208
	Digital Competence Development	1.304	.397	.683	3.285	.000

a. Independent Variable: Digital Competence Development

b. Dependent Variable: Students' Entrepreneurial Intention

Table 4 shows the result of regression analysis on the influence of digital competence development on students' entrepreneurial intention in Nigeria. The generalized model summary showed a R^2 of 0.821 which implies that 82.1 percent of the changes in digital competences

influences 82.1 of the changes in students' entrepreneurial intention in Nigeria. The model also showed a goodness of fit at 95 percent (p-value <0.05). Therefore, digital competence development has an influence on students' entrepreneurial intention in Nigeria and this was statistically significant at 95 percent (also p-value <0.05). Based on the result, the null hypothesis that digital competence development has no significant influence on students' entrepreneurial intention in Nigeria is therefore rejected. The implication of the result is that digital competences have the capacity to influence students' entrepreneurial intention in Nigeria. The findings seem to suggest that beyond entrepreneurship education as currently mounted in tertiary institutions in Nigeria, digital competence development may support entrepreneurial intentions of students.

The result is in line with Hakizinmana and Muathe (2023) who found that digital transformation was key in driving entrepreneurship ecosystem in higher institutions in Kenya. Similarly, the outcome supports Horst (2019) who posited that those expected to own businesses in future should not be limited to conventional educational training exposure but should instead be taught wholly different entrepreneurial mindset. Again, the European Commission (2017) encourages tertiary institutions to develop digital training models with a view to assisting both instructors and students in the application of digital learning practices and therefore be in a position to maximize the potential of cutting –edge digital technology. Findings of the study are also in line with its adopted theories. For instance, while the Theory of Planned Behaviour emphasized influencing learners' interests and directions towards positively affecting their intention and behaviour in opening and managing businesses, the Innovation Theory of Entrepreneurship supports being innovative, therefore, entrepreneurship education delivery should go beyond what is presently offered to emphasize more on the emerging digital business landscape and opportunities in order to exert more impact on entrepreneurship education learners, who are expected to apply their training in practically starting and managing businesses. Furthermore, Nambian (2017) found that digital competences have transformed both market and society profoundly. The implication of these findings is that creating more avenue for digital competence and skills development would be beneficial in motivating learners towards embracing and managing businesses.

CONCLUSION

This study was conducted to establish what was more important between traditional entrepreneurship education and digital competence in boosting entrepreneurial intentions of learners. The study was motivated by the worsening unemployment situation in Nigeria and lack of corresponding opening of entrepreneurial ventures compared to the number of graduates who had compulsorily offered entrepreneurship courses in their institutions. Findings of the study indicated that students in tertiary institutions in Nigeria, offer entrepreneurship and businesses related courses. However, current delivery of entrepreneurship education in the tertiary institutions of Nigeria has failed in teaching for entrepreneurship in a practical sense. Furthermore, findings of the study showed that imparting digital competences would be more acceptable with the possibility of increased entrepreneurial intentions of the students leading to increased graduate entrepreneurship opening and management, job creation and unemployment reduction. The researchers acknowledge the need to expand the study's scope to engender generalization of findings.

RECOMMENDATIONS

In line with the findings of this study, the following recommendations are put forward:

- It is recommended that entrepreneurship educators in tertiary institutions in Nigeria should be made undergo a capacity building training programme on digital competence to place them in good stead to transfer such knowledge to their students.\
- It is recommended that there is an urgent need for tertiary institutions in Nigeria to develop a new entrepreneurship education curriculum which places more on emphasis digital competences in line with the emerging yearnings of students as indicated in the study.
- It is recommended that policy makers in education should consider creating a supportive entrepreneurship ecosystem through functional digital channels in order to improve upon the quality of digital skills imparted in students in tertiary institutions in Nigeria.

REFERENCES

- Ajzen, I. (1988). *Attitudes, personality and behavior*. Dorsey Press.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-T](http://dx.doi.org/10.1016/0749-5978(91)90020-T)
- Akpan, O. E. (2021). Entrepreneurship studies education in tertiary institutions in Nigeria: Theories and practices. *International Journal of Vocational and Technical Education Research*, 7(1), 35-42
- European Commission. (2017). Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *A renewed agenda for higher education*. Fayolle, A. & Klandt, H. (2006). *International entrepreneurship education. Issues and Newness*. Cheltenham: Edward Elgar Publishing.
- European Union (2019). *What potential does digital entrepreneurship have for being inclusive? in The Missing Entrepreneurs 2019: Policies for Inclusive Entrepreneurship*. OECD Publishing, Paris.
- Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks (p. 92). Luxembourg: Publications Office of the European Union. doi:10.2791/82116
- Fleaca, E. & Stanciu, R. D. (2019). Digital-age Learning and Business Engineering Education – a Pilot Study on Students’ E-skills. *Procedia Manufacturing*, 32, 1051– 1057 (2019).
- Hakizimana, S. and Muathe S. (2023). *Digital Kenya: A Key Driver in Entrepreneurship Ecosystem in Higher Education*. *International Journal of Social Science and Education Research Studies*, 3(1), 199-211
- Horst, I. van der. (2019). *Establishing a strong Entrepreneurial Ecosystem*. <https://thesis.eur.nl/pub/51002/Horst-Ivo-vander.Pdf>
- Karnreungsiri, I. (2023). The Role of Digital Competence and Entrepreneurship Education in relation to Entrepreneurial Intention. 97th International Scientific Conference on Economic and Social Development – "Modern technologies and innovative concepts in the function of promoting cultural heritage" Varazdin, 1-2 June, 2023.
- Kim, M. & Park, M.J. (2019). Entrepreneurial education program motivations in shaping engineering students’ entrepreneurial intention. *J. Entrepreneurship Emerging Econom.* 11 (3), 328–350.
- Lawal, I. (2018). 95% of Nigerian graduates are not employable, says don. The Guardian Newspaper, July 17. <https://guardian.ng/features/education/95-of-nigerian-graduates-are-not-employable-says-don/>
- Maresch, D., Harms, R., Kailer, N. & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technol. Forecast. Soc. Change*, 104, 172–179.

- Nambisan, S. (2017). Digital entrepreneurship: toward a digital technology perspective of entrepreneurship. *Entrep. Theory Pract.* 41 (6), 1029–1055.
- Okoye, V. & Chinasa, O. (2019). Entrepreneurship education in tertiary institutions: A paradigm for sustainable development. *International Journal of Research – Granthaalayah*, 7(9), 63-70.
- Onwughalu, V. C. & Ojakorotu, V. (2020). The 4th industrial revolution: An opportunity for Africa’s “decolonization,” and development or recolonization? *African Renaissance*, 17(1), 75-93.
- Onwughalu, V. (2023). Revisiting Entrepreneurship Education and the development of learners in Nigeria. *International Journal of Novel Research in Education and Learning*, 10(5), 48-60. DOI: <https://doi.org/10.5281/zenodo.8389490>
- Peng, Z., Lu, G. & Kang, H. (2012). Entrepreneurial intentions and its influencing factors: A survey of the university students in xi’an China. *Creative Education*, 3(Supplement), 95–100.
- Schumpeter, J.A. (1939). *Business cycles: A theoretical, historical and statistical analysis of the capitalist process*. New York: McGraw-Hill.
- Shinnar, R.S., Hsu, D.K., Powell, B.C. & Zhou, H. (2018). Entrepreneurial intentions and start-ups: are women or men more likely to enact their intentions? *Int. Small Bus. J.*, 36 (1), 60–80
- Trading Economics. (2022). Nigeria youth unemployment rate. Retrieved April 7, 2022 from <https://tradingeconomics.com/Nigeria/youth-unemployment-rate>
- Tunji, S. (2022, March 30). Poor Nigerians to hit 95.1m in 2022, says World Bank. *Punch Newspaper*. <https://punchng.com/poor-nigerians-to-hit-95-1m-in-2022-says-wbank>
- Yatu, L., Bell, R. & Loon, M. (2018). Entrepreneurship Education Research in Nigeria: Current foci and future research agendas. *African Journal of Economic and Management Studies*, 9(2), 165-177. <http://doi.org/10.1108/AJEMS-08-2016-0120>