

# Sustainability of Entrepreneurship and Innovation among TVET Graduates in Namibia

**Elock Emvula Shikalepo**

Namibia University of Science and Technology, Namibia

## **Abstract**

*Sustainable entrepreneurial skills are vital for the promotion of economic and social progress for both developed and developing societies. Hence, Technical, Vocational Education and Training (TVET) trainees needs adequate entrepreneurial exposure to become artisans who can satisfy the current and future market demands. Traditionally, TVET curricula has been preparing trainees to answer the question: where can I get employed after my training? However, contemporary curricula should now seek to prepare trainees who can equally answer the question: how can I become an innovator of business opportunities after my training? The former is proficient with occupational skills, but deficient of entrepreneurial ambitions, and should thus be consolidated with the latter to promote entrepreneurship and innovation. TVET curricula should not only seek to equip trainees with occupational skills and attitudes for seeking employment, but also with entrepreneurial capabilities for turning their occupational skills into feasible, viable and sustainable industrial entities. Therefore, TVET stakeholders should map out an appropriate model for ensuring successful integration of entrepreneurial education at every stage of the vocational education and training, to subsequently graduate committed and skilled artisans who are business-minded. This article explained a model whose implementation could realise sustainable entrepreneurship and innovation among TVET graduates in Namibia.*

**Keywords:** *entrepreneurship, entrepreneur, innovation, training, sustainability, TVET.*

## **1. Background**

TVET (Technical, Vocational Education and Training) is any form of education that concerns the development of occupational skills needed by an individual as preparations for work (Olaitan, 1998). TVET is also regarded as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (UNESCO, 2002).

The ultimate aim of TVET is to increase the employability of individuals, and work for the benefit of the community and sustainability in general. TVET programmes are not only aimed at producing employees, but also producing employers. Thus, TVET is the master key that can alleviate poverty and improve the quality of life for all and help achieve sustainable economic growth (UNEVOC-UNESCO, 2004).

Sustainable economic growth can be achieved through entrepreneurship and innovation, as critical economic pillars that TVET should embrace.

Entrepreneurship is a process that involves the (a) evaluation of business opportunities, (b) development of a business plan, (c) determination of required resources, and (d) management of required enterprises (Allawadi, 2007). According to the European Commission (2006a), entrepreneurial programmes and modules offer trainees with the ability to think creatively and become an effective business developer. Entrepreneurship is thus concerned with the ability of individuals to turn their ideas into action.

Entrepreneurship is initiated by an entrepreneur, as a person who brings the resources together to make their values greater than before (Maigida, Saba & Namkere, 2013). Kitzer (2007) viewed an entrepreneur as a special type of labour that requires an organised combination of all factors of production namely capital, land and labour, and tries to ensure optimum utilisation of them to ensure maximum profit. Entrepreneur do not only organise resources to create wealth for themselves and others, but manages such resources efficiently in order to sustain their innovation and minimise possible risks that might collapse their innovation.

Innovation is the development and implementation of ideas to produce new or improved products, processes or services (The Experts' Forum, 2010). Innovation in Small and Medium Enterprises (SMEs) is crucial to their success and sustainability. Enterprises that innovate are more likely to survive in the market than enterprises that do not innovate. Entrepreneurs, who are in most cases TVET graduates, should be innovative and entrepreneurial to boost economic growth. To sustain and develop SMEs, entrepreneurship education must be integrated into TVET programmes to empower TVET trainees to become potential innovators and entrepreneurs.

The interdependence between innovation and entrepreneurship is such that innovation deals with the development of new ideas, concepts or processes. Once these new ideas and processes are turned into business opportunities, then that becomes entrepreneurship. These new ideas and processes needs to be sustained. Sustainability is the process of using resources efficiently to benefit the generation today and generation tomorrow. Sustainable entrepreneurial skills are vital for the promotion of economic and social progress for both developed and developing societies. For example, in the People's Republic of China, thirteen percent of secondary vocational school graduates opted for self-employment or to establish their own small business in 2010 (Vocational and Technical Education Publishing House, 2011).

Teaching entrepreneurship during training makes graduates gain experience and become more confident about running their own businesses. The considerable percentage of TVET graduates who choose to work independently (in self-employment or their own business) supports the conclusion that entrepreneurship is relevant to TVET (Maigida, Saba & Namkere, 2013). TVET therefore is critical to the economy as it directly increasing the employability of students and trainees in two major types of employment: self-employment (which includes establishing and developing SMEs) and paid employment.

Both types of education, vocational education and entrepreneurship education, directly link the training courses to the labour market, widen the scope of choices for students and graduates, optimise the utilisation of individuals' potential, and contribute to the comprehensive development of society (Maigida, Saba & Namkere, 2013). Entrepreneurship is thus a major cornerstone in promoting the establishment and

development of SMEs that are required for economic growth. Hence, Complementing the acquisition of trainees' job-specific skills with entrepreneurship education, would enable TVET graduates broadening their scope for gaining decent work opportunities and for establishing own business entities. In a globally competitive, knowledge-based economy, having a multi-skilled labour force is essential in ensuring productivity and sustainable economic growth.

Namibia as a developing country, has more than 16 vocational training centres (combination of both private and public vocational training centres) registered with the Namibia Training Authority, a statutory body by Act of Parliament, Act No. 1 of 2008, mandated with the regulation of technical, vocational education and training in Namibia. These centres produce artisans that Namibia needs to grow its economy and achieve its vision of becoming an industrialised nation, competitive with other economic powerhouse of the world by the year 2030. So far, the Namibia University of Science and Technology (NUST), is the only tertiary institution mandated with the training of professional vocational instructors, who are expected to train the trainees at the various vocational training centres nationwide.

By consequences, the quality of the instructors that NUST produce, determine the quality of the graduates that the vocational centres will produce, and the capabilities of these graduates in positively handling the nation's economic endeavours. This implies that NUST plays a significant role in shaping, not only the quality of the professional vocational instructors it produces, but also in shaping the quality of the TVET graduates being produced by its instructors, and subsequently shaping the economic outlook as geared by these graduates.

The effectiveness of the TVET education that NUST provide is not only manifested by the qualified professional vocational instructors that NUST graduates, but also manifested by the effectiveness of the vocational training centres' graduates in the market. Thus, it is essential that TVET trainees get adequate exposure to innovation and entrepreneurship, to become graduates who can excel in their chosen trade and satisfy the current and future needs of society. This excellence can be demonstrated by getting employed in their chosen trade areas and by equally establishing business ventures in the trade of their interests. Hence, it is significant for NUST, as an instructor training institution, to ensure that entrepreneurship education takes centre stage in the TVET curriculum, and guarantee that this education is exploited optimally to meet both current and future economic demands. With this in mind, this concept paper attempted to explain a model whose implementation by instructor training institutions and vocational centres, could realise sustainable entrepreneurship among TVET graduates in Namibia as a case study.

## **2. Problem Statement**

It is a fact that the society needs men and women that are capable of establishing businesses that would counteract the adverse effects of mass unemployment and poverty. Society have realistic expectations from TVET graduates to promote economic growth through innovation and entrepreneurship, as economic pillars that TVET should provide. With the ability to innovate and turning innovation into business opportunities, TVET graduates should promote industrialisation as a driver for economic growth. For this promotion to happen, innovation and entrepreneurship education should manifest itself at every stage of the TVET system, and managed sustainably. Despite this recognition, entrepreneurship education is not

emphasised at every stage of the vocational education and training system. This deficiency depletes sustainable entrepreneurship and industrialisation endeavours. This paper explains a model on how entrepreneurship can be exercised and sustained at every stage of the TVET system. This explanation is informed by the following key questions:

*Main question*

- How can TVET graduates demonstrate sustainable entrepreneurship in society?

*Sub-questions*

- How can TVET institutions impart entrepreneurship skills to TVET trainees?
- How can TVET graduates sustain their imparted entrepreneurial skills?

There is a broad conceptualisation of TVET, which in most cases paid more attention on the trades and occupational skills, little attention has been paid to entrepreneurship education. In attempting to find answers to the above questions, the following objectives were considered:

- Explain the teaching of entrepreneurship to TVET trainees
- Suggest measures for sustaining entrepreneurial skills among graduates

The above objectives were addressed by employing the following methodology.

### **3. Methodology**

This paper is based on a comprehensive analytical review of the available literature evidence on TVET programmes and establishing how entrepreneurship education manifest itself in these programmes. This comprehensive analytical review generated data from documentary analysis and informal discussions with students.

With regard to document analysis, the researcher reviewed the existing curriculum programmes for the following TVET courses for trainers, offered by NUST: Certificate in Vocational Education and Training: Trainer; Higher Certificate in Vocational Education and Training: Trainer; and the Diploma in Vocational Education and Training Management. The curriculum for these courses were analysed to establish the extent to which entrepreneurship education is manifested in any of the TVET programmes.

With regard to informal discussions, distance students were consulted when they came for vacation classes. The researcher expressed to students that there was an upcoming international conference, with emphasis on TVET's three main domains, namely, Work Integrated Learning, Vocational Training and Entrepreneurship. The researcher informed students that the focus of interest to the researcher, is entrepreneurship domain and it would be grateful if willing students could share their inputs with the researcher, regarding the presence, absence and/or integration of entrepreneurship education in the TVET curriculum. Mutual agreements was reached with the students and time was scheduled and discussions ensued between the students and the researcher.

### **4. Findings**

The findings are presented according to the tools used to collect them.

*Documentary analysis*

This analysis revealed that NUST offers three programmes in the TVET field. These programmes are offered in the Faculty of Human Sciences, Department of Education. These qualifications are: Certificate in Vocational Education and Training (04CVET): Trainer; Higher Certificate in Vocational Education and Training (05HCVT): Trainer; and Diploma in Vocational Education and Training Management (06DVET). These programmes can be presented in both full-time, part-time and distance modes. The findings showed that the curriculum for Certificate in Vocational Education and Training: Trainer, has fifteen courses/subjects offered over two semesters.

None of these fifteen courses relates to entrepreneurship education, and none of these fifteen courses has embedded entrepreneurship education in it. These courses placed emphasis on occupations, technologies, assessment, instructional strategies and other contents, and nothing is relative to entrepreneurship in their content. Upon passing these courses, students were certified and graduated as professional vocational instructors, conferred a Certificate in Vocational Education and Training (04CVET): Trainer.

The Certificate in Vocational Education and Training: Trainer, is a prerequisite for admission to the Higher Certificate in Vocational Education and Training: Trainer, for professional instructors who would like to take their qualifications a step further. The curriculum for the Higher Certificate in Vocational Education and Training: Trainer, consist of ten courses offered over two semesters. None of these ten courses relates to entrepreneurship education, and none of these ten courses has embedded entrepreneurship education in it.

The Higher Certificate in Vocational Education and Training: Trainer, is a prerequisite for admission to the Diploma in Vocational Education and Training Management, whose curriculum consist of twenty five courses (including elective courses) offered over four semesters. Sharing the same trend with the previous programmes, none of these twenty five courses relates to entrepreneurship education, and none of these twenty five courses has embedded entrepreneurship education in it.

It is very clear that the instructors that NUST graduates are deficient of entrepreneurship education, which then makes society have unrealistic expectations from vocational centres' graduates, with regard to their entrepreneurial ambitions. None of the programmes that trainers took, entailed entrepreneurship education. As a result, vocational centres graduates were faced with challenges in turning their occupational skills and newly developed concepts (innovations) into business opportunities (entrepreneurship). This was the case, as their trainers (certified professional vocational trainers) have failed to impart entrepreneurial skills on trainees, as trainers too, were also not gifted with such skills during their training at a designated instructors' training institution - NUST.

The snow ball effect of this gap is that, TVET graduates should were required to enrol for other programmes or rather short courses elsewhere after graduating from a TVET institution, to be capacitated with innovative and entrepreneurial skills, when they could have learnt entrepreneurship education at their TVET institution. It was thus difficult for TVET graduates to sustain any entrepreneurial endeavours in the absence of a well laid entrepreneurial foundation. Ideally, entrepreneurship education should start right from instructors training institutions, then passed down to vocational training centres under the caretaker of trainers, and then realised practically in the market by graduates. This will ensure that there is an established entrepreneurial knowledge-base to build on and sustain among TVET graduates.

### *Informal discussions*

This method was mainly used to corroborate the findings of the document analysis. These discussions were held with trainers, who were students upgrading their qualifications to be professional vocational trainers. Indeed, students confirmed the findings of the curriculum analysis, that students for the Certificate in Vocational Education and Training: Trainer, did not have any course that relates to entrepreneurship. Some students narrated that, back at their vocational centres, they have one or two subjects that seek to connect what trainees were doing at the training centres with what was happening in the industries.

However, entrepreneurship was not manifested explicitly in these subjects. In addition, some students doubted their competence in facilitating these subjects or facilitating certain topics for these subjects since, they were not trained in teaching these subjects. The overall impression is that, entrepreneurship education is not offered at both instructor training institution, this case being NUST, as well as at the various vocational training centres countrywide.

In view of the above findings, the following model bears relevance with regard to the integration of entrepreneurship education throughout the different stages of the TVET system.

## **5. Multi-Faceted TVET Model**

This model strives to ensure the sustainability of innovation and entrepreneurship among TVET trainees and graduates by considering the role of both institutional and industrial dynamics. The current model in Namibia that emphasises entrepreneurship, is one facet, industrial-based. Institutions that produce professional vocational instructors (such as NUST) and institutions that produce artisans (vocational training centres), are kept out of this model. Emphasis is placed on TVET trainees to start new businesses upon their graduation, well after they have left training institutions. Any failure to start a business is placed squarely on the graduates in the industries. As opposed to one-facet model, which is industrial-based, this multi-facet model sought to explain the role that different TVET institutions and industries can equally play in promoting entrepreneurship and innovation, and making it easier for TVET graduates to turn their occupational skills into business opportunities upon their graduation.

### **5.1 Institutional dynamics**

Institutional dynamics refers to the powers that both instructor training institutions and trainee training institutions should have, to imparting entrepreneurial skills to students. The teaching of entrepreneurship and innovation should start at training institutions and boil down to the labour market where it will be realised in practice by the TVET graduates. TVET institutions should be first points of entry for the entrepreneurship and innovation. The teaching of entrepreneurship by TVET institutions will harbour realistic entrepreneurial expectations among TVET graduates, knowing that the graduates were capacitated by the institutions they are graduating from. The dynamics that institutions can exercise in promoting and sustaining entrepreneurship education are discussed next.

### 5.1.1 Sustainable Entrepreneurship (SE)

Entrepreneurial skills should augment the technical knowledge and skills trainees gain in vocational training centres. Entrepreneurial skills will help trainees to acquire the know-how mindset necessary to create self-employment as a viable career option (UNESCO, 2006-07a). In order to create realistic entrepreneurship expectations among TVET graduates, there is a need for the curriculum of TVET programmes for both trainers and trainees to have a subject that teaches entrepreneurship and how entrepreneurial skills can be sustained. Such subjects can be named Sustainable Entrepreneurship (SE).

Through Sustainable Entrepreneurship subject at trainers' training institutions, trainers will be capacitated with both theoretical knowledge and practical skills on entrepreneurship. Armed with these knowledge and skills, trainers will be able to transmit these knowledge and skills to the trainees at their various vocational centres. As graduates, trainees will be able to realise in practice these entrepreneurial knowledge and skills in the industries after their graduation. Thus, the provision of SE will ensure that TVET graduates are skilled with entrepreneurship and innovative ways for an improved way of life in the labour market (Dike 2009). This will ensure that upon completion of their training at a TVET institution, graduates will not be required to enrol for another course to gain entrepreneurial skills, but rather implement the entrepreneurship endeavours that they were capacitated with during training at a TVET institution. The curriculum of SE, may for example consist of the following chapters, (a) evaluation of business opportunities, (b) development of a business plan, (c) determination of resources, and (d) management of enterprises (Allawadi 2007).

The first chapter, *'Evaluation of business opportunities'*, should focus on capacitating trainees on how to be innovative, create and improve processes, and then how to turn their innovations into business opportunities, as well as how these business opportunities can be sustained. Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these opportunities by transforming ideas into practical and targeted activities (European Commission, 2002). Trainees should not only be armed with occupational skills, but be able to turn their occupational skills into sustainable business entities, essential for economic growth. SE seeks to prepare trainees to become successful entrepreneurs, by guiding them through the various stages of developing a commercial idea, from identifying a community need for a product or service to acquiring resources, organising a workplace and marketing the product or service and finally preparing a business plan (UNESCO 2006-07a).

The second chapter, *'Development of a Business Plan'*, should focus on teaching trainees how to write an impressive business plan to submit to creditors. What a business plan is, the components of a business plan, possible creditors, what to avoid in a business plan and having assessment based on writing a business plan, should form the crux of this chapter. Capital is a fundamental factor in establishing a business entity and to flourish innovation. However, creditors look for impressive and viable business proposals, which then requires that trainees should be highly cultivated in the art of crafting a business plan for them to secure financing for their business ideas. Without sufficient knowledge of writing a business plan, TVET graduates will hardly execute their entrepreneurial endeavours.

The third chapter, *'Determination of resources'*, should inform trainees on identifying the human and material inputs required for a specific proposed business venture. Entrepreneurial studies allows the trainees to consider various occupational possibilities and the resources required, available rewards, necessary training and relative advantages and disadvantages of each (Nwoye, 2011). Having a clear picture of the resources required enables entrepreneurs to choose correct business choice. Specific types of business requires specific resources, whose availability and affordability should be established before getting the business off the ground. This will help to guarantee sustainability of the business as opposed to starting a business only to realise the shortfall in resources needed, resulting in business collapsing.

The fourth chapter, *'Management of enterprises'* should inform and capacitate trainees on the management and leadership domain of a business enterprise. Aspects of leadership styles, management functions, span of control and business hierarchy are fundamental topics to this chapter. According to the UNESCO (2003), the scope of entrepreneurship education should include creativity, innovations, risk taking and the ability to plan and manage projects in order to achieve objectives. This scope requires entrepreneurs to be well-versed with the management domain. The owner of a business, cannot be the secretary, the accountant, the manager, the cleaner and driver at the same time. The business ought to have a well-organised staff complement with clearly defined roles as well as a management structures for the business to flourish, and trainees needs to be informed of these management structures.

SE curriculum would ensure that trainees are educated and motivated, which leads to better achievement of the required skills, both occupational and entrepreneurial, and increase their opportunities to enjoy job satisfaction in their chosen trades. During training, trainees will use their acquired entrepreneurship skills in mastering skills and acquiring knowledge that would enable them to become self-employed or become more productive in paid employment, thereby reducing unemployment in society (Olaitan 1992; Oranu 1991). The integration of SE curriculum in the TVET programmes would help trainees become multi-skilled and possible entrepreneurs. Overall, it is essential to have SE as part of the TVET curriculum so that trainers are well groomed with entrepreneurship skills, such that they can impart these skills optimally to the trainees, who are then expected to realise these skills to fruition in the industries upon their graduation.

### **5.1.2 Pedagogical Content Knowledge (PCK)**

The inclusion of SE curriculum in the TVET programmes requires specialised experts to facilitate SE to trainers and subsequently to trainees. This calls for good teachers who are well armed with professional knowledge (Bullock 2015). Professional knowledge relates to the 'pedagogical content knowledge' which is defined as a instructor's understandings of the concepts being taught and skills needed to contextualise, situate and personalise the content to the trainees (Thompson, Greer & Greer 2004; Mullock 2003). Being competent with pedagogic content knowledge implies that good instructors know how to organise and teach trainees in a way that each trainees can demonstrate mastery of the learning content.

Instructor training institutions should thus, reflect on the quality of their lecturers/instructors and ensure that they have pedagogues who are pedantic in the successful application of various SE teaching methodologies and pedagogies to the trainers. The presence of pedagogues at instructors training



institutions will ensure that trainers are capacitated with entrepreneurship education, and become competent in replicating successful SE teaching to trainees at their various vocational training centres. This success will further be replicated practically, into industries by trainees upon their graduation. This will ensure a sustained entrepreneurial culture and mindset throughout the different stages of the TVET system.

## **5.2 Industrial dynamics**

These refers to powers that different industries, companies and financial institutions can exercise, mainly to sustain the imparted entrepreneurial skills among TVET graduates. There is an interdependence between training institutions and industries, such that training institutions are more focusing on imparting entrepreneurial knowledge. On the other hand, industries take the role of reinforcing this knowledge with practical skills, all for the purpose of sustaining entrepreneurial knowledge and skills among TVET trainees and graduates. Industrial dynamics takes the forms discussed next.

### **5.2.1 Industry Exposure and Apprenticeship**

SE alone as facilitated by pedagogues, is not all enough to promote entrepreneurship. There is a need for a multidisciplinary approach involving governmental, financial, economic and social bodies, to join forces in promoting entrepreneurship and innovation. In order to complement SE theoretical knowledge with practical skills, industry exposure and apprenticeship should continue to be emphasised and prioritised. Industries should thus make themselves available to accommodate trainees for opportunities of internships and apprenticeships. Through internships, trainees get to experience the practical part of their trade and specifically how to turn their trade into business opportunities.

It is common in a Namibia, where some trainees fails to secure internships, commonly known as job attachments. This is a major setback, as without internship opportunities, trainees' theoretical knowledge perishes and cannot be sustained. To ensure that the knowledge acquired continues to flourish, training institutions and industries should join forces and enter into collaborative partnerships to secure internship opportunities for trainees and make their knowledge sustainable. In addition, to internship, TVET stakeholders should pool resources to promote apprenticeship among various companies, so that trainees can get employed by these companies and get the necessary skills about their trade and occupational skills and how they can turn these skills into business opportunity. The aim is to ensure that trainees get trade and entrepreneurial exposure such that should they decide to run their own business entities, they can do so without or with little hurdles.

### **4.2.2 Financing and Support Services**

Almost everything depends on the availability of finance and available support services. Once trainees are capacitated and have the necessary exposure on how to become an entrepreneur, they are expected to establish business entities to grow the economy. As emphasised earlier, the aspect of business plan becomes an important factor here. TVET graduates should innovate viable business ideas and develop impressive business plan for submission to creditors to access finance. Various industries, corporate entities as well as financial institutions should join forces and provide financial provisions for emerging entrepreneurs who

are in most cases TVET graduates. It is unfortunate that most established financial institutions demand collateral before giving finance to entrepreneur. TVET graduates have who graduated and have not yet gathered sufficient properties to serve as collateral suffers a major setback due to collateral criteria.

This demand for collateral is a challenge as it does not sustain entrepreneurial ambitions of TVET graduates. Financial institutions should be established, that are solely catering for emerging entrepreneurs who have no collateral. Earlier, Namibia has established the Small and Medium Enterprises (SMEs) Bank, to support financially, emerging small and medium business innovators. It is very unfortunate that this bank was liquidated due to mismanagement of funds and poor business ethics, thereby leaving the emerging Namibian entrepreneurs' business dreams in peril.

Entrepreneurial dreams have been found to flourish under favourable circumstances, such as a fertile ecosystems, adequate financing of entrepreneurship from inception to critical size, and promoting an entrepreneurial culture among citizens (Marich, 2011). Shaping fertile ecosystems for entrepreneurship is thus crucial in boosting the success rates of start-ups (Badawi, 2011). To ensure sustained economic growth, a solution should be found to fund small business ventures and provide the required support services, such as workshops on how to manage the business and finances. The continuous support services to emerging business will ensure the sustainability of the small established business ventures, as well as their subsequent growth into big industrial entities.

### **5.2.3 Monitoring and Evaluation**

There has to be an on-going interaction between various TVET stakeholders, from instructor training institutions to vocational training centres, down to industries and vice-versa. Monitoring and evaluation is a mutual task of both instructor training institutions, vocational training centres and industries. Instructor training institutions and vocational centres should be mindful and content of what becomes of the trainees they graduated. They will only be mindful of what becomes of their graduates if there is a constant monitoring of what their graduates are up to in the industries, how effective are they in the market and what business ventures they have established. Equally, industries providing support services to emerging business ventures will not be mindful of the effectiveness of their support thereof, unless they keep monitoring progress made. This will help industries establishing appropriateness of the support provided and identifying any gaps in support service provisions.

Monitoring and evaluating the effectiveness of what the graduates are up to in the industries is not only beneficial to the vocational centres to ensure that they are producing graduates that the market can absorb, but it is also essential in assisting the re-alignment and revision of the TVET curriculum, in view of the feedback received from the evaluation. Any gap identified in the market, such as a specific skills lacking among TVET graduates, could well be addressed by including the content of this specific skill in the SE curriculum. Therefore, monitoring and evaluation ensures the sustainability of the SE at both TVET training institutions (instructor training institutions and vocational centres for trainees) as well as in the labour market, by guaranteeing that SE is taught as planned and that trainees bear fruition and relevance in industries upon graduation.

## 6. Conclusion

This paper focused on the inclusion of entrepreneurship education into the TVET programmes, which is currently lacking in the Namibian context. This paper argues that entrepreneurship education provides trainees with the necessary business-minded skills that they need in their lifetime, to turn their innovations into business opportunities. The paper explained a multi-faceted model of ensuring that TVET graduates are equipped with adequate entrepreneurial skills during training, and ensuring that entrepreneurship education is manifested at every stage of the TVET system.

For entrepreneurship to be consistently sustained, it is essential that its teaching should start from instructors training institutions, facilitated by pedagogues. The instructors produced by these training institutions will then impart entrepreneurship education to trainees at the various vocational training centres. As graduates, trainees will then realise in practice these entrepreneurial skills in the labour market, by excelling in their employment or by establishing own viable business ventures, all of which are essential ingredients for the growth of the economy.

Until such a time that entrepreneurship education is integrated in the TVET programmes, TVET graduates will continue to struggle in implementing and sustaining their entrepreneurial ambitions, owing to their lack of exposure to entrepreneurship and innovation during their training and vocational training centres. Given sufficient training and support services by both TVET institutions and industries, there is no doubt that TVET graduates are reservoirs of potentials that society needs to prosper, and indeed masters of their own destiny.

## 7. Recommendations

For an improved entrepreneurship provisioning in the TVET system, this paper made the following recommendations:

### 7.1 Recommendations for TVET institutions

- Instructors training institutions should make entrepreneurship education as part of their courses. This will ensure that instructors for vocational training centres are well capacitated to facilitate the teaching of entrepreneurship to trainees at various vocational training centres. To carry out this function efficiently, instructors training institutions should attract, motivate and retain good lecturers, who are experts in the development of SE curriculum and facilitation thereof.
- Vocational training centres, equally should make entrepreneurship education as one of the courses at the vocational training centres. This will make sure that trainees are not only capacitated with trade and occupational skills, but also with innovative and entrepreneurial skills. This will help TVET graduates turn their innovations into business opportunities upon their graduation.
- Important to all TVET institutions (instructors training institutions and vocational training centres), is the motivation and capacity building of lecturers and instructors/trainers. Staff members should be motivated to remain confident in what they do, and rewarded adequately so that institutions invest in their staying.

## 7.2 Recommendations for industries

- Governmental, financial, economic and social bodies should join forces in promoting entrepreneurship and innovation. Various industries should make themselves available for funding TVET initiatives, and for providing opportunities for internships and apprenticeship. This will help trainees augment their theoretical knowledge with practical skills.

## 7.3 Recommendations for researchers

- Periodical research should be conducted to establish the effectiveness of the inclusion of entrepreneurship into the TVET curriculum. There is a need for a more focused research to explore issues related to entrepreneurship education in the TVET programmes, especially the impact on the employability (gained employment and self-employment) of the TVET graduates. Evidence-based policies on the success or failure of the inclusion of SE in the TVET programmes cannot be realised in the absence of a sound research base. Research-based evidence would inform sound SE and TVET policy development and implementation. Hence, this is an area that warrants further research from educational institutions, industries and individuals.

## References

1. Allawadi, S.C. (2007). *Entrepreneurship Challenges in the 21st century*. Abuja: Central Bank of Nigeria.
2. Badawi, A. A. (2011). *Creating the ecosystems for entrepreneurship success: technology parks*. Presentation for conference on Entrepreneurship for Scientists, Amman, 20–24 March 2011.
3. Bullock, M. (2015). What makes a good teacher? Exploring student and teacher beliefs on good teaching. *Rising Tide*, 7:1-30.
4. Dike, V.E. (2009). Addressing youth unemployment and poverty in Nigeria: A call for action, not rhetoric". *Journal of Sustainable Development in Africa*. 11(3)129-151.
5. European Commission (2006a). *Commission Communication: Fostering entrepreneurial mindsets through education and learning*. Brussels: European Commission.
6. European Commission. (2002). *Final Report from the Expert Group on the Project, 'Best Procedure – Education in and Teaching of Entrepreneurship'*. Brussels: European Commission.
7. Kitzer, L.E. (2007) *Entrepreneur development: new venture creation*. USA: Mcgraw Press.
8. Maigida, J.F., Saba, T.M. & Namkere, J.U. (2013). Entrepreneurial skills in Technical Vocational Education and Training as a strategic approach for achieving youth empowerment in Nigeria. *International Journal of Humanities and Social Science*, 3(5):303-309.
9. Marich, M. (2011). *The Power of Many: Realising the socioeconomic potential of entrepreneurs in the 21st Century*. Accessed from: [www.forbes.com/real-time](http://www.forbes.com/real-time). Accessed on: 30 November 2018.
10. Mullock, B. (2003). What makes a good teacher? The perceptions of postgraduate *TESOL* students. *Prospect*, 18(3):3-24.

11. Nwoye, M. I. (2011). *Entrepreneurship Development and Investment opportunities in Nigeria (A compass of self- reliance)*. Benin: High cliff Publishers.
12. Olaitan, S.O. (1992). *Work-linked education curriculum as a sine qua non for teacher effectiveness towards self-reliance education*. Paper presented at the Alvana international conference on educational studies and research. Owerri. August, 9th – 13th.
13. Oranu, R.N. (1991). *Vocational education and manpower development*. Paper presented at the Alvana international conference on educational studies and research. Owerri. August, 9th – 13th.
14. The Expert's Forum (2010). *Innovation: Why is it so important?* Ottawa: Canadian Dairy Commission
15. Thompson, S., Greer, J.G. & Greer, B.B. (2004). *Highly qualified for successful teaching: Characteristics every teacher should possess*. Retrieved from: <http://www.usca.edu/essays/vol102004/thompson.pdf> [Accessed on 07 November 2015].
16. UNESCO, (2003). *Starting my own small Business*. A training Module on entrepreneurship for students of TVET At secondary level participants workbook.
17. UNESCO. (2002). *Technical and Vocational Education for the 21st Century: UNESCO and ILO recommendations*. Paris and Geneva: United Nations Educational, Scientific and Cultural Organisation (UNESCO) and International labour Organisation (ILO).
18. UNESCO. (2006–07a). *Starting My Own Small Business: A training module on entrepreneurship for students of technical and vocational education and training at secondary level*. Paris: United Nations Educational, Scientific and Cultural Organisation (UNESCO).
19. UNEVOC-UNESCO. (2004). *The Bonn Declaration*, UNESCO International Meeting of TVET Experts on Learning for Work, Citizenship and Sustainability, Bonn, Germany, 25-28 October 2004.
20. Vocational and Technical Education Publishing House (2011). China integration of vocational and technical education. *Journal of Vocational and Technical Education in China*, 2(3)29-35.