

# The Need for Integrating Entrepreneurial Education and Training in Nigerian Technical Colleges



Abubakar Ibrahim Muhammad, Yusri Bin Kamin, NurHusnaBinti Abd.Wahid,  
WaleedMugahed Al-Rahmi

**Abstract:** *Entrepreneurial education and training is systematic and recognize domain of research that serves a stimulant for sustainable development, economic increase and social well-being of the society. In Nigeria technical colleges are designed to address the issue of job creation, youth employment, self-reliance, skill development and increase productivity so as to compete with the current opportunities and challenges in the labor market and the movement towards 4.0 IR for integrity. Unfortunately most of the college graduates lack the required entrepreneurial competencies and mindset to become successful entrepreneurs. Therefore to achieve such objectives there is an urgent need for integrating EET in the curriculum and the full implementation of the program in our technical colleges. The paper explores the need for integrating EET into the college curriculum; semi-structured interview was conducted with 12 selected Nigerian students in UniversitiTeknologi Malaysia. The participants are from different geo-political zones of Nigeria, they are also from various faculties of the university; faculty of education, faculty of computing, faculty of management, faculty of science and faculty of electrical engineering. Purposive sampling technique was employed for the selection of the participants. 100 percent of the respondents' are in support of integrating EET into technical college curriculum and the full implementation of the program across the county. It is therefore recommended that National Board for Technical Education and policy makers should endeavor to address this issue as urgent because it will help Nigeria to prosper and the African continent in general.*

**Index Terms:** *integrating, entrepreneurial education, technical college*

Manuscript published on 30 September 2019

\* Correspondence Author

**Abubakar Ibrahim Muhammad\***, Federal College of Education (Technical), Bichi Kano Nigeria. Technical and Engineering Education Department, School of Education, Faculty of Social Sciences and Humanities, UniversitiTeknologi Malaysia, Malaysia.

**Yusri Bin Kamin**<sup>2</sup>, Technical and Engineering Education Department, School of Education, Faculty of Social Sciences and Humanities, UniversitiTeknologi Malaysia, Malaysia.

**NurHusnaBinti Abd.Wahid**<sup>2</sup>, Technical and Engineering Education Department, School of Education, Faculty of Social Sciences and Humanities, UniversitiTeknologi Malaysia, Malaysia.

**WaleedMugahed Al-Rahmi**<sup>2</sup> Technical and Engineering Education Department, School of Education, Faculty of Social Sciences and Humanities, UniversitiTeknologi Malaysia, Malaysia.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

## I. INTRODUCTION

Entrepreneurial education and training (EET) is an organized formal education training design to prepare individuals to become responsible and enterprising persons through developing an entrepreneurial mindset and competencies attain the goals they set out for themselves (European Commission [EC], [1].

Interestingly there is a growing concern all over the world about entrepreneurship because entrepreneurship could serve as catalyst for achieving the objectives of economic growth and social development. Presently, EET is identified as a recognized research area, which is going hand to hand with the interest of stake holders and students [2].

Since EET become a recognized field of research and a catalyst for sustainable development it is obviously serve as a cross-link in most fields of studies TVET included. It has been stated (EC) [1] people with entrepreneurial training are more employed than those without. [3, 4] opined that the growth of entrepreneur is perceived as a main way out for job creation and sustainable economic development. They further argued that as a result of these agitations, several calls and initiatives have been made to make entrepreneurship the growth engine of European economy and to set the principles of “think small first” at the core of national and European policies. Since early 1980s there is a frequent deliberations on entrepreneurship and emphases are placed on entrepreneurship as an important key driving aspects of economic development of Europe and the world in general [5]. Scholars are deliberating on entrepreneurship under various headings and sub-headings such as entrepreneurship orientation and its measurement in various types and groups of enterprise [6]. Likewise in Asia studies are going on about entrepreneurship development and economic growth of the countries. [7] reported that the Asia and Pacific countries are growing prominently by thisperiod; most of the countries havegone through high economic evolution. This is due to the eminent growing of Asian markets and cooperation, thus, globalization has high impact on technological changes, trade, entrepreneur, innovation and workforce. Promotion of entrepreneurship will contribute to additional increase in small and medium enterprises (SMEs) [8]. Studies on inclusion of EET into various educational institution have been sponsored by international and regional organizations to explore area of corporations.Kabongo, [9] reported shortest of research among the African countries in term of EET.



He further argued that most of the context of entrepreneurship research in Sub Sahara Africa (SSA), the write up were mostly on entrepreneurship principles, theories, startup ventures as well as implications and achievement. In recent years, many of SSA countries established poverty reduction strategies specifically emphasizes promotion of small scale enterprises (SMEs) as a major way to reduce poverty particularly among the urban people.

[2] maintained that entrepreneurship is a solution to global and economic critical issues; hence EET would be an interesting intervention that stimulates students' decision to become a successful entrepreneurs.

## II. THE NEED FOR INTEGRATING EET IN TECHNICAL COLLEGES

Going by the above discussion it is evident that there is a need for integrating EET in our technical colleges in Nigeria. In Nigeria technical colleges are designed to address the issue of job creation, youth employment, self-reliance, poverty eradication, skill development and increase productivity so as to compete with the current opportunities and challenges in the labour market. These colleges are considered as the main vocational institution. But most of the students of this institution are graduating without the required skills and competencies as observed by [10]. In other hand, lack of integration between the curriculum taught in the colleges and the required skills in the workplace in small business and enterprise [11] is a major obstacle to the growth and development of SMEs. With regards to this [12, 13] suggested the need for new school curriculum that would adopt the teaching of entrepreneurial education, this will serve as a solution to the current issues of unemployment and high poverty rate. According to Ghina, Simatupang, and Gustomo, [14] the intention of instilling entrepreneurial mindset into students is to produce novice educated entrepreneurs as well as innovative ventures that can form jobs opportunities.. [15] observed based on their research, the need for encouragement both from the government and the business community to invest heavily in EET more especially at the early age. They also reiterated that instilling entrepreneurial mindset among teaming youth would influence global economic development positively. In view of this [16] conducted a research on the Japanese high school students and found that to influence students entrepreneurial mindset there should be an innovation and convert the ideas to reality is one of the vital role of EET. [17] asserted that entrepreneurial competences obtained through formal education are considered among the most vital factors that influenced individual entrepreneurial ability. Based on this [13] believed that integrating entrepreneurial education in all institutions of learning in their curricula in Malaysia and other developing countries will improve the situation.

### A. Research Purpose

The purpose of this research is to explore the need for integrating Entrepreneurship Education and Training into the curriculum of Nigerian Technical Colleges.

### B. Research Questions:

1. How do you explain entrepreneurship education?

2. What is your perspective about the need for integrating Entrepreneurship Education and Training in Nigerian Technical Colleges?

## III. RESEARCH MYTHOLOGY

The research was conducted using qualitative method to explore the need for integrating entrepreneurship training in technical colleges which utilized interview with participants. The data for the research were collected using semi-structured interview. Semi-structured was used because it gives participant the opportunity to express their views clearly in relation to the topic under research. Content analysis method [18] was employed by the researcher to analyse the data collected from the interviews which were audio recorded. The semi-structured interview was conducted with 12 selected Nigerian students in UTM. The participants are from different geo-political zones of Nigeria, they are also from various faculties of the university such as faculty of education, faculty of computing, faculty of management, faculty of science and faculty of electrical engineering. Purposive sampling technique was employed for the selection of the participants. In purpose sampling the researcher [19] has a free hand to select the participants based on their possessed qualities, thus no need for underlying theories or a particular number of participants. The interview was guided by the research objective and consists of two parts: part A about the participant's background and part B was the interview protocol about the entrepreneurship education and training and the need for integrating EET in Nigerian technical colleges. After the collection of the result, transcription and analysing of the result inductively [20] was followed.

## IV. RESULTS AND DISCUSSION

The analysis was done was based on the responses of the participants according to the identified key issues in the research. The views of the Nigerian students were recorded during the interview session under the key issues emerged in the interviews considering integrating entrepreneurship education training into Nigeria technical colleges curriculum. The general characteristic of the participants was similar in term of education, hence their responses were appeared to be similar but with little discrepancies. Therefore the main findings of the research were summarized that Nigerian students' have a good perception about entrepreneurial education, all of the participants are in the view of the need for integration of entrepreneurial education and training into the Nigeria technical colleges curriculum. The first question was about the definition of entrepreneurial education and training, the respondents were asked to explaining what they understand with entrepreneurial education and training. The following are the some of their responses: "To my own understanding entrepreneurship education can be simply a way that we can incorporate new skill in that particular field of research in such away whoever brought up from the system can be able to develop and design a kind of skill using his own talent and education he acquired from the field so that he can sustain himself it can save as career to him."

“Entrepreneurship in my own perspective is act of acquiring a particular skill in marketing in today society”

“Entrepreneurship is simply a strategy of providing awareness and skills as supplementary qualities instil in the students’ learning processes in the school. Students are taught on how to efficiently utilize the opportunities available in their society by either innovation or emulation of best practices that promote social welfare and development.”

The responses continue as follow:

“Entrepreneurship education is an education which individual acquires or learns through formal way that can use for self-reliance and provide employment for other people.”

“Entrepreneurship education is a teaching and learning process of organizing, running, and leadership management that include opportunity recognition without looking at the present resources under controlled. When a person attempted to create or start up a venture for self-reliance individually or in group is also termed as entrepreneurship.”

In summary the participants have clearly shown that they are familiar with entrepreneurial education and training. Having established their knowledge of the issue at stake, the participants were then asked to express their perception about the need to integrate this type of education into the curriculum of technical colleges in Nigeria. Some of the responses are:

“While actually ...eh in a my own perspective, there is quite alright need for that entrepreneurship education, why because even though people understand it in different perspective, but from my own perspective we shouldn’t consider technical education is enough, it means some of the scholars do understand that the entrepreneurship sorry technical education we are given to the students itself is an entrepreneurship but we shouldn’t understand it and narrow it in that perspective”

“Yeah is obvious integrating entrepreneurship in technical colleges is of a great paramount.”

“Yeah, actually, in Nigeria we have a lot to do in regards to entrepreneurial education because if you look at developed countries like the Europe and US they have made policy such that the entrepreneurship education have being eh ... inculcated into their curriculum because they believe in the way of development of their economic growth, and look at Nigeria today laymen joblessness is as a result of the lack of this entrepreneurship education.”

Examining the responses 100 percent of the participants has indicated a clear support of integrating entrepreneurial education and training in technical colleges’ curriculum in Nigeria. Their responses were coded as “*I support it integration in technical colleges*”. This finding is in line with [21, 22, 23]. In the same vein [24] college students are facing difficulties after graduation such as poverty and unemployment, to overcome these challenges it requires technological and social innovations that are championed by new breeds of entrepreneurs. The finding is also in line with [25] observed that there is a need for changes in educational practice curriculum to include entrepreneurial education and training. As a result of above mentioned reasons is suffice for integrating and implementing entrepreneurial education and training in our technical colleges for sustainable development, economic growth, job creation that would trigger the move towards 4.0 IR for integrity and social development. However, [25] opined that the lingering problems that embedded the growth and development of developing countries could resolved through vocational and

technical education by integrating EET as a device to promote economic and social progress. To this end [26] believed that entrepreneurial human capital and national growth are bond together while entrepreneurial competences are important for scholarly research. UNCTAD, (2015) described SMEs as the provider of almost 80% jobs in SSA, and almost 67% in all developing countries this is the most important role of the SMEs as the main drivers of job creation.

## CONCLUSION AND FUTURE WORK

The research is a preliminary which focus on the need assessment for the integration and implementation of EET in technical colleges. Looking at the scope and the nature of the respondents the findings are worth of generalization. Therefore this research gives away for further intensive research in entrepreneurship and technical education in Nigeria.

1. To achieve the stated goals in the national policy of education there is an urgent need for integrating EET in the curriculum and full implementation of the program in our technical colleges.
2. National Board for Technical Education and the policy makers should endeavour to address this issue as urgent because it will help Nigeria to prosper and the African continent in general.

## ACKNOWLEDGMENT

The researchers thank the Research Management Centre (RMC), Universiti Teknologi Malaysia (UTM) for funding this project under grant number PY/2019/00809:Q.J130000.21A2.04E69.

## REFERENCES

1. European Commission. (2017). European commission. Retrieved November 19, 2017, from <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework>
2. Valerio, A., Parton, B., & Robb, A. (2014). Entrepreneurship education and training programs around the world. World Bank Publications. <https://doi.org/10.1596/978-1-4648-0202-7>
3. Iacobuta, A-O. & Socoliuc, O.-R. (2014). European entrepreneurship in times of crisis : realities , challenges and perspectives (No. L26; M13; Y1) (Vol. VI). Alexandru. Retrieved from [www.google.com](http://www.google.com)
4. Sam, C. & van der Sijde, P. (2014). Understanding the concept of the entrepreneurial university from the perspective of higher education models. Higher Education, 68(6), 891–908. <https://doi.org/10.1007/s10734-014-9750-0>
5. Dvoulity, O. (2017). What is the Relationship between Entrepreneurship and Unemployment in Visegrad Countries? Central European Business Review, 6(2), 42–53.
6. Codogni, M., Duda, J. & Kusa, R. (2017). Entrepreneurial orientation in high-tech and low-tech SMEs in Malopolska region, 18(1), 7–22. Retrieved from <http://dx.doi.org/10.7494/manage>.
7. Maclean, R., Jagannathan, S., Saivi, J., Power, C. N., Maclean, R., Pavlova, M., ... Chow, J. K. F. et al. (2013). Technical and Vocational Education and Training: Issues, Concerns and Prospects Vol. 19. (J. Maclean, R., Jagannathan, S. & Sarvi, Ed.), Asian Development Bank. New York, London: Springer Dordrecht Heidelberg. <https://doi.org/10.1007/978-94-007-5937-4>
8. Gosevska, L., Popovski, V. & Markoski, G. (2013). The role and influence of entrepreneurship on the growth and expanding of small and medium enterprises in the Republic of Macedonia. Iliira International Review, 3(1), 89–102. <https://doi.org/10.21113/iir.v3i1.100>
9. Kabongo, J. D. (2008). The Status of entrepreneurship education in colleges and universities in Sub-Saharan Africa. Retrieved from

- [https://www.researchgate.net/profile/Jean\\_Kabongo2/publication/228466849\\_The\\_status\\_of\\_entrepreneurship\\_education\\_in\\_colleges\\_and\\_universities\\_in\\_sub-Saharan\\_Africa/links/00b7d537e5f985c32f000000.pdf](https://www.researchgate.net/profile/Jean_Kabongo2/publication/228466849_The_status_of_entrepreneurship_education_in_colleges_and_universities_in_sub-Saharan_Africa/links/00b7d537e5f985c32f000000.pdf)
10. Dawha, J. M. & Medugu, J. D. (2016). Emerging entrepreneurial and business planning competencies required by motor vehicle mechanic students in establishing enterprise in Bauchi and Gombe states, Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 3(1), 156–161. Retrieved from <http://www.google.com>
  11. Chekole, Z. G. (2014). Challenges and prospects of micro and small enterprises in Awi zone: The case of Dangila district. Indra Gandhi National Open University. Retrieved from <http://www.google.com>
  12. Enombo, J. P., Hassan, S. L. & Iwu, C. G. (2015). The significance of entrepreneurship education in Gabonese schools: justifications for a new curriculum design. *Socioeconomica – The Scientific Journal for Theory and Practice of Socio-Economic Development*, 4(8), 493–506. <https://doi.org/10.12803/SJSECO.48139> JEL:
  13. Syed, Z. A. (2013). The need for inclusion of entrepreneurship education in Malaysia lower and higher learning institutions. *IntEntrepManag J*, 55(2), 191–203. <https://doi.org/10.1007/s11365-016-0390-y>
  14. Ghina, A., Simatupang, T. M., & Gustomo, A. (2014). A systematic framework for entrepreneurship education within a university context. *International Education Studies*, 7(12), 1–19. <https://doi.org/10.5539/ies.v7n12p1>
  15. Jabeen, F., Faisal, M. N., & I. Katsioloudes, M. (2017). Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship. *Journal of Small Business and Enterprise Development*, 24(1), 136–157. <https://doi.org/10.1108/JSBED-07-2016-0117>
  16. Ishiguro, J. (2015). What influences entrepreneurial career choice?: An exploratory analysis of the Sally Caird's GET2 for Japanese high school students. *Academy of Entrepreneurship Journal*, 21(1), 44–58. Retrieved from <http://connection.ebscohost.com/c/articles/108588438/what-influences-entrepreneurial-career-choice-exploratory-analysis-sally-cairds-get2-japanese-high-school-students>
  17. Ndudi, O. C. & Samuel, V. S. (2016). Technical vocational education and training and local technologies: A panacea for sustainable entrepreneurship skills development. *Pearl Research Journals*, 2(3), 32–36.
  18. Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
  19. Bernard, H. R. (2002). *Research methods in anthropology: Qualitative and quantitative approaches* (3rd ed.). Walnut Creek, CA: Altamira Press.
  20. Schreiber, J. B. (2008). The Sage Encyclopedia of Qualitative Research Methods. In L. M. Given (Ed.), SAGE (p. 1043). Los Angeles: Sage publications, Inc. <https://doi.org/10.4135/9781412963909>
  21. Marques, C. S., Ferreira, J. J., Gomes, D. N., & Gouveia Rodrigues, R. (2012). Entrepreneurship education: How psychological, demographic and behavioural factors predict the entrepreneurial intention. *Education + Training*, 54(8/9), 657–672. <https://doi.org/10.1108/00400911211274819>
  22. Ananda, A. F., & Mukhadis, A. (2016). Production unit as entrepreneurship, cooperation business and industrial world with the school for the development of vocational student entrepreneurship mindset. In the International Mechanical Engineering and Engineering Education Conferences (IMEEEEC) (Vol. 1778, pp. 1–10). American Institute of Physics (AIP) Publishing. <https://doi.org/10.1063/1.4965782>
  23. Cheraghi, M., & Schøtt, T. (2015). Education and training benefiting a career as entrepreneur. *International Journal of Gender and Entrepreneurship*, 7(3), 321–343. <https://doi.org/10.1108/IJGE-03-2013-0027>
  24. Camacho, A. P., Janowski, A., Konak, A., & Kulturel-Konak, S. (2016). Creative problem solving builds entrepreneurial mindset. ISEC 2016 - Proceedings of the 6th IEEE Integrated STEM Education Conference, 65–70. <https://doi.org/10.1109/ISECon.2016.7457556>
  25. Buli, B. M. & Yesuf, W. M. (2015). Determinants of entrepreneurial intentions: Technical-vocational education and training. *Education + Training*, 57(8/9), 891–907. <https://doi.org/10.1108/ET-10-2014-0129>
  26. Cubico, S., Formicuzzi, M., Ardolino, P., Noventa, S., Ferrari, A., Sartori, R., & Favretto, G. (2013). Entrepreneurial human capital: A model for analyzing and validating the key competences for entrepreneurship. *Research in Entrepreneurship and Small Business, RENT (XXVII)*, 1–19. Retrieved from <https://www.researchgate.net/requests/r38332643?pli=1&loginT=Ocoj>

Da6GvZN5ACKPsnKIXGmEYJLypab\_4EggACF4OqAzqujycC2eG Z2tI\_ON9oPq0Zn6jK-JHM5VE4iaNi8jvHL&uid=LZZY1K11mlZ7mv uWt8amXnGQxW6e86sLxyVZ&cp=re386\_x\_p1&ch=reg&utm\_medium=email&utm\_source=researchgate&utm