# Role of Entrepreneurship Education on Self-Employment in Tanzania: Case of Vocational Institutions Graduates

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#### Abstract

This study examined the impact of entrepreneurship education curriculum on self-employment in Tanzania, specifically examining whether skills development for trainees in vocational training institutions contributes significantly to economic growth. Data for this study was collected from a sample of 118 trainees from the fitter mechanics, electrical installation, and motor vehicle mechanics trades at the Chang'ombe Regional Vocational Training Institution in the Dar es Salaam region, using a questionnaire and employing a descriptive design. The chi-square model, implemented through SPSS version 25, was used to determine the relationship between entrepreneurship education taught in vocational institutions and students' perception of their future careers. The findings indicated that vocational entrepreneurship education is knowledge and skills-based, thereby enhancing learners' competencies for self-employability. Additionally, student's exhibited positive attitudes towards entrepreneurship education, and a significant relationship exists between students' perception entrepreneurship and their future careers. This study recommends that future researchers conduct in-depth case studies of successful self-employment ventures initiated by graduates of vocational training institutions who have undergone entrepreneurship education. Such studies can help identify key factors contributing to success and inform future reforms of entrepreneurship education curriculum

**Keywords**: Vocational education, entrepreneurship, vocational institutions grauduates, self-employment

## INTRODUCTION

Entrepreneurial program in vocational education (VE) in Tanzania was established with the responsibility of provision of employability skills in all sectors of the economy. With reforms in education specifically in vocational education in Tanzania, the instruction system changed from traditional method of teaching to an approach known as competency-based education and training (CBET). The approach, competency-based education and training has been claimed that it has increased learners' work experiences

hence chances of employment, personal and social development (VETA, 2018). To ensure smooth provision of skills, entrepreneurship program was designed in such a way it provides and plasters all technological dimensions in terms of knowledge and skills needed for development of skills for industrial economy.

According to VETA (2018), curriculum is designed to cover attitudinal aspects in relation to cross cutting issues, such as entrepreneurship skills, environmental issues and issues related to HIV/AIDS. This has been integrated in the entrepreneurship curriculum in order to produce graduates who can face the challenges of the world of work (VETA, 2018).

In Tanzania, entrepreneurship education is currently taught as a subject in all vocational institutions on a nationwide basis to support efforts by the Government to promote entrepreneurship capacities to trainees completing studies at these vocational institutions. This is in line with ongoing efforts by Tanzania government view to vocationalise the secondary education where students are expected to learn vocational subjects, this in turn will help the learners to develop life and work-related skills to increase efficiency in everyday life (URT, 2023).

Vocational educational and entrepreneurship plays an important function in creating an avenue for economic growth for all nations (VETA, 2018). In Tanzania, Vocational Educational and Training Authority (VETA) play a pivotal role of training of middle cadre manpower for industrial production, a study by Luhala and Yuting (2021) pointed out that VET prepares students to be familiar with detailed careers and be professionals and experts in different career paths, for example, agriculture, food and nutrition programmes in the school. The advancement of science and technology, practical activities such as computer sciences need to be introduced and integrated in public secondary schools to develop students' careers. Amongst many functions, VETA promotes provision of short tailor-made course programs and inserving training in order to improve performance, quality and productivity of the national economy (VETA, 2018).

Transformation in VE encompassed technology advancements and market rivalry, as well as shifts in the requirement for highly qualified and adaptable workforce. To meet these demands, it is necessary to reduce the gap between academic and vocational education and strengthen the co-operation between the education authorities and employment organizations as well as industries (Tabbron and Yang, 1998). In Malaysia, the studies have highlighted the importance of entrepreneurial initiatives in improving the country's economic

conditions. For instance, Hoang et al. (2020) investigated the role of entrepreneurial education in enhancing self-efficacy, learning orientation and entrepreneurial intention among young people. Furthermore, (Ip et al., 2021) investigated the important effects of different determinants of entrepreneurial intention, providing fruitful findings to help educators nurture students' abilities to solve social problems and EE is important for developing their favourable entrepreneurial attitudes and mindsets (Wardana et al., 2020).

Vocational Education and Training (VET) system is a vital element of economic development approach in Tanzania as it maintains economic competitiveness among the workforce and improves skills and knowledge. The statement is supported by Moshi et, al. (2024) who adds that Technical and vocational educational and training (TVET) remain the appropriate tool for implementing and promoting sustainable development in Tanzania, it produces the workforce who will be in the forefront in dealing directly with sustainable development issues. In this regard, TVET programmes must aim to enable and expand the acquisition of life skills needed to meet the changing needs of industry and the economy.

VET curriculum should be designed to provide a pathway to development of knowledge and skills for improving entrepreneurial practices and facilitate flow of theory and practice. According to Ellis (2003), the obvious advantages of a vocational curriculum are: to provide instruction for many different fields that require technical skills rather than academic knowledge, to allow students to focus solely on training for a career development and to provide flexible programs for skill development. At some extent, skills provided by VET may be influenced by quality of instructors in VET.

Both the vocational training and skills development are the most impact factors of human capital development of a country. In Tanzania vocational education institutions, the concept of entrepreneurship is not new; it encompasses the theoretical understanding and practical application of principles and skills related to entrepreneurial endeavors (Audu, 2022). This has been included in vocational curricular for training middle carders and to help out those who wish to establish small businesses. Vocational institutions like Morogoro Teachers Training College (MVTTC), Dar, es Salaam National Vocational Training Centre (NVTC) provide several short courses, targeting all those who aspire to set up and run their own businesses and those engaged in small business enterprises development.

The World Bank points out that the fundamental solution for the manpower problem facing Tanzania's small-scale enterprises (SSEs) was the establishment of vocational schools and training centres since they are important for formation of industrial manpower (World Bank, 1991). It is therefore advanced that effective use of the vocational skills acquired from vocational education and training could serve as a basis for technological innovation within the SSEs in Tanzania (Ishumi, 1998). Technical and vocational education (TVET) is of key important for Tanzania today as countries vision is to implement industrialization policy and more recently the government has set the goal to introduce vocational subjects in secondary schools (Ishumi, 1998). The purpose is to ensure that all students completing basic education also obtain employability skills. Ofori (2018) backs up this argument by acknowledging that any developing country's education system must be linked to TVETs colleges which are a driver to human capital development that bases on the provision of skills and competences for its sustainable development.

Characteristics and competencies of an entrepreneur trainee from vocational education as highlighted in syllabus stipulates that: the syllabus intends to provide a crucial link between the trainee's occupation and a practical life of self-employment. The trainees will therefore have developed a positive attitude towards self-employment and the motivation to become job creators and not mere job seekers (Ofori, 2018). This is supported by literature on entrepreneurship by Van der (1998) who adds that a number of competencies listing on entrepreneurial qualities are like motivation, a need for autonomy and independence, creativity and originality, taking initiative, risk taking. Other competencies include looking for possibilities, posing challenging objectives, self-confidence, internal locus of control and endurance, these qualities could be called enterprising key skills. These skills are more important in promoting self-employable individuals. In some cases, skills analysis focuses on managing a business rather than managing your own enterprise. The last, and most interesting, theme focuses more explicitly on the role of the entrepreneur as entrepreneur. 'Proper' entrepreneurial competencies are needed successfully to start an enterprise, to run it in the market and to let it survive or grow. Competencies, range from recognizing business opportunities, interpretation of market information and the development of customer orientation to the development and effective operation of relation networks and the building of an innovative organisation (Tolentino, 1998). The entrepreneur has to develop personal entrepreneurial behavior and characteristics, learning effectively from and in business interactions and the personalization (knowledge circulation in personal and Internet/email supported networks) of global information. Bonet *et al.*, (2011) individuals with entrepreneurial characteristics can significantly be driven to self-employment since they are: self-confident, creative, dynamic and energetic, leaders, flexible, able to calculate risk, able to get on well with people, independent, and initiative oriented. These people also, need to achieve, are optimistic, are directed towards profit, can persevere and are determined, and are receptive to suggestions and criticisms. However, Bonet *et al.*, (2011) have shown that education, specifically the provision of entrepreneurship education to all students may not lead to innovation.

The aim of the reform is to better use the VET system to qualify people and prepare them for the labour market and to improve vocational training. More specifically, the reform sets out to improve the effectiveness and efficiency throughout the system by improving the quality of training and making it more relevant to the needs of business, individuals and society.

It has been claimed that a number of researches conducted worldwide illustrate that formal education has failed in achieving the target of providing entrepreneurship education in various levels. Vocational education contribution in this matter called into question by many sides, because many graduates who do not meet the qualifications required by the sector at the same time were not ready to be entrepreneurs. Winarno (2012, 2013), Peterman, and Kennedy (2003) suggest that formal education has no significant influence on the formation of character and an -entrepreneurial attitude to the learners. His research on the effectiveness of entrepreneurial learning in vocational show that the material and entrepreneurial learning strategy is not sufficiently effective in developing entrepreneurial values of students, the diversity knowledge of entrepreneurship teachers affects the failure of achieving the entrepreneurial class. Timmons (2004) indicates that formal education is not able to encourage entrepreneurship in its graduates; schools prepare graduates to only know limited knowledge about the company, and be mentally prepared to seek for work, and actually suppress creativity and students' entrepreneurial skills. Similarly, entrepreneurial education cannot be used as a strategy to solve unemployment but can equip students with job skills.

#### **Theoretical Framework**

The study employed Human Capital Theory, positing that the success of entrepreneurs hinges on their knowledge, skills, and experiences (Becker, 1964). Developed primarily by economist Gary Becker in the 1960s, this theory suggests that investments in education, training, and health can elevate

economic productivity and spur higher levels of development within societies (Becker, 1964). According to Becker, individuals accumulate human capital through these investments, thus enhancing their productivity and earning potential in the labor market (Becker, 1964). This concept encompasses not only formal education but also practical skills, knowledge, and experiential learning gained through on-the-job training and informal education (Schultz, 1961). In the realm of entrepreneurship studies, Human Capital Theory offers valuable insights into the pivotal role of education and training in nurturing entrepreneurial success (Audretsch & Thurik, 2001). Researchers leverage this framework to explore how individuals' human capital—comprising their educational attainment, relevant skills, and prior work experience—affects their propensity to embark on entrepreneurial ventures, their adeptness in identifying and capitalizing on entrepreneurial opportunities, and their overall performance as entrepreneurs (Shane & Venkataraman, 2000). Furthermore, the theory aids in assessing the efficacy of entrepreneurial education and training initiatives in enhancing individuals' entrepreneurial capabilities and outcomes, thereby informing policymakers and educators in crafting efficacious entrepreneurship development strategies (Wyrwich, Stuetzer, & Sternberg, 2016). Within vocational training programs, entrepreneurship initiatives aim to bolster individuals' human capital by providing education tailored to specific industries, thereby enhancing their capacity to succeed as entrepreneurs (Wyrwich et al., 2016). This study aligns with Human Capital Theory by prioritizing the acquisition and enhancement of skills and experiences directly applicable to particular vocational or industry settings (Wyrwich et al., 2016). Within the framework of vocational education, Human Capital Theory underscores the importance of experiential learning, enriching individuals' human capital by bridging the gap between theoretical knowledge and practical application (Wyrwich et al., 2016). By staying abreast of industry advancements, learners in entrepreneurship programs gain a competitive edge, ensuring they are well-equipped to tackle the evolving challenges of entrepreneurship within their specific industries (Wyrwich et al., 2016). This study underscores the significance of cultivating human capital tailored to the requirements of particular vocational fields, with vocational education programs building human capital and preparing individuals for successful entrepreneurship through practical experiences and continual learning (Wyrwich et al., 2016). Guided by three research questions, this study aims to evaluate the adequacy of current vocational entrepreneurship education in developing the entrepreneurial skills necessary for enhancing self-employability, assess vocational institution students' attitudes towards entrepreneurship education, and explore the relationship between students' perception of entrepreneurship and their choice of entrepreneurship as a future career.

## **METHODOLOGY**

The study was comprised of 118 vocational education trainees that were enrolled in second-level entrepreneurship courses at the Regional Vocational Training Centre (RVTC) in the Dar es Salaam region. Data was gathered from multiple trades within the RVTC, including electrical installation, fitter mechanics, and motor vehicle mechanics, with a random selection of 30 totaling 120 participants. Unfortunately, trade, questionnaires were not returned, resulting in the utilization of 118 questionnaires for data collection. The study adopted a pragmatic paradigm, employing a mixed approach and descriptive survey design, with the chisquare model utilized for analysis. Descriptive research aimed to depict the characteristics of the study participants, enabling the capture of diverse perspectives on the role of vocational entrepreneurship curriculum in developing employability skills for the current economy. Non-participant observation was conducted during teaching and learning workshops to assess the availability of facilities, including ICT gadgets. Likert scales, ranging from strongly agree (SA) to strongly disagree (SD), were employed for data collection, analyzed quantitatively using SPSS version 23. The study instruments were modified based on the human capital model, emphasizing the significance of knowledge, skills, and experience in entrepreneurial success. The scale exhibited good consistency in responses, demonstrating moderate to good internal reliability and suitability for the vocational education context.

#### **RESULTS**

The results and discussion section presents an analysis of the study's findings regarding the influence of entrepreneurship curriculum on self-employment among vocational students in Tanzania. Descriptive statistics were used to summarize data, while inferential analysis employed the Chi-square test to assess the association between entrepreneurship and future careers. Results are presented in accordance with the study objectives. Firstly, regarding the appropriateness of the vocational entrepreneurship curriculum for developing entrepreneurial skills, 54 (45.8%) respondents agreed that vocational training centers are adequately resourced for teaching entrepreneurial skills, with 46 (39%) strongly agreeing and 8 (6.8%) disagreeing. Additionally, 51 (43.2%) trainees agreed that the curriculum's teaching contents are knowledge-based, enhancing skills and competencies for self-employability. Observation revealed predominant use of a traditional classroom-based teaching approach,

with limited integration of ICT gadgets. Secondly, regarding student attitudes towards entrepreneurship education, 75 (63.9%) learners showed strong positive attitudes towards entrepreneurship education, while 71 (60.2%) strongly agreed that entrepreneurship programs can produce graduates with high knowledge and skills. Moreover, 77 (65.5%) students agreed that entrepreneurship education enhances their potential for future entrepreneurial success. Notably, 81 (68.6%) students expressed confidence in their business ideas, indicating a predisposition towards entrepreneurship even before completing the curriculum. Finally, concerning the relationship between students' perception of entrepreneurship and future careers, the Chi-square test revealed a statistically significant association ( $\chi 2 = 0.000$ , p < 0.05) between students' views on entrepreneurship and their aspirations for future entrepreneurship careers. The strong association (Cramer's V = 0.516) underscores the link between students' perceptions of entrepreneurship and their future career choices as entrepreneurs.

Table 1: The Summary of Association Between the Entrepreneurship and Future Career

Chi-Square Tests			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Pearson Chi-Square	156.852a	25	.000
Likelihood Ratio	41.996	25	.018
Cramer's V	.516	-	.000
N of Valid Cases	118		

## **Discussion and Implications of the Study**

The findings of this study shed light on the perceptions and attitudes of vocational students towards entrepreneurship education and its impact on their future self-employment prospects in Tanzania. Firstly, concerning the adequacy of the vocational entrepreneurship curriculum, a substantial proportion of respondents agreed that vocational training centers possess the necessary resources for teaching entrepreneurial skills, with a notable percentage strongly endorsing this view. Moreover, a considerable number of trainees acknowledged the knowledge-based nature of the curriculum, indicating its effectiveness in enhancing skills and competencies relevant to self-employability. However, the observation of predominantly traditional teaching methods and limited integration of ICT gadgets suggests potential areas for improvement in curriculum delivery to align more closely with modern entrepreneurial practices and technological advancements.

Secondly, the study revealed encouraging attitudes among vocational students towards entrepreneurship education, with a majority expressing strong positive sentiments towards its potential to cultivate high knowledge and skills. The positive correlation between entrepreneurship education and future entrepreneurial success, as perceived by the majority of students, underscores the value they place on such educational initiatives in preparing them for self-employment opportunities. Furthermore, the significant level of confidence exhibited by a large proportion of students in their business ideas highlights their proactive inclination towards entrepreneurship, signalling a promising foundation for future entrepreneurial endeavours.

Lastly, the examination of the relationship between students' perceptions of entrepreneurship and their aspirations for future careers yields noteworthy insights. The Chi-square test results demonstrate a statistically significant association between students' views on entrepreneurship and their intentions to pursue entrepreneurship as a future career path. This strong association underscores the influential role of students' perceptions in shaping their career aspirations, emphasizing the pivotal importance of fostering positive attitudes towards entrepreneurship education within vocational training institutions. The high Cramer's V value further reinforces the robustness of this association, indicating a strong link between students' perceptions of entrepreneurship and their inclination towards entrepreneurial careers.

Overall, these findings underscore the critical role of entrepreneurship education in equipping vocational students with the requisite knowledge, skills, and attitudes necessary for successful self-employment ventures. The study highlights the importance of continuously enhancing entrepreneurship curricula and teaching methodologies to better align with the evolving demands of the entrepreneurial landscape and to foster a conducive environment for cultivating entrepreneurial aspirations among vocational students in Tanzania.

## RECOMMENDATIONS AND CONCLUSIONS

Based on the findings of this study, several recommendations can be made to enhance entrepreneurship education and support self-employment among vocational students in Tanzania. Firstly, there is a need for vocational training centers to modernize their curriculum delivery methods by incorporating more interactive and experiential learning approaches. This includes greater integration of ICT gadgets including; computers, printers, projectors, lecture boards internet facilities, adequate stable power supply, as well as technology-driven teaching tools to better prepare students for the dynamic entrepreneurial landscape. Additionally, vocational institutions should collaborate with industry partners to provide students with real-world

exposure and practical experience in entrepreneurship, enabling them to apply theoretical knowledge in practical settings.

Furthermore, efforts should be made to foster a culture of entrepreneurship among vocational students by promoting positive attitudes towards entrepreneurship education. This can be achieved through targeted initiatives such as guest lectures, workshops, and mentorship programs conducted by successful entrepreneurs and industry experts. Moreover, vocational training centers should strive to install confidence in students' business ideas and aspirations, providing them with the support and encouragement needed to pursue entrepreneurial ventures. By nurturing students' entrepreneurial mindset and skills, vocational institutions can empower them to seize opportunities for self-employment and contribute to economic growth and innovation in Tanzania.

In conclusion, this study underscores the critical role of entrepreneurship education in equipping vocational students with the knowledge, skills, and attitudes necessary for successful self-employment ventures. By addressing the identified areas for improvement and implementing the recommended strategies, vocational training centers can play a pivotal role in fostering a conducive environment for cultivating entrepreneurial aspirations among students. Ultimately, investing in entrepreneurship education not only benefits individual students but also contributes to the socio-economic development of Tanzania by fostering innovation, job creation, and economic empowerment.

#### REFERENCES

- Audretsch, D. and Thurik, A. (2001). "What's New about the New Economy? Sources of Growth in the Managed and Entrepreneurial Economies", *Industrial and Corporate Change*, 10(1), 267-315.
- Audu, G.A. (2022). Role of Entrepreneurship and Vocational Education in Sustainable Development; Journal of Advances in Education.
- Bonet, F.P., Armengot, C.R. Miguel, & Martin, A.G. (2011). Entrepreneurial success and human resources, *International Journal of Manpower*, 32 (1), 68 80.
- Creswell, J.W. (2005). Educational Research: Planning, conducting and evaluating quantitative and qualitative research, 2nd ed. Thousand Oaks, California: Sage Publications.
- Creswell, J.W. (2012). Educational Research: Planning, conducting and evaluating quantitative and qualitative research, 4th ed. Boston, MA: Pearson Education.

- Ellis, T. (2003). "What are the Advantages of a Vocational Curriculum?", *Conjecture Corporation*, 4(3), 34-40.
- Hoang, G., Le, T.T.T., Tran, A.K.T. and Du, T. (2020). 'Entrepreneurship education and entrepreneurial intentions of university students in Vietnam: the mediating roles of self-efficacy and learning orientation", *Education b Training*,63(1),115-133.
- Ishumi, A. (1998). Vocational Training as an Educational and Development strategy, *International Journal of Educational Development*, 4(1), 9.
- Ip, C.Y., Liang, C., Lai, H.J. and Chang, Y.J. (2021), "Determinants of social entrepreneurial intention: an alternative model based on social cognitive career theory", *Nonprofit Management and Leadership*, 31(4), 737-760.
- Kowalczyk, D. (2015). Descriptive Research Design: Definition, Examples & Types. Retrieved from <a href="http://study.com/academy/lesson/descriptive-research-design-definition-examples-types.html">http://study.com/academy/lesson/descriptive-research-design-definition-examples-types.html</a>. [Accessed: 4th January 2016].
- Kuip, I. van der, & Verheul, I. (2004). Early Development of Entrepreneurial Qualities: The Role of Initial Education. *International Journal of Entrepreneurship Education*, 2(2), PAGE NUMBERS???
- Luhala, P.P., & Yuting, Z. (2021). Contribution of technical and vocational education training towards industrial development in Tanzania. *North American Academic Research*, 4(5), 118-136.
- Moshi, G.G., Lyimo, N.S. & Magaya, E.V. (2024). Triple Helix Model for retrofitting technical and vocational education training in transition to green economy in Tanzania. *Journal of Research Innovation and Implications in Education*,8(1), 139–150.
- Ofori, D. Appiah-Nimo, C. & Arthur, K.A. (2018). Assessment of Entrepreneurship Education on Entrepreneurial Intentions: Evidence from University of Cape Coast. *Global Journal of Management and Business Research: A Administration and Management*: 18(9), 1-12.
- Roy, A. and Raymond, L. (2008). "Meeting the Training Needs of SMEs:" Is e-Learning a Solution? "The Electronic Journal of e-Learning, 6(2), 89-98.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory and Practice*, 28, 129-144.
- Shane, S. and Venkataraman, S. (2000). 'The Promise of Entrepreneurship as a Field of Research'. *The Academy of Management Review*,25(1),217-226.

- Tabbron, G. and Yang, J. (1998). The Interaction between Technical and Vocational Education and Training (TVET) and Economic Development in Advanced Countries Elsevier Science Ltd.
- Tolentino, A. (1998). Training and Development of Entrepreneurs-managers of Small Enterprises: pointers and lessons learned. Geneva: International Labour Organization.
- United Republic of Tanzania. (2023), Education and training policy. Dar es Salaam: Ministry of Education Science and Technology.
- Wardana, L.W., Narmaditya, B.S., Wibowo, A., Mahendra A.M., Wibowo, N.A., Harwida, G. and Rohman, A.H. (2020). The mediating role of attitude and self-efficacy. Heliyon, 6(9), 99-110.
- World Bank (1991). Technical and Vocational Education and Training, Washington, DC.