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## Enhancing Entrepreneurial Education and Self-Efficacy through Technical Vocational Education and Training- Authority of Afghanistan (TVET-AVI): Evaluation and Way Forward

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## Abstract

*This study endeavours to evaluate and propose the mechanism to intensify and expedite entrepreneurial education and self-efficacy in Technical and Vocational formal education. Based on the qualitative research method, fourteen open-ended questions were developed for interviews targeting three types of respondents (students, teachers and TVET-A officials) for data collection. The results suggest that there is no specific entrepreneurial learning in TVET-AVI institutions, and on the organization level a clear comprehensive strategy for enhancing entrepreneurial education is not yet developed. Further findings revealed that students only received a technical education, mismatching the current labour market needs. To enhance entrepreneurial education, it has been observed that developing a new curriculum for entrepreneurial education, teacher training and teaching methodology and the role of TVET authority has a positive impact on enhancing entrepreneurial education. In addition to that, cultivating an entrepreneurial mindset in the local community is an important factor for student motivation and independence. This study proposes how TVET can realize the issue of integrating entrepreneurship education and self-efficacy in formal education. The curriculum and monitoring and evaluation directorates will utilize the study result to ensure the entrepreneurial education and self-efficacy included in the updated curriculum and for monitoring and evaluation procedures as well. Further research is required to identify the stakeholders' involvement that could help the entrepreneurial education process.*

**Keywords:** *Entrepreneurial Education, Self-Efficacy, Technical Vocational Education and Training- Authority of Afghanistan*

## Introduction

Organizations such as the European Commission (EC), Organisation of Economic Cooperation and Development (OECD), UNESCO, and International Labor Organisation (ILO) identify the importance of entrepreneurship education for the betterment of people's lives through bringing growth and offering job opportunities among small and medium enterprises (SMEs). For the sustainable improvement of job creation, entrepreneurship education is a priority for the overall education system, specifically for the Technical and Vocational Training (TVET) sector, which enables people to be active and innovative in their workplace. The 21st-century development in digital technology and the changing nature of working methods are the main drivers for the job profile change. Entrepreneurship education

helps in creating new opportunities for TVET graduates in the workplace (Badawi, 2013). Besides creating different concerns for the people, this situation also opens a new window to be creative and take initiative to move forward and find the best solution for both economic and social problems. These variations alert the TVET system to align their education system according to the needs of the market and provide new technical skills for their students such as entrepreneurial, applied research, and business activities. Therefore, TVET institutions need to imbibe and diffuse entrepreneurial learning in their education system. The mechanisms however vary, but usually, the easiest one is to focus on students, curriculum, and teachers. In the learning process, external parties such as social enterprises and industries need to be involved. This partnership can help the education system develop new products, train the students according to labour market requirements, and learn about the workplace situation. TVET education and entrepreneurship complement each other's and this combination prepares the students for work such as cash payment, working in companies, self-employment, starting up a new business, own family activities, community work and unpaid 'voluntary' work (Shane, 2012). Entrepreneurship and TVET education provided solutions to the unemployment problem, which was directly linked to the reduction of poverty within the society.

### *1.1 Afghan TVET Formal Education System: Current Status*

Technical and vocational education and training (TVET) play an important role in providing young people with the skills and competencies needed to build a modern workforce to lift Afghanistan out of poverty. According to the provisions set out, TVET has to be super-responsive to the needs of the labour market, support balanced and equitable development in all regions and respond to social and market needs. (TVET strategy 2019-2023, p.15). Since 2002, the provision of Formal TVET has increased substantially to address the growing needs in Afghanistan. The number of schools and institutes increased from 42 to 301, student numbers rose to over sixty-three thousand. In terms of geographical distribution, the construction of these new public TVET schools and institutes also expanded access to TVET in provinces. However, the rapid expansion in the TVET sector overwhelmed the existing capacity, leading to a lack of proper governance, poor institutional framework development and a general lack of oversight. As a result, quality standards in curriculum and teaching have not been maintained, the efficiency of course delivery deteriorated, and contact with the world of work has been neglected. Currently, under the oversight of the Office of the President, the Formal TVET system is under substantial reform (Jarvi, 2012; Darling, 2015).

The TVET Afghanistan provide two types of education. 1) Formal education which supports by an official degree. 2) Short-term vocational training provides a short-term educational program to the population such as tailoring, embroidery, electricity etc. The current condition of entrepreneurial education condition asked from two respondent groups (teachers and TVET-A managers). Each respondent group provide different information about the entrepreneurial education in TVET-AVI formal education. With the support of the international donor community, Afghanistan's reform and rehabilitation have been reinvigorated and reinforced. The presence and involvement of international alliances resulted in a huge amount of funds flowing into the country, mostly spent on the war effort. More importantly, it has largely failed to fulfil the international community's pledges to rebuild Afghanistan. The poor planning and oversight have affected projects' effectiveness and sustainability, with local authorities lacking the means to keep projects running, aid delivery undermined by corruption and as such affected the penetration of aid on the ground (International Crisis Group, 2011). Besides investment in security defiance, a big portion of

the fund was spent on the development of different public sectors to formulate the economic structure and entice possible entrepreneurship opportunities for the population. But producing at least 4 per cent of its citizens as entrepreneurs, unfortunately, didn't coincide with the requirement for a country to have an advanced growing economy.

Since the academic research conducted on entrepreneurial education and self-efficacy is almost non-existent, thus paving a way to understand entrepreneurial education through TVET-AVI education in Afghanistan seems an indispensable element to ponder on. Technical and vocational education and training (TVET) play an important role in providing young people with the skills and competencies needed to build a modern workforce to lift Afghanistan out of poverty. The predicaments set out in the TVET strategy also outline the responsiveness to the needs of the labour market, to support balanced and equitable development in all regions and respond to social and market needs (TVET strategy 2019-2023, p.15).

Since 2002, the provision of Formal TVET has increased substantially to address the growing needs in Afghanistan. The number of schools and institutes increased from 42 to 301, student numbers rose to over sixty 63000. In terms of geographical distribution, the construction of new public TVET schools and institutes also expanded access to TVET in provinces. However, the rapid expansion in the TVET sector overwhelmed the existing capacity, leading to a lack of proper governance, poor institutional framework development and a general lack of oversight. As a result, quality standards in curriculum and teaching have not been maintained, the efficiency of course delivery deteriorated, and contact with the world of work has been neglected. Till Aug 2021, the procedures were under the direct oversight of the Office of the President, and the formal TVET system is under substantial reform. (TVET strategy 2019-2023, p.17), but the recent regime change has put a question mark on their persistence and adaptability.

For realising the full potential, TVET is to provide life-long learning opportunities (including initial and further TVET) to enable the workforce to keep pace with the rapidly changing work environments brought about by technological progress and development in the organizations of work. Life-long learning also implies that people can continuously enhance their recognized qualifications. Therefore; the entrepreneurship concept is embedded in TVET training programs (TVET strategy 2019-2023, outcome 3, p.38-40). Even some parts of the TVET training centre are managed by the private sector, fully devoted to enhancing entrepreneurship, along with the setting up of BDS services such as 'Business Clinics' or 'One Stop Shops' to give training and advice and specific help to women in business.

The TVET sector in Afghanistan came under heavy criticism and pessimism loomed all over, as 30 per cent of their graduates are hired in their subject area, while another 20 per cent were structurally employed, and 50 per cent were unemployed, citing the reason that education imparted is not based on market need and cultivating entrepreneurial skill sets has been far from expected (ITC & ILO 2017, pp. 12). In the current TVET-AVI education system graduates shows a high percentage of job unemployment as well as a decrease in the interest of the student to continue their education in the TVET sector. This study comes to the rescue and proposes how TVET can realize the main issue in integrating entrepreneurship education and self-efficacy in formal education. The curriculum and monitoring and evaluation directorates will utilize the study result to ensure the entrepreneurial education and self-efficacy included in the updated curriculum and monitoring and evaluation procedure.

Technical Vocational Education and Training- Authority of Afghanistan (TVET-AVI), despite wide recognition in imparting formal education in Afghanistan, face low interest of students for enrolment. It is observed that AVI graduates' unemployment rate is very high, as the system lacks entrepreneurial learning. The study intends to understand the current gap in entrepreneurship education and propose a mechanism how to enhance entrepreneurial self-efficacy in TVET formal education. The study explores the current entrepreneurial education and self-efficacy in the TVET-AVI education system; investigates the main obstacles to the application of entrepreneurial self-efficacy in TVET-AVI formal education, and defines the best way for developing the entrepreneurial self-efficacy approach for TVET-AVI formal education. The rest of the study is organised with section 2 highlighting the literature review, section 3 presents methodology focusing on research philosophy, research approach, instrumentation and operationalization, interview protocol, data collection procedure and data analysis; section 4 presents the research findings; and section 5 presents the conclusion, recommendations, limitation and future scope of the study.

## **2. Literature Review**

### *2.1 Entrepreneurial Self-Efficacy, and Role of Technical Education in Promoting Entrepreneurship*

Given the target of this article is to discuss the role of TVETs in expediting entrepreneurial self-efficacy and the role of technical education in promoting entrepreneurship, the main focus is on the TVET's learning and reflection processes, which comprise an essential element in entrepreneurial development. Entrepreneurship education helps to decrease the unemployment rate in a country and as such boosts economic growth (Chou et al, 2011). Several studies have examined the role of TVET in economic growth and factors that impact entrepreneurial self-efficacy (ESE), and further, shed light to ascertain whether visiting the entrepreneurship-related industry and designing a business plan influence entrepreneurial self-efficacy. The studies recommended that lectures, and conducting training on business plan making should be based on the level of training participants, and as such enhance the entrepreneurial capacity (Akpoiyibo, 2015, Abu-Naser et al, 2017; Al Shobaki et al, 2018; Andayani et al, 2020).

Since technical and vocational training has twofold roles in TVET education. On one hand, the technical and vocational teacher training enhanced the capacity building of the teacher and on the other hand, the technical teacher transferred the knowledge and skillset to the TVET students. It should be noted that, in pedagogy, experience includes knowledge, skills and attitude (Guthrie, Michele, and Tom, 2013). Increasing technical and vocational teacher capacity is the main aspect of improving vocational education (Haris and Jones, 2017). A plethora of studies have focused on proposing a theoretical business model that could meet the increasing demands in developing countries (Andayani & Iqbal, 2015; Asrar et al; 2019). Determining a proper policy for entrepreneurship education and integrating technical and vocational education has been always a cornerstone for churning out dividends. The prime element of economic development depends on entrepreneurship education and skills, specifically in the technical and vocational education sector ((Daluba et al., 2013); Ojido, 2011). The entrepreneurship education and skills required are strategies necessary for vocational and technical education students. The studies have shown that students are required to achieve entrepreneurship education and skills; entrepreneurship studies should continue in all vocational schools including the engineering institutions, and be practical oriented. The entrepreneurship education objective is to enhance the ability of schools and institutes to

imbibe students with entrepreneurial skills, and policymakers should work to integrate entrepreneurship education as it has a positive effect on entrepreneurial behaviour (Niazi & Rasooli, 2019), thus resulting in entrepreneurial self-efficacy.

## *2.2 Enhancing Entrepreneurial Self-Efficacy through Vocational Entrepreneurship Education Programs*

ESE is a construct that involves the individual's beliefs about their capabilities for attaining success and controlling cognitions to manage challenging goals during the business start-up phase. ESE is emphasised as a key antecedent to entrepreneurial choice (Pihie and Bagheri 2010, Mahdi and Wani, 2021). ESE is an appropriate measure for entrepreneurship because it is task-specific and includes the individual's assessment of their own confident beliefs about their internal (personality) and external (environment) constraints and possibilities, and is close to the action and action intentionality (Drnovsek, Wincent, and Cardon 2010). This closely mirrors the enhancement of graduate outcomes, including entrepreneurial behaviours, attitudes and skills as provided by TVET-AVI in Afghanistan. Several studies examined the linkage of the Entrepreneurship Education Program (EEP) with entrepreneurial skill and knowledge for their self-efficacy. The results were startling, thus confirming the proximity for enhancing self-efficacy in entrepreneurs ( Yin, 2003; Gravetter and Wallnau, 2009; Donovan et al, 2013; Maritz & Brown, 2013). Some countries like Malaysia thrust more focus on entrepreneurship development through an effective and clear vision, to cultivate and enhance entrepreneurial self-efficacy (Pihie & Bagheri, 2011). Some studies discussed that entrepreneurial intention will be high if the students perceived the need to learn entrepreneurship in university. Entrepreneurship education is necessary to ensure that university student can integrate their skills and equip themselves with ESE. The study suggests that for improving university student skills in entrepreneurial self-efficacy, different teaching strategies should be included in the policy. This will help the graduates to incorporate their skills and develop entrepreneurial self-efficacy and promote an entrepreneurship development model for a successful enterprise, and as such has a positive impact on student decisions and mediate the effect of self-efficacy. (Pihie & Akmaliah, 2009; Roddin et al., 2011, Saraih et al., 2018; Yasir & Liren, 2019).

Entrepreneurship education has expanded significantly in most countries during the last two decades. The considerable expansion over this period has been seen as a widespread governmental belief in the positive impact that entrepreneurship has on the socio-economic and political infrastructure of a nation (Matlay & Carey 2007). There has been an increase in entrepreneurship education throughout the globe. Globalization has brought about substantial changes in the job market to which young people as newcomers are vulnerable. With the continuously changing environment, the students of the current century find that university education is no longer secured for employment in the job market (Collins, L., Hannon 2004). In this study, an organized entrepreneurship education framework is necessary to evaluate and assess the current activities in TVET-AVI. This framework includes different stakeholders such as teachers, students, and the TVET curriculum development department. The exogenous variables include the entrepreneurship curriculum, teaching methodology and TVET's role in developing the entrepreneurship education system.

## **3. Research Methodology**

The study is based on the interpretivism philosophy and follows a qualitative inductive research approach. For accurate data collection, interviews, focus group discussions, and

observations have been used at the individual level (students, lecturers, and TVET-Authority officials). The main reason for selecting different units was to collect accurate data and analyse the problem from different dimensions. The population for this study included all TVET schools and institutes around the country. Currently, 84 agriculture high schools and 33 agriculture and veterinary institutes are active in 34 provinces. Considering the accessibility of these TVET learning centres, the sample size in this research was collected from seven different zones. In these zones, eight provinces were selected for the data collection (*Kabul, Nangarhar, Parwan, Bamyan, Nimroz, Kandahar, Kunduz, and Balkh*). The purposive sampling method was used for all three targeted groups. Three different interview sheets were developed, one for each variable. To make sure the variable is properly measured, open-ended questions have been used. The interview protocols entailed three different respondent groups being interviewed; viz., students currently enrolled in institutes/schools; teachers in charge of instruction at an institute or school; and the TVET officials for curriculum division. Three questionnaires were developed, one for each respondent group. The students and teachers were interviewed inside the AVI institute. A group of four people were assigned to collect the data from eight different provinces. The TVET-A officials were interviewed by researchers inside TVET-A's main headquarters. To make sure reliability, the researcher checked the stability, equivalent, and internal consistency. When the questionnaire was developed, it was distributed to related field experts (the Delphi method) to check for content validity. The results were then checked and confirmed through the *Lawske* table.

**Table 1. Research Methodology Summary**

<b>Research questions</b>	<b>Research methods</b>	<b>Data collection instruments</b>	<b>Target Audience</b>
How entrepreneurial education and self-efficacy will be enhanced through TVET formal education?	Interview	Interview	TVET Teachers and Officials <sup>1</sup>
What specific educational practices can be helpful to develop a proper entrepreneurial self-efficacy approach for TVET formal education?	Desk study interview	Existing data and literature review (document study)	Students, TVET Teachers and Officials
What are the obstacles to starting entrepreneurial learning and the possible role of key stakeholders in AVI?	Interview	Interview	TVET Teachers, Officials and Stakeholders
What are the appropriate approaches for applying entrepreneurial learning in TVET formal education?	Interview	Interview and study the existing education curriculum	Students, TVET Teachers and Officials

Source: Author's Compilation

<sup>1</sup> In this interview question, the student were not asked about the entrepreneurial strategy, as they are not involved on the strategy level.

## 4. Analysis and Findings

In this section, the main finding of the research questions are included.

### 4.1 Fostering Entrepreneurial Education and Self-Efficacy Via TVET Formal Education

#### *Responses from TVET Teachers*

In the interview, the question of current entrepreneurial education conditions was asked by teachers in different provinces. Of the 15 interviewed teachers, 13 of them explained that there is no specific policy from TVET authorities on entrepreneurial education. Even some of the teachers during the interview revealed that they are very enthusiastic about providing entrepreneurial education to students, but there are no specific entrepreneurial learning materials. During the interview, one of the teachers from the eastern region shared his experience and lessons learned about the importance of entrepreneurial learning in the AVI (see table 2).

**Table 2: The Real Situation**

*"In 2018 I joined the AVI as a teacher and decided to transfer my knowledge about entrepreneurial mindset to students. In the curriculum, no specific activity for entrepreneurial learning was visible; and this concern was shared with the institute principal and other teachers; unfortunately, no interest was paid, as they were not familiar with the entrepreneurial topic. Then, I decided to start some basic entrepreneurial activities with students. In the third semester, I gradually started working on some small activities with students to deliver basic knowledge and skills in entrepreneurship. After providing some basic knowledge of entrepreneurship, I designed some practical assignments for students. The first assignment was to study a small value chain (village level) and find out the gap inside the value chain. To conduct this assignment, the student needed to go to the market to collect some basic information. I asked the AVI principal to help the students with the printing of the questionnaire and to facilitate transportation for students, which was rejected, as AVI could not afford the budget cost. On asking the students to collect the data on their expenses, the request was again nullified as the AVI did not approve citing security concerns. After this, I was discouraged and stopped all my entrepreneurial activities for the students. When I stopped, most of the students enquired about the raison d'être, to which I had no answers to tell".*

The reasons cited by other respondents were even worse. The answers were reflecting the flaws as follows:

*"The entrepreneurial education is not considered in AVI education. There is no specific content in the curriculum and no training has been provided to teachers. For teachers, it is very difficult to provide entrepreneurial learning to students without supporting of TVET authority. The students are not able to afford the expenses of some small projects. We do not have facilities for our curriculum practical activities; therefore most of our education focuses on theory. In TVET education increasing student capacity in practical activities, especially in entrepreneurship is very important, but unfortunately, we do not have a clear learning strategy. The system sans a clear learning strategy for entrepreneurial education; teachers are not trained in entrepreneurship education; and the AVI curriculum lacks content about entrepreneurship education".*

#### *Responses from TVET-A officials*



TVET-A officials are responsible to introduce new educational materials for the AVIs. The interviews were conducted with the curriculum department of TVET-A. The discussion result is summarized as follows.

Respondent 1:

*“The entrepreneurship education concept is very new in Afghanistan. TVET-A curriculum department has observed the importance of entrepreneurial education in TVET - AVI. In 2019 when the TVET directorate was promoted as an independent authority, we started working to revise the overall strategy of the organization. The new strategy embedded the WoV concept which will be delivered through entrepreneurial education to all academic institutions of TVET-A. This approved that TVET-A on strategy level considering the entrepreneurial education concept. But on the institutional level, the entrepreneurial learning strategy is not yet developed”.*

Respondent 2:

*“In the current TVET education, entrepreneurial learning is not embedded and the AVI institute curriculum is not yet updated. Secondly, our teachers are not trained in entrepreneurship education. They don't have a clear understanding of the entrepreneurship concept”.*

Respondent 3:

*“The current TVET-AVI education system is not designed from an entrepreneurial mindset perspective, it is only focusing on production. This is the first and most important reason for unemployment. When our students graduate from AVI more than 60% of the students go to higher-level education and only about 10-20% of students find a job or get self-employment. The low employment rate caused the disappointment of several students and now we face with lack of students in AVIs.”*

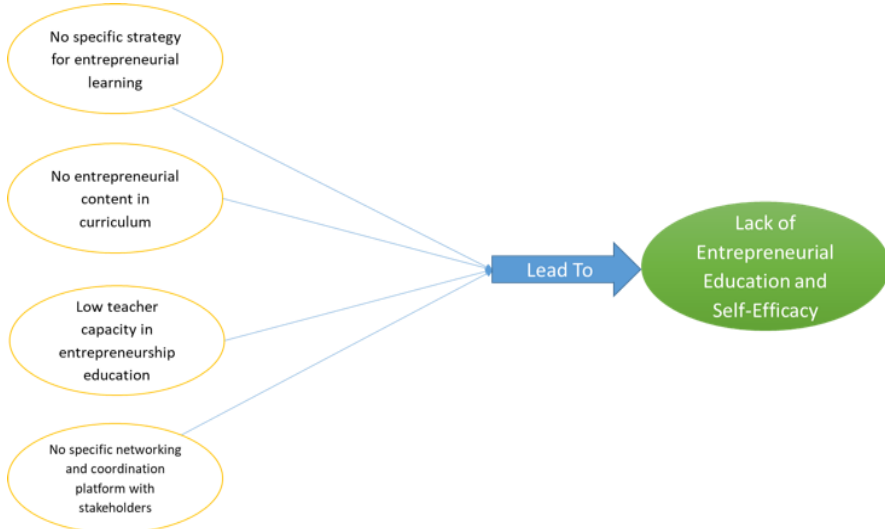
The teacher's and TVET-A official interview result exposed that entrepreneurial learning is not embedded in the TVET-AVI education system. The main reason is the unavailability of a clear strategy, old curriculum, lack of trained teachers and low support of the system for starting entrepreneurial activities inside AVIs. The collected information also shows that on the institutional level some teachers (those who know the entrepreneurship concept) are enthusiastic to deliver the knowledge and skill of entrepreneurship to the student, but due to strict rules and regulations on the administration level, they are not able to proceed.

The respondents including (teachers and TVET officials) were grimy about the entrepreneurial learning strategy. Each respondent group had a different view of the question. All the teachers explored that there is no specific strategy in TVET-A to improve entrepreneurial learning. An AVI teacher from the eastern province said:

*“This is the 15th year that I am teaching in AVI. During this long period, none of the TVET-A officials discussed entrepreneurial education. It means that there is no specific strategy to integrate entrepreneurial learning into our current education system. In 2014 an NGO start a project to support the AVIs. They provided training for teachers and supported the student to find employment opportunities. This NGO provided training by the name of “Business Development Services – BDS”. In this training, for the first time, I heard about the entrepreneurial concept. Most of the teachers were happy to apply entrepreneurial learning in the AVIs. We requested to add the content to our current curriculum activities, but the provincial authority said that this is out of*

our authority. This need to change the lesson plan which will affect the whole education system. I share our teacher request about entrepreneurial learning in one of the national workshops in Kabul with TVET-A managers, but unfortunately, there was no practical action to embed the entrepreneurial learning into the curriculum". Below Fig.1 was developed from the collected information during interviews for further understanding."

**Fig 1: Main Reasons for the Lack of Entrepreneurial Education in AVIs**



Source: Figure based on excerpts from the interviews

Even at the manager level, they are not sure about the existence of an entrepreneurial learning strategy. They mentioned that the overall objective of TVET education is to train technical experts for the labour market but unlikely this goal is not yet achieved. In the interview, it was observed that at the manager level no one has specific information about entrepreneurial education strategy. Only one TVET official accept that he saw something in the document about entrepreneurial learning. He said:

*"During strategy development for TVET-A, I was a member of a working group. In this strategy, the importance of the entrepreneurial concept is mentioned for the TVET sector. But it is not enough to only mentioned words in the document, it needs to for further development of the concept in the sector. Now about the TVET-A national strategy, the concept of entrepreneurial learning should expand".*

From the interviews of both teachers and TVET-A officials, it has been observed that there is no specific entrepreneurial learning strategy. The graduate and the teacher both suffer, and hence, cultivating an entrepreneurial mindset in the students is compromised. In addition to that, the result of the interview showed that at the institutional or even national level, the entrepreneurial concept is very new, and teachers are not skilled enough.

#### *Specific Educational Practices for Developing a Proper Entrepreneurial Self-Efficacy Approach for TVET Formal Education*

The justified way to embed entrepreneurial learning in TVET-AVI education includes a series of synchronised steps which need utmost care and understanding. In the interview, three respondent groups asked about the possible option to include entrepreneurial education in

TVET-AVI education. There are different answers given by the respondents which are discussed below:

Responses from Students:

The students thought to rejuvenate and reinvigorate the different aspects related to TVET. The first important issue is the curriculum. As the current curriculum does not include entrepreneurial learning content; therefore, they proposed to update the AVI curriculum by adding new content about entrepreneurship. Of 15 students, 14 of them are ensured that by updating the curriculum their entrepreneurial education can be improved. The second element which is important for improving entrepreneurial education in AVI is providing teacher training. They explained that most of our current teachers do not understand the concept of entrepreneurship; so, they need capacity building in entrepreneurship. This training will help to introduce and expand the concept of entrepreneurship in AVIs. The third suggestion for the improvement of entrepreneurial education in AVI is a close relationship with key local stakeholders. The student observed the role of local stakeholders in entrepreneurship education. One student shares his experience in this regard as presented in table 3.

Responses from Teachers:

The teachers also have a similar idea about including entrepreneurial learning in the AVI education system. They also concentrate on curriculum updating, teacher training programs, and stakeholders' relationships. During the interview, some of the teachers shared their views about the embedding of entrepreneurial learning:

A teacher from the northern provinces of Afghanistan said:

*"If we see the employment rate of AVI graduates, it is very disappointing to us and our students. When the student graduates, they are not able to start their own small business in the local market. I see that there are several opportunities in the market. To include entrepreneurial learning in AVI, the TVET-A should define the overall strategy. Currently, there is no specific topic on entrepreneurship in the curriculum. They have to work and develop a clear policy and procedure for entrepreneurial education and the way it is implemented inside AVIs. "*

A teacher from the western province of Afghanistan shared his view:

*"Besides embedding the entrepreneurial content in the curriculum, a well-defined networking and coordination platform should be developed. The reason for establishing this platform is to encourage different stakeholders at the provincial level to support the AVI in providing a practical working environment for our students. Currently, we are facing difficulties in the implementation of the technical curriculum. The reason is that the AVI itself does not have enough facilities to utilize for conducting practical activities. "If the entrepreneurial content is included in the curriculum but the practical side is not considered, it will impact our goal."*

Responses from TVET-A officials"

The TVET-A officials insisted on first developing a clear strategy of entrepreneurial learning at the national level. This will help to clarify the way forward to include entrepreneurial learning in TVET-A institutions. They shared their experience of embedding new concepts in the current education system. An official from the curriculum department said:

*“Sometimes we work in space. It means that in the system we do not have a specific plan, but we develop the concept, which means during the implementation we face different problems. For example, in 2018, a donor signed an MoU with TVET-A to develop a new curriculum in TVET-A. The donor expert and a member of the curriculum development department began working on a new curriculum for AVIs. This curriculum was developed for the 1st and 2nd semesters and started to be piloted in specific institutes. During the piloting phase, the implementation team faced several problems, such as a lack of facilities to implement the new curriculum, difficulty changing the current producers, and low capacity of teachers for the implementation of a new curriculum. Finally, after two years of work, our efforts were useless because of the low coordination and resistance to new changes that were the main reasons for the failure of this project. Now, considering the above example, it is very difficult to bring about changes in the system without a clear strategy from the top level. I would request to first develop the entrepreneurial learning strategy for the TVET-A sector and then support the sub-department to develop the content.”*

One of the targeted respondents viewed it like this:

*“For the development of entrepreneurial learning in the TVET-A sector, first, it is necessary to conduct a national study to see the current opportunities and resources. After this study, the expert should put together and develop a clear policy for the embedding of entrepreneurial learning. During my M.Sc. degree, I studied different models for entrepreneurial learning in the world. These models should be further studied and start by piloting one of these models in Afghanistan. Secondly, the TVET-A expert should receive specific training or an education degree in entrepreneurial education. This will help us to train the experts for the sector, after which they will work on developing teaching materials such as updating curriculum and entrepreneurial practices for students. Also, they can train the TVET institution teachers for the proper implementation”.*

From the conducted interviews, it has been learned that for embedding entrepreneurial learning, the most important action is to develop a clear entrepreneurial strategy. This strategy should be developed based on national assessment findings. In the second step, the current curriculum should be reviewed and updated based on the national entrepreneurial learning strategy. Finally, the TVET-A should train their current teacher employees or hire an expert to work closely with them to increase their capacity in entrepreneurial education. The TVET-A should develop a well-defined networking platform with local and national stakeholders.

#### *Obstacles and Role of Key Stakeholders for Starting and Supporting Entrepreneurial Learning in AVI's*

In this study, the teachers and TVET-A officials were asked about the required resources for the implementation of entrepreneurial learning in AVI. Both the teachers and TVET-A officials confirmed that they need the best resources for proper entrepreneurial education. They confirm that the current resources are not sufficient for the implementation of best entrepreneurial practices. One of the TVET-A curriculum department employees shared his view about the importance of key resources for proper entrepreneurship learning. He said:

*“For the last 10 years, I have been working in the TVET-A curriculum department. We developed several modules and subjects for different needs. The only problem we mostly face is the lack of resources to implement the new modules or subjects. In 2017, we started to develop a new curriculum for AVIs. This curriculum is for grades*

13 and 14th. During the designing phase of curriculum development, we organized several coordination meetings with other related departments. Our main discussion was to ensure that the TVET-A and other responsible departments are ready to provide the resources for the implementation of the new curriculum. All of them were agreed upon. When the curriculum developed for grade 13 was sent to AVI for piloting, we found out that there was a lack of resources to apply the practical parts of the curriculum. At that time, we discussed this issue with other responsible parties, but there were no financial resources. Therefore, before we develop the entrepreneurial learning materials, we have to think and allocate a specific budget for its proper implementation".

The AVI teachers also complained about the availability of resources for the implementation of new activities in the institute. This situation caused a decrease in the quality of education. During the interview, the teachers listed the following reasons for the unavailability of resources: The AVI does not have any authority for spending money. For small items, they have to request the provincial authority for purchasing approval; lack of budget for TVET practical activities. In the yearly budget, there is a smaller amount of budget for purchasing training materials for teaching; resource utilization procedures are rigid<sup>2</sup>, and low capacity to use the available teaching resources. Therefore, if entrepreneurial learning is embedded, the availability of resources should also be included and available during teaching. Otherwise, as with other technical subjects, the focus of entrepreneurial learning will be merely only on theory. According to the respondents, the list of resources should be prepared based on the requirements of entrepreneurial learning modules. To understand the current situation of resources, in this study, the following table has been used to collect the information from the respondents.

**Table 7. Required Resources for Entrepreneurial Education in AVIs**

Resources	What resources are accessible to AVI institutions?	Resources required
Number of teachers in entrepreneurial section	No technical teacher in entrepreneurial learning	1 teacher per each AVI.
Subject which contain the entrepreneurial contents.	Agriculture economy Agro-business	Need to develop specific modules of entrepreneurial education.
Number of interested students	All the students	All the students
Required space for conducting activities	From the production point of view, most of the AVI does not have a specific place to produce agriculture and livestock products.	Specified a room as a processing lab. Opening an agriculture farm inside the AVI.
Accessibility to budget for developing curricula, purchase required materials, excursion, teacher training, grants for students, etc.	No specific budget. The current long bureaucratic process limited to use the available resources.	Authorized the AVI to have its own budget. A clear procedure for allocating budget for the curriculum activities.

<sup>2</sup> Sometimes we have equipment inside AVI, but due to tough procedures, we are not able to use it. Most of the teachers are wary about the damage to the resources.

Training facilities for teachers	None	Hire new employees with good qualification of entrepreneurial education. Provide regular training program for AVI teachers. Associate with regional countries to use their capacity for entrepreneurial education.
Networking policy with stakeholders	Not specific policy exist	Develop a clear policy for networking. Recognize the key stakeholders in the local, national and international level. Maintain and utilize the possible resources of stakeholders for entrepreneurial learning.

*Source: Excerpts based on the interviews with respondents*

In the interview, the teachers and officials from TVET-A have been asked to list the most important stakeholders for entrepreneurial education. The teachers are more focused on local stakeholders while the TVET-A officials considered both local and national stakeholders. Both lists are matched and the following 10 most important stakeholders are listed for entrepreneurial education. This list is extracted from the teacher and TVET-A official interviews. Besides listing the most important stakeholders the respondent also asked to write about their contribution to supporting entrepreneurial education in AVIs.

In the following table 8, the key stakeholders are identified for entrepreneurial education. These stakeholders will support the learning process as well as they can help in developing the training materials for entrepreneurial education.

**Table 8: List of Stakeholders Involved in Entrepreneurial Education**

<b>Key stakeholders</b>	<b>Contribution of this specific stakeholder</b>
Learners	Participate in entrepreneurial learning. Help to improve the entrepreneurial learning process. Provide feedback and comments about the learning process for its further development.
Teachers	Transfer the entrepreneurial education to students. Help in developing the curriculum. Contribute to creating new initiative activities for students (student projects). Keep relationships with other stakeholders.
AVI principle	Provide the best facilities for teachers and students to learn entrepreneurial education. Establish a network with the local community and with other district and provinces level stakeholders. Link the teachers with other AVIs to share their experiences and lesson learned.

Teacher training institution	<p>Increase the interest of students' families to trust their children for starting new business activities.</p> <p>Provide training on entrepreneurial education to AVI teachers.</p> <p>Follow up on the entrepreneurial education process in the AVIs and provide constructive feedback for its further development.</p> <p>Help in the curriculum development process.</p> <p>Update the entrepreneurial teachers about the new techniques.</p>
Role models (cases)	<p>Increase the interest of students to actively participate in entrepreneurial learning.</p> <p>Help to increase the awareness of the student's family about the impact of entrepreneurial learning.</p> <p>Help in the curriculum development process.</p> <p>Design some practical procedures for starting a new and successful business.</p>
Private and public sector (industries)	<p>Provide internship opportunities for students.</p> <p>Facilitate excursions on local and regional levels.</p> <p>Provide small loan or grants for students to start their own business activities.</p>
Other TVET institution	<p>Shared their experience and lesson learned with one another.</p> <p>Support the curriculum committee for its further development.</p> <p>Share the facilities.</p>
Local leaders	<p>Facilitate local awareness program to increase the trust of families on their students.</p> <p>Motivate family to financially and mentally support their children.</p>
Banks	<p>Facilitate short term internship program for students.</p> <p>Provide loan for student to start their own business activities.</p>
Employment offices	<p>Provide internship opportunities for students.</p> <p>Help the students to find a job after their graduation.</p> <p>Contribute in curriculum development process</p>
Families	<p>Trust on their children.</p> <p>Financially support their children.</p>
Marketplaces	<p>Involve the children in family economy related decisions.</p> <p>Accept the student as an important client.</p> <p>Support the student with update information about market.</p> <p>Involve the students in daily operation.</p>
Media	<p>Develop and broadcast entrepreneurial mindset messages.</p> <p>Increase the local community awareness about the entrepreneurial mindset.</p> <p>Give chance to student to participate in specific motivational programs.</p>

Source: Excerpts based on the interviews with respondents

### *Appropriate Approach for Applying Entrepreneurial Learning in TVET Formal Education*

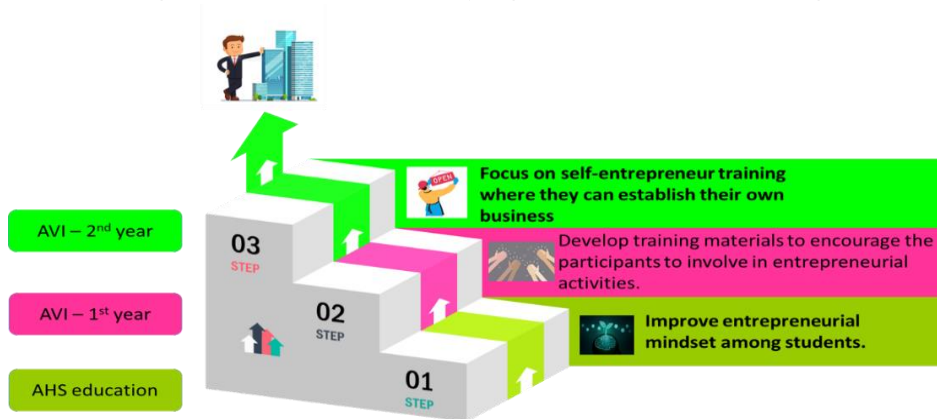
In this interview, the teachers and TVET officials were asked about the proposed approach for entrepreneurial learning. Most of the respondents were not able to present a workable option, as most of them don't have a clear concept of entrepreneurial learning. Only one teacher from the eastern zone gave his idea about the proposed approach as follows:

*“The good approach is to develop learning materials about entrepreneurial learning and add it to the current curriculum. There should be two levels of entrepreneurial learning (basic and intermediate level). The basic level education could be an introduction to entrepreneurship and in the intermediate level could be operation and starting a small business”.*

During the interviews, three approaches were explained to respondents and were asked to rank the important approach. The result of the discussions varies between these two groups (teachers and TVET officials). Overall, the teachers are more concentrated on the training materials to be developed for AVI to transfer the entrepreneurial learning, but on the management level, they are more focused on cultivating an entrepreneurial mindset among students and then providing training materials. Specifically, the teachers are most interested to develop training materials and including them in the current curriculum. And in the second phase, the AVI teachers should receive good entrepreneurial learning training to be able to apply the new contents within the current lesson plan. The argument of teachers for proposing these two approaches is; that the teacher capacity will be increased in entrepreneurial learning; the new entrepreneurial content will give a formal sense of entrepreneurial learning in the AVIs; the students will be able to learn good practices during their education period and will apply their knowledge and skill after graduation.

Hence, including entrepreneurial learning in the education system, the government's responsible authorities should cultivate the entrepreneurial mindset in student families. They should trust their children and the government should provide some grants for those students who have innovative ideas to start their businesses. Figure 2 summarises the appropriate approach for applying entrepreneurial learning, and is adopted from the TRIO model of entrepreneurial education as follows:

**Figure 2. Approach for applying entrepreneurial learning**



In an attempt to formalise the appropriate method for developing entrepreneurial competencies, a set of interviews with the respondents (teachers and TVET officials) was held, and questions were asked about the proposed model. Unfortunately, there was no input from their side. The reason was that there was no expert in entrepreneurial education in the curriculum department. At the teacher level, no teacher understands entrepreneurial education technically in the current AVI employee structure. Therefore, based on the current situation of AVI education and years of experience in the TVET sector, this study has proposed an appropriate approach for applying entrepreneurial learning as presented in figure 2.



## *4.2 Discussions of the Results*

An investigation into enhancing entrepreneurial education and self-efficacy (ESEE) through Technical Vocational Education and Training- Authority of Afghanistan (TVET-AVI) has been a mere case study where the literature is not succinctly available. The literature review has found some typical gaps with few studies focusing on nascent entrepreneurs and employing longitudinal studies, particularly in a TVET training context (Pihie and Bagheri 2010). Accordingly, we studied how to enhance entrepreneurial education and self-efficacy through Technical Vocational Education and Training in Afghanistan. The findings from the study indicated that the TVET Authority of Afghanistan is in the nascent stage, and demands an urgent relook and reinvigoration. Entrepreneurship education needs to not only focus on those content areas in which entrepreneurial education and self-efficacy may be relatively weaker but also help students in their beliefs about ESEE. In other words, since ESE is about people's perceptions, proper attention needs to be given to both course content and pedagogy to ensure that, to whatever extent possible, beliefs about those capabilities are changed (Wilson et al. 2009). This research also shows substantial evidence as to how entrepreneurial education and self-efficacy can be enhanced through TVET formal education, and what specific educational practices can be helpful to develop proper entrepreneurial self-efficacy. Although the obstacles to starting entrepreneurial learning and the possible role of key stakeholders in AVI are also envisaged. The study further adopts a mechanism and appropriate approaches for applying entrepreneurial learning in TVET formal education in the Afghanistan context. Given the important role that TVETs play in entrepreneurship around the world – students own approximately 25% of all businesses in advanced market economies – this should be an important goal of entrepreneurship education (Wilson, Kickul, and Marlino 2007). Because of their observed self-efficacy bias (Chen, Greene, and Crick 1998; Pihie and Bagheri 2008), students in particular need to perceive that an EESP can increase their self-efficacy (Krueger 1993). This research demonstrates the importance of EESPs to the SE of young nascent entrepreneurs further supporting the observations that EESEs help potential entrepreneurs, aiding them to become nascent entrepreneurs and eventually small business owners (Wilson et al. 2009). The result of this study will help the TVET-A to work on integrating entrepreneurship skills and competencies into their education system. Currently, there is no specific entrepreneurial education system in TVET-AVI. The main reason for not embedding entrepreneurial learning is that, at the strategic level, there is no clear objective for entrepreneurial education in TVET-A. The lack of a clearly defined entrepreneurial education strategy within TVET-A hampered innovation in this sector. Without development and reform in the current system of TVET-A, it will be very difficult to embed entrepreneurial education.

## **5. Conclusion**

The purpose of this study is to first identify the main factors why entrepreneurship skills do not apply in TVET formal education and secondly, to propose an approach to how to integrate entrepreneurship education and self-efficacy into the current curricula. The main reason for not embedding entrepreneurial learning is that, at the strategic level, there is no clear objective for entrepreneurial education in TVET-A. This leaves the AVIs graduates outside of the market with a low employment rate, which has resulted in a low-interest rate among students to enrol in Agriculture and Veterinary technical education system (AVI). Even at the official level, they are not sure about the existing entrepreneurial learning strategy. They mentioned that the overall concept of TVET education is to produce technical experts for the market, but it is unlikely that this goal has not yet been achieved. From the study, it was observed that on

the TVET-A official level, fewer people have specific information about entrepreneurial education strategy. For embedding entrepreneurial learning, the most important action is to develop a clear entrepreneurial strategy. This strategy should be developed based on national assessment findings. The current curriculum should be reviewed and updated based on the national entrepreneurial learning strategy. The TVET-A should train their current teaching employees or hire an expert to work closely with them to increase their capacity in entrepreneurial education. Also, the TVET-A should develop a well-defined networking platform with local and national stakeholders. By embedding entrepreneurial learning in the TVET-AVI education system, the graduates will be able to increase their income generation activities. This will directly decrease the percentage of underemployment in rural communities. When the rate of underemployment decreases, the economic situation of the rural community will improve. By improving the economic situation, the security situation will also be improved. The lack of a clearly defined entrepreneurial education strategy within TVET-A hampered innovation in this sector. Without development and reform in the current system of TVET-A, it will be very difficult to embed entrepreneurial education. All the related departments (curriculum, M & E, student affairs, job employment, and research department) should coordinate their activities and create a new coordination platform for the proper implementation of entrepreneurial education.

Low teacher capacity is a major concern for the proper implementation of entrepreneurial learning. Since there are more than 180 AVI in the country, reaching out to technical teachers in entrepreneurial education is a big concern. The TVET is not able to professionally train 1 teacher per AVI to provide the best entrepreneurial learning to students. The AVI teachers and TVET officials are complaining about the availability of resources for the implementation of new activities in the institute. This situation caused a decrease in the quality of education. The AVI does not have any authority for spending money. For small items, they have to request the provincial authority for purchasing approval; lack of budget for TVET practical activities; the resource utilization procedure is sketchy, and low capacity to use the available teaching resources. The other problem is the weak relationship with stakeholders. The AVIs at the district and provincial levels are not authorized to create their networks with existing stakeholders. At the central and provincial levels, TVET officials do not have a clear strategy for creating a network. This hurts the AVIs because they can only concentrate on their resources, which are too limited. Another major impediment to the practical impact of entrepreneurial education is the student's family's lack of trust. Afghan parents do not trust their children; therefore, after their graduation, they will face the problem of starting their income-generating activities.

## 5.2 Recommendations

Based on the study findings, the following suggestion is proposed for increasing entrepreneurial learning and self-efficacy (ELSE) in TVET-AVI. These suggestions will help TVET-A cultivate an entrepreneurial mindset among the participants and apply an applicable networking platform with relevant stakeholders.

**Develop a clear strategy for entrepreneurial education:** It has been confirmed that there is no clear strategy for entrepreneurial learning in TVET-AVI. Therefore, it is required that the authorities develop a comprehensive strategy for embedding entrepreneurial learning.

**Conduct a national assessment:** There is a gap in the right information existing between the different involved groups. So it is recommended that before developing any learning tools for entrepreneurial education, assessment should be carried out around the country. In this

assessment, different factors should be included, such as market analysis, organization structure, key resources, key stakeholders' analysis etc.

***Develop an applicable curriculum based on the Afghanistan context:*** Following the results of the national assessment, the curriculum department of TVET-A should develop a comprehensive competency-based curriculum for entrepreneurial education. The content of the curriculum should apply to the context of Afghanistan as well as put more focus on practical activities rather than theory.

***Capacity building:*** Currently few teachers have an entrepreneurial education background. Therefore, it is suggested that the TVET-A officials should provide entrepreneurial training to the AVI teachers.

***Increase the authorization level of AVIs and resource allocation:*** There is a centralization system followed at TVET-A. The AVIs do not have any authorization to purchase small items (e.g. a pen) to use for their education. So the TVET-A should give proper authorization to their institute principal to apply the teaching activities on time. Considering this limitation, it is highly recommended to equip all the AVIs with the required resources. The resources list can be developed during the entrepreneurial learning curriculum.

***Create a strong network platform with stakeholders:*** There is no specific coordination platform. On the provincial level, the AVIs are not authorized to create their relationships with other stakeholders. Therefore, it is recommended that well-defined coordination and networking platform should be developed.

### 5.3 Contributions, Limitations and Future Research

This research sought to contribute to the discussion on enhancing entrepreneurship skills and secondly, to propose an approach to how to integrate entrepreneurship education and self-efficacy into the current curricula. In doing so, it contributes to vocational entrepreneurship education, and entrepreneurship and economic policy by highlighting how EESE can be increased through vocational entrepreneurship education and in so doing potentially increase the pool of people willing to engage in entrepreneurship. This research provides evidence useful to policy decision-makers considering the allocation of public resources to target nascent, in particular, nascent young entrepreneurs through the development of vocational EEPs. It also provides evidence that could be used to meet institutional requirements for the continuation of EESEs. Since learning in entrepreneurship includes tacit and explicit knowledge, distinct pedagogical initiatives and directed entrepreneurial learning initiatives are important in elevating EESEs in course participants. Learning to become or enhance entrepreneurial behaviour involves entrepreneurship as a specific concept, professional dimension, learning by doing pedagogies, expected acquisition of skills and practical knowledge and expected development of entrepreneurial competencies. These directly correlate with enhanced ESE. In this light, an effective learning environment for entrepreneurial skills falls under the pragmatic philosophy of pedagogy. Opportunity, however, exists for further studies to examine the effect of individuals and compared pedagogy.

One of the main limitations of this research is the generalisability of the findings and the potential for self-reporting bias. While this study examined a single case, it provided an appropriate longitudinal and mixed methods perspective. We recommend similar studies across multiple cases and EESEs to validate outcomes. However, since no sensitive information was collected in this research, the likelihood of self-reporting bias is minimal. In

addition, while there is much support in the literature for the use of EESEs as a stable measure for evaluating the effectiveness of EESEs, more research is needed on how to measure entrepreneurial education and self-efficacy as different studies use different items to measure EESEs, limiting comparability among studies. In addition, we propose all studies include additional qualitative measures to gain further insights (even if to even substantiate quantitative findings). Furthermore, cognisance must be taken of external moderators on EESE, such as stakeholders, governments, and political, economic and geographic boundaries.

Future research could include more in-depth case studies and an exploration of samples of older, potential and nascent entrepreneurs who are in an EESE outside of a university classroom setting. In addition, future research could place additional emphasis on control groups, moderating or mediating the role of demographics, and country level of academic development. Finally, we encourage additional longitudinal studies to untangle other factors and impacts that influence and interact with EESE such as efficacy beliefs, conflict and security, government behaviour, and environmental events or feedback.

#### 5.4 Practical Implications

The result of the study will help the TVET-AVI with information on how they can improve the current curricula based on the best entrepreneurial education and self-efficacy competencies. This study provides information to existing TVET-AVI institutions regarding an applicable approach on how to increase entrepreneurial self-efficacy practices inside their schools/institutes. This study supports the curriculum development department in finding a new way of enhancing entrepreneurial skills, knowledge and attitude which lead to increasing the level of employment of TVET-AVI graduates. Overall, this study supports the TVET-AVI to integrate new entrepreneurial self-efficacy skills which can improve the education system. Moreover, the teachers and instructors can design new entrepreneurial self-efficacy practices in different subjects, helping them in recognizing the areas for integrating entrepreneurial self-efficacy practices.

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