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Adult Learning and Global Change

Study Title: An investigation into ways in which TVET colleges could assist students to  
become self-employed through improved entrepreneurial training

Case study

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Glossary of terms:

CFERI	Centre for Entrepreneurship Rapid Incubators
CoP	Communities of Practice
CoS	Centre of Specialisation
DHET	Department of Higher Education and Training
EBM	Entrepreneurship and Business Management
ENTREPRENEUR	An individual who sets up a business, creates a new idea and is willing to take a loss to make money.
ENTREPRENEURIAL	The adjective form of 'entrepreneur' refers to a person who takes a financial risk to make a profit.
ENTREPRENEURSHIP	Refers to the execution of new ideas.
FET	Further Education and Training
INNOVATION	The development of new ideas
NATED	National Certificate (N1-N6)
NCV	National Certificate Vocational
NQF	National Qualifications Framework
SDG	Sustainable Development Goals
SEDA	Small Enterprise Development Agency
SETA	Sectoral Education and Training Authority
SMME	Small, Medium Micro Enterprises
TVET	Technical Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training
White Paper 2013	White Paper of Further Education and Training (1998)

## **Abstract**

The White Paper for Post-School Education and Training (2013) states that the purpose of Technical and Vocational Education and Training (TVET) Colleges is primarily to train students to develop the knowledge, skills and attitudes needed in the formal labour market. They cater for adolescents wanting to enrol in vocational programmes after Grade 9 or finish school with a Grade 12 and learners who wish to complete their schooling. However, mainstream South African qualifications, such as those funded by the Department of Higher Education and Training, have limited practical and workplace learning opportunities and are primarily theoretical. Currently, Entrepreneurship is offered as a theoretical module at TVET Colleges in South Africa. However, there is minimal research evidence of TVET College students or graduates becoming entrepreneurs in the country.

This study will adopt a case study approach investigating three public TVET colleges that have developed an entrepreneurship training programme and use Lave and Wenger's (1991) Communities of Practice (CoP) to assess ways in which this training initiative draws on and supports the notion of learning in the workplace to support emerging entrepreneurs. Lave and Wenger's Communities of Practice (CoPs) are best described as active units within a community where members learn from each other through shared experiences and interactions with a specific area of expertise (p225). It provides a framework for understanding how social learning occurs within various communities.

This research paper examined approaches to how three TVET colleges attempted to enhance entrepreneurial training and instil self-employment strategies amongst students. This research used a qualitative approach, conducting semi-structured interviews with participants via the phone, online, and sometimes in-person. This study thus entails investigating strategies TVET colleges adopted to assist students in becoming self-employed through improved entrepreneurial training.

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# 1. Research Background

## 1.1 Introduction

Terblanche (2018) notes that the Department of Higher Education and Training (2012) states that Technical Vocational Education and Training (TVET) colleges (previously FET Colleges) were created to provide artisan training. TVET Colleges focus on delivering NATED (National Certificate N1-N6) and National Certificate Vocational (NCV) programmes and occupational programmes. These programmes span formal schooling levels from Grades 10 to 12, and NATED programmes end at 1st-year university level. They are supposed to offer both theory and practical training so that when students graduate, they have a formal qualification with a practical/skill component. Whilst enrolling learners from Grade 10 (16-year-olds), most learners entering TVET Colleges have already completed Grade 12 or have spent extra years attempting to gain a Grade 12 before entering TVET Colleges. TVET Colleges, therefore, offer NCV and NATED courses to a diverse age group of students.

However, various challenges occur with these mainstream curricula. Namely, there is insufficient workplace exposure for the primarily theoretical NCV programmes, and learners must do 18 months of workplace exposure before their NATED (N6) certificate becomes a diploma. TVET College graduates find it challenging to find suitable employment or employment at all, which raises the idea of entrepreneurship training as a possible means of self-employment rather than formal employment. The difficulty is that most South African TVET Colleges currently offer Entrepreneurship as a theoretical component, which is tested through a formal examination, resulting in students needing to be equipped with the practical component that would provide them with the knowledge and skills required to start a business. A practical component is different from an apprenticeship because an apprenticeship is a work-based route to qualifications (structured training plan), and practical components allow for entry-level general work experience. Allias (2012) mentions, that students are not lured or incentivised to pursue entrepreneurship, due to the lack of guaranteed employment.

The main focus of this research paper is to investigate how TVET Colleges can assist students in becoming self-employed through improved entrepreneurial training. Entrepreneurship is seen as the best mechanism to reduce unemployment and increase self-employability. It has excellent potential for creating self-sustainability and generating economic growth. Students are expected to have “academic qualifications as well as the knowledge, skills and values”

(Dzuhailmi et al., 2018.p.412.), which creates an even greater need for practical entrepreneurial training while studying.

Chapter 1 of this paper provides a detailed background of TVET colleges and their current role in developing students for self-employment. Chapter 2 details a literature review that draws on the current state of entrepreneurial development in the TVET sector and briefly discusses entrepreneurship training within the international VET sector. UNESCO's Sustainable Development Goals and its intentions towards entrepreneurial development in TVET Colleges are investigated to monitor its progress thus far. Chapter 2 also provides the theoretical approach/framework for this research and will focus on the practical application of concepts and exposure to entrepreneurship education in ways that involve communities of practice. Communities of practice will be investigated to understand how TVET College lecturers have formulated different approaches to entrepreneurship education and training, affecting external stakeholders and peer learning. Lave and Wenger (1991) define Communities of practice (CoPs) as groups of people who share a mutual interest and develop a common range of knowledge and skills.

CoPs provide a social structure where members collaborate and learn from each other fostering a dynamic environment for exchanging expertise and experiences within a specific area of interest or professional practice. Lave and Wenger (1991) emphasise the social nature of learning and the importance of shared participation in shaping knowledge and skills. Chapter 3 focuses on the research methodology adopted, including the data collection and analysis process, and this study's ethical considerations and limitations. Eleven participants/employees employed across the three TVET Colleges were interviewed to allow for the diversity in the data collected. Chapter 4 presents the data analysis, which is presented in the themes derived from the main research and sub-research questions. Chapter 5 presents the research data in conjunction with the literature review and theoretical approach to present key findings within the current entrepreneurial curriculum: increased industry partnerships, incorporating soft skills with entrepreneurial training, a lack of TVET College lecturer industry training experience, and the importance of support services for forming Communities of Practice. Chapter 6 presents recommendations for further research and a conclusion

## 1.2 Background to the Study

This section provides a historical context for the current status of entrepreneurship training in TVET colleges. Badroodien (2004) illustrates the racial history underpinning the formation of technical colleges (now TVET Colleges) and notes that Technical College qualifications were previously provided to white artisans until the 1980s. South Africans classified as Black could only enter technical colleges when apprenticeship and artisan training declined due to a global recession in the 1980s. Technical Colleges in the apartheid era never provided equal opportunities for all artisans, which created a backlog and unfairness in education and training opportunities amongst racial groups since the beginning of their formation.

Badroodien (2004) suggests that after South Africa became a democracy in 1994, the National Certificate Vocational (NCV) was proposed as an alternative to the dated NATED (National Certificate N1-N6) programmes in 2007 but NATED programmes were retained after a massive outcry from businesses, especially those who make use of apprentices. Badroodien (2004) expresses that NATED programmes are still the most used qualification route to becoming an Artisan, even though this qualification was introduced over 50 years ago and is widely regarded as obsolete. An additional challenge is that the Department of Higher Education and Training (DHET) currently only funds TVET colleges for mainstream NCV (National Certificate Vocational) and NATED courses; therefore, any other types of qualifications/programs with structured workplace training opportunities, such as the New Venture Creation learnership's offered by the Services SETA require TVET Colleges to compete for funding of these qualifications.

Authors such as McGrath (2005) have raised concerns about whether TVET colleges prepare students for self-employment upon graduation. The TVET sector has become “costly, and many graduates are failing to secure employment as many programmes appear irrelevant to the labour market opportunities” (McGrath, 2005, p.5). Kraak et al. (2016) note that TVET curricula are “outdated and the infrastructure had become inadequate and dysfunctional” (p.107).

Kraak et al. (2016) posit that South African TVET colleges have been exposed to significant pressures over the past 20 years due to a lack of proper planning and direction. TVET colleges have had to deal with new programmes, decreased enrolments, and competition for courses funded by the Sector Education and Training Authorities (SETAs). Field et al. (2014) highlight that a problem occurs when South African TVET college systems enrol more students in skills-

driven fields that do not produce skilled labourers for the labour market. After 2009, a “College improvement program” (p.xii) was launched to create change and regain its intended purpose. These improvements focussed on six objectives, which included: “improve the quality of teaching and learning in colleges; ensure that there are integrated student support services available in the colleges; improve management systems and capacity in the colleges; improve governance in the colleges; to ensure effective EMIS (Education Management Information Systems) are in place to enhance financial and risk management within TVET colleges” (Kraak et al., 2016, pp. 111–113). This project made teaching and learning a critical element, aiming to strengthen teaching so that students can perform and obtain qualifications for employment. Kraak et al. (2016) assert that this improvement program has not yet reached its intended purpose, causing economic waste.

### **1.2.1 The changing nature of qualifications**

"DHET has recently intervened in TVET colleges to encourage more skill-based programs. As part of this change, NATED report 191 qualifications will be phased out and will thus be replaced by the QCTO (Quality Council for Trades and Occupations) qualifications” (Needham, 2019, p.96). QCTO qualifications have traditionally focused on business and industry workplace-based qualifications that TVET Colleges were primarily excluded from until 2012. This is still not cast in stone, but meetings have been held at TVET colleges, where they were introduced to the QCTO. However, this is still in flux and contributes to current curriculum uncertainty for both TVET colleges.

Unemployment of South African youth has been steadily rising over the past two decades, and recent Statistics South Africa (2023) government statistics have shown youth unemployment at nearly 60 %. Makwakwa (2017) suggests establishing a “commission for enquiry” regarding the issue of unemployment, and models should be developed and implemented for the future success of these unemployed youth. Makwakwa (2019) notes the results of a 2018 unemployment survey of TVET College graduates and mentions that the government is failing to improve the lives of the youth by not providing them with opportunities for success. For example, students at TVET colleges are not offered courses that will lead to self-employment opportunities, and, in many cases, they are taught from outdated syllabi.

### **1.2.2 Curriculum reform**

Allias (2012) researched the relationships amongst South African vocational instruction, skills development strategies and social policies. In this paper, she highlights that skills development

in South Africa contributes to skills and the relationships between development and vocational education. The author mentions that South Africa is one of the most “unequal countries” in the world, which operates on cheap labour and exploiting essential resources (p.14). Most South African systems and institutions that were identified to assist with skills development have failed to succeed because vast numbers of unskilled workers are still not skilled. Allias (2012) highlights those skills shortages and the inflexible labour market as the main reasons for the high unemployment rate in South Africa. She emphasises that this is a significant weakness of the vocational system because they fail to produce enough skilled labourers, which is needed in the South African workforce, or skilled entrepreneurs who can provide employment.

Allias (2012) mentions that the South African education policy focuses mainly on vocational and occupational education and skills development, which is regarded as a notion of “self-help”. Allias (2012) suggests that if the vocational sector has any hope in the future it would have to locate the vocational education policy in a “broader social policy” (p. 2) by creating job security, improved social welfare programs and an improved regulated labour market. There is minimal research evidence to show that Allais’ concerns have been addressed or achieved. She mentions that if we were to enhance educational output, we have to focus on short-term employer needs by creating a curriculum that enhances knowledge and assisting students to acquire this necessary knowledge to excel in the workplace. Most institutions have been known for knowledge-building instead of skills development sites. In questioning how to improve vocational education, she responded that it is necessary to focus on “the education side of it” (p. 16) by building solid academic institutions and focusing on improved curriculum.

Terblanche (2017) suggests that it is essential for “TVET College's curriculum to be restructured to match industry needs” and that “reforming the curriculum, would ultimately lead to employability or self-employment” which is a massive problem in South Africa (pii). She suggests that for change to occur, the leaders of TVET colleges must navigate change and ensure it is implemented. Her findings indicate that curriculum change could improve our high student unemployment rates as students will understand how to create self-employment opportunities.

Terblanche suggests that for curriculum change to occur successfully, there needs to be a combination of “leadership theories and styles” (p.234). The shift in leadership styles is insufficient for curriculum change as more factors are involved for successful curriculum change. The lack of capacity within the TVET College sector to develop new qualifications is

a significant concern, as all mainstream TVET College curricula and learning materials are centrally prescribed by DHET. In addition, TVET Colleges are not differentiated and apply similar mainstream curricula across the 50 Colleges, as opposed to being responsive to local and regional needs. Terblanche (2017) suggests that “learning materials development within TVET Colleges is an unfunded mandate which creates difficulty in bringing about sudden change within the curriculum” (p.235).

The author suggests a need to implement “multiple policies” (p.236) to improve the current curriculum, the high unemployment rates of students, and the poor relationships between industries and stakeholders. Her ideal solution would be a “two-stream curriculum” (p.236) that includes a link between higher education programmes and career path options by allowing students to be connected to industry and the classroom,

DHET produced a paper in 2017 that shows NEETS (people NOT in Employment, Education or Training) highlights that currently, over 60% of South African youth (15-24 years) are unemployed and actively searching for employment (Cieslik et al., 2021). Given the high rate of youth unemployment referred to by Stats SA (2023) and DHET, questions arise as to whether TVET Colleges should continue their focus on qualifications for formal employment in the current weak South African economy or refocus on qualifications that offer possibilities of self-employment and entrepreneurship. Ncube (2022) suggests that developing entrepreneurial skills can produce “job providers instead of job seekers”.

DHET introduced a Qualifications Framework for TVET College lecturers in 2012/3, and currently, 11 Universities teach Diplomas, Advanced Diplomas and Postgraduate Diplomas (PGDIP) for TVET College lecturers. Despite the new qualifications required to become a TVET college lecturer, minimal emphasis has been placed on entrepreneurship within these qualifications. Therefore, despite all the qualifications produced by lecturers, they still need a built-in entrepreneurship component. This affects the quality of entrepreneurial education taught to students as the lecturers have no theoretical or practical experience in this area. Minister Blade Nzimande stated on the 25<sup>th</sup> of May, 2023, that the department was working to ensure that all TVET colleges and lecturers were involved in some form of entrepreneurship over the next three years.

This study argues that TVET qualifications require a greater emphasis on their educational purposes and a broader approach is needed to prepare students for work. Vocational systems must be flexible whilst remaining structured to offer self-employment to reduce unemployment and poverty.

### **1.2.3 International sources**

Legusov et al. (2021) assert that the UNESCO Sustainable Development Goals (SDGs) can also be called global goals. The authors highlight that with “increasing political, economic, environmental, and humanitarian instability, the role that institutions of higher education play by supporting sustainable development is paramount” (p.2). Legusov et al. (2021) refer to higher education, and in South Africa, TVET Colleges still primarily operate at secondary school NQF Levels, with limited higher education programmes.

Legusov et al. (2021) mention that TVET colleges at a global level have formed close connections with industry and are, therefore, able to adjust their current teaching methods and curriculum as needed. This is not, however, apparent in the South African TVET College context. The authors specify that “as more people worldwide obtain a post-secondary education, the number of TVET graduates will also increase” (p.2). Legusov et al. (2021) further indicate that though TVET colleges are trying to respond to the SDG’s, less developed countries are less efficient and need more assistance. Legusov (2017) affirms that the primary role of TVET colleges internationally is to prepare students for employment and self-employment in this ever-changing labour market. Even though TVET colleges are positioned to promote sustainable development through the SDGs, they face many challenges, such as outdated curricula, industry mismatches and a lack of financial resources. South African TVET colleges are still centralised under the control of DHET and have not been decentralised or allowed autonomy to respond to local, regional or national education and training needs, including entrepreneurship.

The 2030 Agenda for Sustainable Development (UNESCO documents) argues that sustainable development is more important than growing the formal economy and that the need to impart entrepreneurial skills to the youth is essential. UNESCO’s sustainable development and the UNESCO SDGs’ argument is essentially that formal economies will never be able to create enough jobs, and this is the need for sustainable development that encompasses entrepreneurial education.

Kuratko and Morris (2018) suggest that more clarity on educating entrepreneurs is required. Therefore, this investigation attempts to provide an understanding of the current entrepreneurial education methods occurring at TVET Colleges and whether they affect the development of an entrepreneurial mindset amongst students. Having provided a contextual overview of TVET Colleges and some of the critical challenges they face in offering entrepreneurship education, the following section outlines the essential approach of this study.

### **1.3 Problem statement**

Rogan (2018) highlights that the government provides 80% of TVET college students bursaries to pay their course fees for 18 months, yet most of them remain unemployed for a long time once qualified. This study aims to address and research ways in which TVET Colleges could focus on students establishing Small, Medium, and Micro Enterprises (SMMEs) that could provide an income within the informal economy rather than a focus on formal employment. The current curriculum in TVET colleges does not require a practical component in the entrepreneurship module, and the DHET does not provide funding for a practical component.

In addition, South Africa has an informal and formal economy that does not necessarily relate to each other. There is no connection between the two; they are primarily seen as separate sectors. The study seeks to identify ways TVET Colleges can actively strengthen entrepreneurship training to provide opportunities for TVET college students to establish their businesses within formal/informal economies.

### **1.4 Aims and Objectives**

This research study aims to “explore and describe” (Cohen et al.,2018, p. 300) TVET colleges in the Western Cape offering entrepreneurial innovation incubators to assist students in obtaining the necessary support and skills to start their business ventures. I have identified (College A) and (College B) in the Western Cape as possible TVET colleges that currently run Centre for Entrepreneurship Rapid Incubator (CEFRI) incubators to assist students. CEFRI were established in 2016 by these colleges and offer a non-accredited skill training programme to equip students with the necessary skills to create employment. These colleges both use an incubator approach where an organisation accelerates the development and achievement of

entrepreneurial ventures through a range of business support resources and services. These include space, capital, coaching and networking connections. Interviews have been held with the CEFRI coordinators of College A and B to collect the necessary data to complete my study. I also identified College C, which does not have a CEFRI, to compare the traditional delivery of entrepreneurship education against the practical entrepreneurship training approach from two other colleges.

## **1.5 Research questions**

### **1.5.1 Main research questions**

An investigation into ways TVET colleges could assist students to become self-employed through improved entrepreneurial training.

The sub-research questions below have been formulated to collect qualitative data to help answer the main research question.

### **1.5.2 Sub-questions**

1. How are entrepreneurship skills taught and practiced at South African public TVET Colleges?
2. To what extent do public TVET Colleges involve external stakeholders and resources for entrepreneurship training?
3. In what ways have TVET Colleges enabled lecturers to develop their expertise, networks and knowledge of entrepreneurship?
4. What are the general perceptions of how entrepreneurship is taught and practised?

## **1.6 Significance of the study**

The significance of this study is to investigate how TVET Colleges in the Western Cape are assisting students with their entrepreneurial skill development as they transition to the workforce. Ali (2018) suggests that the possible cause of these high unemployment rates is that students must be provided with techniques to create employment and sustain themselves. The DHET and University of the Western Cape (UWC) current five-year TVET Research Programme (2019-2024), where entrepreneurship in TVET Colleges is currently being researched, highlights that Entrepreneurship is being identified as a way to solve the high unemployment rate and possibly create employment for others.

This research is necessary because the South African White Paper on Post-School Education and Training (2013) policy has highlighted the importance of entrepreneurship education for the country's youth. Furthermore, TVET Colleges need to ensure that students are prepared sufficiently in the field by offering the proper educational training to cope with issues such as the 4<sup>th</sup> Industrial Revolution while at the same time ensuring that the youth need to obtain skills to generate income to support themselves and their families. The fourth industrial revolution relates to entrepreneurship as they are both closely linked. Technological advancements have challenges and opportunities for entrepreneurs as digitalisation can become very costly for small businesses, yet they offer opportunities for development and growth. Killen (2010) emphasises that too many unemployed graduates cannot utilise options such as funding for young start-ups. Entrepreneurship education in TVET Colleges is an under-researched area. This is critical to my study as I hope to contribute to improved research/knowledge in this area.

This research study/ undertaking casts light on whether urgent retooling may be necessary for lecturers who are charged with strengthening the entrepreneurial capacities of the students in their care.

### **1.7 Layout of the study**

This research paper is divided into 6 Chapters:

#### Chapter 1

This chapter provides an introduction and background of the study, which includes a contextual statement of the problem, the aims and objectives of the study, the primary research and sub-research questions which the study intends to answer, the significance of the study, as well as a detailed layout of the study.

#### Chapter 2

This chapter presents a review of the literature on entrepreneurship education. The literature review focuses on the following areas: the education and training of TVET college lecturers and how the lack thereof is affecting their ability to provide students with the necessary entrepreneurial skills and skills mismatches of the TVET college education sector not producing skills for the world of work, which affects students' ability to seek employment. Skills Development unpacks how to develop the necessary skills needed to become self-

employable. Curriculum reform is focussed on the current entrepreneurship curriculum and the necessity of reforming it to the current state of the economy, which requires a skills-based curriculum. Finally, the Effectiveness of Entrepreneurship Education refers to the current curriculum and its shortfalls in preparing students for self-employment.

In addition, the theoretical and conceptual framework is also discussed in this chapter through the concept of Lave and Wenger's Communities of Practice (CoPs) and how CoPs are formed in TVET colleges.

### Chapter 3

This chapter describes the research design used for this study. It includes the research paradigm and design, a qualitative case study approach. A description of the research site is provided, as well as the method of sample selection and the criteria for the selected target population. The methodology chapter also outlines the techniques employed for data collection and its analysis and ethical considerations for the study.

### Chapter 4

Chapter four presents the findings of the analysed data collected from the interviews. The chapter begins with an introductory section and moves on to findings where the case themes are presented using major headings.

### Chapter 5

Chapter five discusses the findings against the research questions using extant literature. The theoretical approach is discussed, describing the chosen approach in detail.

### Chapter 6

Chapter six of this report presents the recommendations which emerge from the findings and the concluding remarks of this study.

## **2. Literature Review & Theoretical Framework**

### **2.1 Introduction**

The literature review focuses on an overview of entrepreneurial education and training at TVET Colleges in South Africa and internationally. The literature confirms the lack of practical entrepreneurship preparation at TVET Colleges, both locally and globally. Yang (2022) alludes that this significantly impacts students' future employment. These articles confirm the need to instil proper entrepreneurial skills in TVET college students. The theoretical approach supporting these debates is identified as communities of practice, which is defined and described, from which a theoretical perspective for this paper is developed. Ncube (2022) emphasises that entrepreneurship is a solution to address high unemployment rates causing poverty in large parts of South Africa. However, Malawu (2022) asserts that entrepreneurship is put forward by policy as an answer to unemployment, but how does one start a business with no experience of business and industry experience?

### **2.2 Literature Review**

#### **2.2.1 Education and training of TVET College lecturers**

Malawu (2022) suggests that if lecturers were to be trained in entrepreneurship education, students would succeed in self-employment. Malawu further mentions that in his findings, a student responded “saying that because their lecturer provided them with practical examples of businesses, they would be able to start and sustain their businesses” (p.107).

Malawu (2022) asserts that these students have received “favourable subjective norms because of the way their lecturer teaches them”, which would possibly create successful entrepreneurs” (p108). Malawu (2022), however, found that due to lecturers' lack of exposure to entrepreneurial training, “they did not seem to know what pedagogies are and the lecturers also seemed unsure when asked theoretical questions. (p.108)

#### **2.2.2 Skills mismatches**

Buthelezi (2017) focuses on skill mismatches in TVET colleges that have resulted in colleges not producing the skills required for the current world of work. He discusses lecturer experiences at TVET Colleges and that TVET Colleges experienced challenges after the Apartheid era due to educational reforms that are still occurring currently. In 2000, the TVET sector started experiencing significant changes, which led to structural and institutional

changes as they were previously racially segregated. TVET colleges were de-racialised in the late 1980s. Buthelezi mentions that from its “inception, TVET colleges are viewed as a vehicle for providing skills that respond to the economic needs of the country’ by addressing the “priority needs” of the country (Buthelezi, 2016, p. 2). However, the curriculum does not address the skills shortages, which, in turn, leads to a significant mismatch of student qualifications and actual skills needed. Buthelezi (2017) states that at most TVET colleges, the entrepreneurship curriculum is a theoretical subject that does not expose students to true entrepreneurship.

Buthelezi (2017) highlights that many lecturers are not qualified to teach students skills-based programmes, which impacts the skills students obtain. The government has implemented a program that allows lecturers to become suitably qualified for skills-based courses, and a ‘bridging course’ should be introduced to help students. However, entrepreneurship is not a key focus of these programs. The author emphasises that “the non-employability stigma is in contradiction with what the reform was designed to achieve and is indicative of unanticipated effects of the reform” (p.15). He mentions that TVET college lecturer qualifications are diverse and that they need to upskill their current qualifications. Many lecturers do not have teaching qualifications but only artisan training, which means that lecturers do not have the necessary skills to teach students the skills they need to progress in the world of work. Wynberg et al. (2021) argue that artisans with significant workplace experience should be paired with academic teachers for improved throughput and success of TVET College students. Buthelezi (2017) claims that few lecturers have entrepreneurship training, but some may own businesses on the side-lines.

Buthelezi (2017) mentions introducing the new NCV curriculum and how it was not welcomed by most industries, setting students up for failure because the NCV programs offered to students are not accepted in specific workplaces. Despite this assertion, the 2023 Destinations study shows that NCV graduates obtain slightly higher employment rates than NATED students (the Destinations Study of TVET College graduates within the UWC DHET TVET Research Programme, 2023). This would suggest that the NCV is gaining traction and recognition within business and industry. Buthelezi's (2017) argument highlights the centralised curriculum design critique without involving external stakeholders in the consultation process. This approach thus disregards the input needed from these stakeholders operating in the industry who could have provided valuable insights. Without their expertise and insights into the curriculum design process, this creates a disconnection between the

current educational setting and the needs of the workplace. This, therefore, leads to graduates being under-skilled and unprepared for the industry's needs. Buthelezi (2017) thus enforces that stakeholder involvement in the curriculum design is essential for educational programs to serve industry needs best. He highlights that any curriculum/educational change that stakeholders do not accept will cause a delay in the progression of “social reform processes” (p. 9).

DHET (2006) mentions that TVET College lecturers have not been trained to develop their learning materials due to the curriculum's centralisation, which remains an obstacle to responsiveness to local and national economic needs. This would have been more beneficial to students in helping them progress and create a sustainable life once they graduate. TVET Colleges across the country offer the same curricula, so all mainstream NCV and NATED curricula are centrally prescribed. TVET Colleges find it challenging to adapt curricula to local employment needs.

### **2.2.3 Entrepreneurship Training Approaches in South Africa**

Uleanya (2018) explored factors impacting entrepreneurship education in TVET colleges, which are critical in fostering the acquisition of knowledge and skills for people capable to contribute successfully to the social and economic development of a country. The article emphasises the essentiality of entrepreneurship for the South African economy and that youth employment needs to become a priority due to the alarming rate of unemployed youth. Teaching entrepreneurial skills promotes the dignity of labour by embedding work as the goal of education. The author highlights that these learning experiences may occur in various learning contexts, including educational institutions and workplaces.

Entrepreneurial education “allows beneficiaries to consider various occupational possibilities required by work, available rewards, necessary training and relative advantages and disadvantages (Killen, 2010, p.2)”. Killen (2010) mentioned, “the deepening youth unemployment and need to empower youth requires training them in entrepreneurial education. Thus, introducing entrepreneurial studies as an explicit goal in the curriculum tends to be an important signal for students” (p.2). Therefore, if job creation and entrepreneurial skills are wisely coordinated, then it would assist in improving the needs of the future labour market.

Ditlopo (2021) mentions that “there are key course components in an entrepreneurship education programme that were important for gaining the needed skills and knowledge base

for starting and managing self-owned businesses” (p.46). These key subjects are also called “core subjects, including business management, computer practice, and introductory accounting/financial accounting” (p. 46).

Uleanya (2018) indicates that TVET instruction was designed to develop skills that can be used in “specific occupations”. The aims and content of the TVET college curriculum result from occupational standards and analysis of the task to be carried out on the job. The curriculum should be evaluated regularly and should not be allowed to become as outdated as it currently is. Feedback should be provided to improve the delivery of entrepreneurship at TVET colleges.

#### **2.2.4 Curriculum Challenges and Leadership capacity-training Needs**

Terblanche & Bitzer (2018) explore VET in the United Kingdom, Germany and Australia to explore international perspectives on the differences and similarities. It was found that both South African and the United Kingdom governments “constantly intervene in the institutional arrangements, design, management and funding of VET, yet are reluctant to wrest power and oblige employers to conform” (p.106). In Germany, students are identified at a young age to follow the vocational route in conjunction with business and industry, but this does not happen in South Africa.

#### **2.2.5 Entrepreneurial Training and the Lack thereof in the TVET sector**

Killen (2010) highlights that entrepreneurship is essential for the South African economy as it addresses unemployment issues, and if implemented correctly, it could help develop and grow the economy. Entrepreneurship is considered an opportunity to create jobs for unemployed youth. Killen (2010) suggests that youth unemployment should be prioritised by developing sustainable entrepreneurial programmes and linking them to TVET Colleges to provide lucrative employment opportunities. Killen (2010) implies that the lack of adequate entrepreneurial training opportunities at TVET Colleges currently contributes to a high unemployment rate, which could lead to a collapse in the economy; therefore, drastic change must occur to eliminate and overcome poverty. Gamede et al. (2019) emphasise that entrepreneurial training cannot be dependent on business schools any longer but should be incorporated into all activities or programmes at TVET Colleges. This could be useful because when students gain a qualification and do not find employment, they can use that skill and start a business in their local community.

Shumar and Robinson (2019) along with several other authors question entrepreneurial education and wish to separate the concept from its intended purpose, which is generating financial capital. They highlight that green entrepreneurship and social entrepreneurship already exist, with green entrepreneurship referring to the creation of businesses which prioritise social responsibility and environmental sustainability. Shumar and Robinson (2019) suggest that entrepreneurs should create products and services that promote and support sustainable development, for example, renewable energy and waste reduction that will have a meaningful impact on the environment.

### **2.2.6 Effectiveness of Entrepreneurship Education**

Ncube (2022) investigates the effectiveness of entrepreneurship education in selected high schools, TVET colleges and public universities in Kwa-Zulu Natal Province. He highlights that entrepreneurship education still has many shortfalls and limitations that affect the subject's intended purpose. He emphasises that “the lack of resources like finance, technology, training and support from government are the major hindrances towards the effectiveness of entrepreneurship” (p.331) and that these challenges create difficulty for some of the “recommended pedagogies, teaching methods, theories and models” (p.331). Ncube (2022) emphasises that entrepreneurship is a solution to address high unemployment rates causing poverty in large parts of South Africa. He highlights that practical entrepreneurial training could boost economic growth and development; therefore, the government should invest in entrepreneurial education programmes to increase the number of successful entrepreneurs.

Li et al. (2020) endorse the role of CFERIs in entrepreneurial development. They also suggest that “entrepreneurship can only be successful when the economic environment is favourable” (p.3). Li et al. (2020) refer to Mahmood et al. (2016), who suggest that “business incubators provide the most effective strategies to promote community entrepreneurship and to support job creation by supporting new businesses” (p.3). They also suggest that “exposure to entrepreneurial opportunities is a form of integrating the work of preparing entrepreneurs to build successful businesses” (p.4). They highlight that many businesses often lack “the required skills for business survival, so these incubators offer knowledge-based services and long-term use of their physical infrastructure” (p.5). Li et al. (2020) suggests that “networking services have a positive effect on entrepreneurship development” (p.13). They also suggest that “communities with a wider network of peers tend to enjoy higher levels of entrepreneurship and economic growth” (p.13).

Akhoobaai & Bambo (2022) investigated The Situation analysis of Entrepreneurship in TVET Colleges, highlighting that the South African youth “unemployment rate is currently at 64.4%” (p.9) and provides five crucial risks faced (“prolonged economic stagnation; an employment and livelihood crises; state collapse; failure of public infrastructure; and the proliferation of illegal economic activity” (p.9). This study investigates ways South African youth can be supported in entrepreneurship, for example, by encouraging “innovative technologies, products and services” (Akhoobaai & Bambo, 2022. p.9). As a private financial institution, Allan Grey created The Allan Gray inter-college competition initiative, which started in 2020 to support youth development through entrepreneurship. This initiative aims to provide students with entrepreneurial knowledge through “fostering entrepreneurial culture in TVET students” (p.64). Students from any “course or level registered at any South African TVET college are invited to submit a business idea, product or service or with existing business” (p.64) and can participate. In 2022, “2667 students from 43 TVET Colleges participated in the national finals where 18 finalists had the opportunity to compete for a part of the prize valued at R100 000” (Akhoobaai & Bambo, 2022. p.9). This competition motivated many students to think of how they could become entrepreneurs to win a share of the prize to support their business venture.

Lackéus (2017) argues against entrepreneurship training for students’ profit as opposed to social or community entrepreneurship. This refers to the fact that entrepreneurial education and training should encourage community upliftment and not merely focus on financial rewards. Entrepreneurship has the potential to create a better standard of living for communities and should not only have a certain group of people benefiting and earning large profits. Students should be equipped on how to start businesses in their communities which improve the lives of people and not only to make money to sustain themselves.

Peschl et al. (2021) stress entrepreneurial thinking versus entrepreneurship skills. The authors critique entrepreneurial education as not leading to innovative activities with limited resources. They propose that entrepreneurial thinking should instead be replaced with entrepreneurial skills and students should be encouraged to develop skills to start businesses. Students should therefore be equipped with the necessary skills on how to be an entrepreneur and not just thinking of how they would do it. Entrepreneurship should be accompanied by the necessary skill set on how to solve problems to be able to create sustainable development opportunities.

### **2.2.7 UNESCO**

The UNESCO Strategy 2022-2029 highlights ways to transform technical and vocational education and training (TVET) for effective and objective changes. Education is UNESCO's top priority because it assists with creating sustainable development. UNESCO's strategy is to transition TVET Colleges globally from 2022 to 2029 through skills development, productive employment, and the generating of work opportunities for youth. The COVID-19 pandemic created a massive disturbance in the labour market and education systems, leading to even higher unemployment rates. This document highlights a need for increased entrepreneurial skills development and support. Enhancing STEM (science, technology, engineering and mathematics) skills and fostering entrepreneurial and 21<sup>st</sup>-century skills is emphasised. It will develop new skills currently required in the labour market by fostering entrepreneurial skills and mindsets. Enhancing STEM skills enables youth to develop critical thinking, problem-solving and innovation skills essential for employability in the world of work. UNESCO stresses that it will support the TVET sector by updating its current curriculum and STEM-related qualifications.

### **2.2.8 Summary**

The literature review has attempted to show the extant literature local and international views of entrepreneurial education and outline the need for an increased focus on entrepreneurship training and initiatives, such as the Allan Gray inter-college competition attempting to increase entrepreneurial youth development in TVET colleges. The following section focuses on the theoretical approach for this lengthy paper.

## **2.3 Theoretical Framework/ Research paradigm and theoretical concepts**

Cohen et al. (2018) describe that no theory can cover every aspect of a research study, but rather, it tries to explain a framework from a single angle. Theory is essential to research as it underpins the methodology and helps us to learn (Cohen et al, 2018, p. 77). Theory enables us to “select, classify and organise ideas, processes, and concepts” (Cohen et al., 2018, p. 71). It provides direction to research work by highlighting the research purpose and consequences. It also “connects the researcher to existing knowledge in the field” (Cohen et al. 2018, p. 71). Therefore, using a specific theory helps researchers guide their study and identify working methods to evaluate and critique their research. Recent methodologists encourage multi-paradigmatic approaches because researchers often have complex matters to unravel and layers

of information to mine. Therefore, an exploratory approach (Ponelis,2015) suits my research interest.

Choosing a theoretical approach is a significant aspect of any study. I identified that the best-suited theoretical approach for this study is a social-cultural perspective (communities of practice). A sociocultural perspective is used in education to enhance social interaction among students and learn from each other. It highlights the differences in people caused by different “social and cultural backgrounds, " which affects learning in a classroom or society.

I will draw upon Lave and Wenger’s (2008) socio-cultural pedagogy to understand how TVET College lecturers work with external stakeholders through communities of practice to provide improved entrepreneurship training opportunities for TVET College students. I will be studying both traditional learning approaches based on theory and establishing incubators that involve practical learning and entrepreneurs' development within practice communities. I use communities of practice to analyse how TVET College staff interact with broader stakeholders to improve entrepreneurship training within TVET Colleges.

Lave and Wenger (1999) define a Community of Practice (CoP) as “participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities” (p.98). Lave and Wenger argue that a “learning curriculum unfolds in opportunities for engagement in practice” (p. 93). Work practices and peer engagement shape these learning opportunities, and learning occurs through “centripetal participation in the learning curriculum of the ambient community” (p.100). Their critical observation is that these apprenticeships involve “partial participation in 32 segments of work that increase in complexity and scope” (p.80). They further argue that the ordering of learning and everyday practice does not coincide and state: “Production activity segments must be learned in different sequences than those in which a production process commonly unfolds” (ibid).

My research will focus on the practical application of concepts and exposure to entrepreneurship education in ways that involve communities of practice. I intend to use communities of practice approach to understand how TVET College lecturers have formulated their different approaches to entrepreneurship education and training, which involves external stakeholders and peer learning. Storberg-Walker (2008) suggests that communities of practice offer value to learning but do not always take “recognised theory-building steps”, meaning that scholars should be given tools to gain knowledge and cannot be expected to produce

knowledge independently. Lackéus (2015) suggests that lecturers should teach students skills by introducing them to the tools needed to start businesses and become self-employed.

Wenger (2000 p.225) claims that “knowing, therefore, is a matter of displaying competence defined in social communities”. The socio-cultural perspective aims to analyse the role of society in individual development, therefore perceiving teaching and learning as a social activity and not a knowledge-building task(cognitive). The socio-cultural perspective promotes a “community of practices”, a group of people that have the same passion and goals in a specific field (law, engineering, etc.) and learn from social interaction, called “social learning systems” (Wenger, 2000). TVET Colleges can become communities of practice if TVET College lecturers are prepared to learn from each other and broader external stakeholders; “learning in a social system occurs because of competence, skills, experience and different ways of belonging” (pg. 225-226). Communities of practice develop from “displaying competence defined in social communities” (Wenger,2000, p. 225).

There are three main concepts Wenger views as being necessary for a community of practice; he recommends that your joint enterprise defines an “individual’s competence, mutuality and repertoire” (p. 229); informal learning occurs when a group of people work together by further developing in their field of expertise. It is important to remember that informal learning does not replace formal education; it offers support by providing a community of practice with skills, products, or other needed assistance.

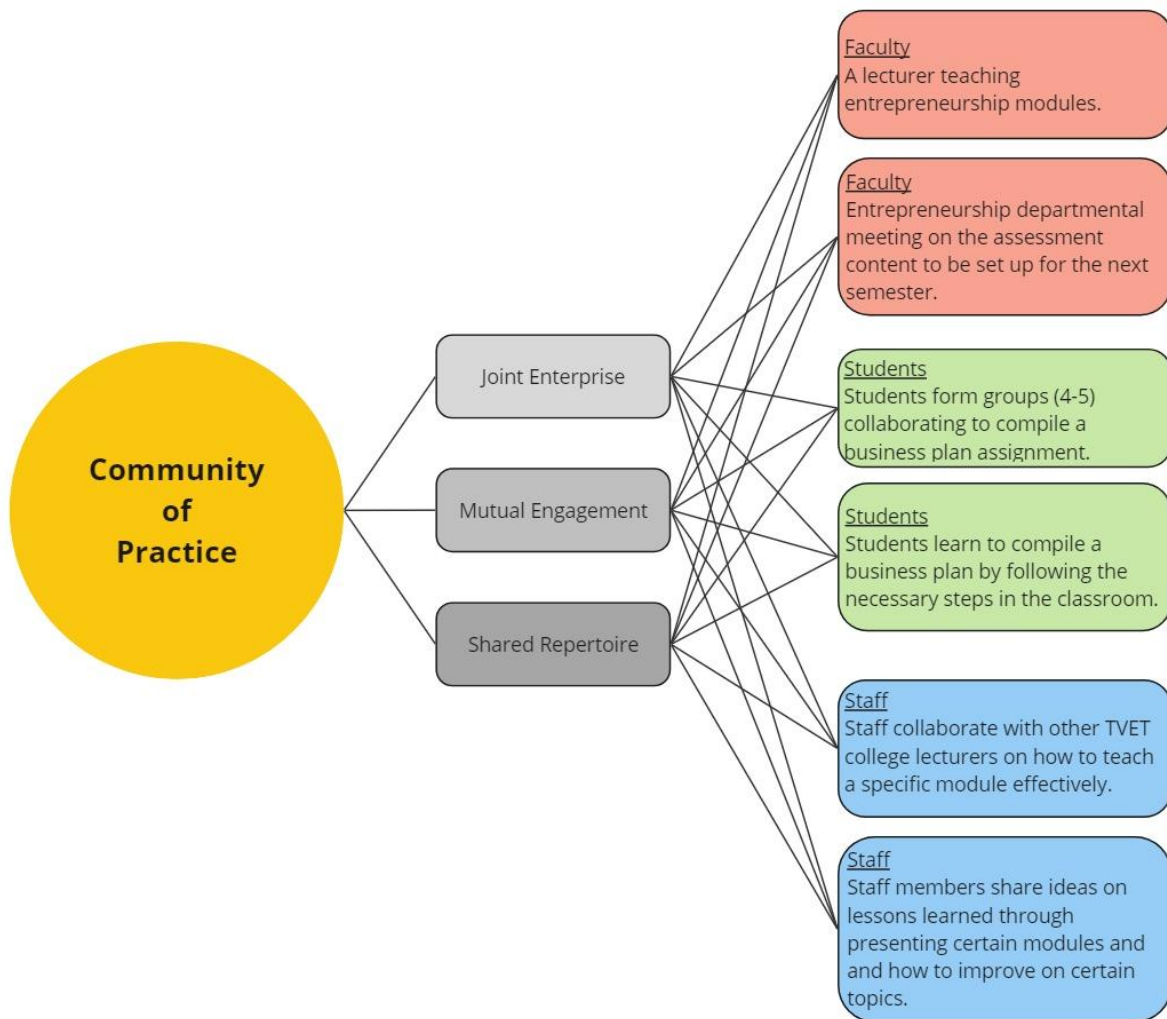
Snyder and Wenger (2000) imply that the three frameworks which ensure the success of various communities of practices are sharing the same “domain (sharing the same identity), community (solid relationships amongst each other) and practice (develop their practice by developing practitioners)” and if it lacks any one of these frameworks, it would not be able to function as intended to.

Wenger argues that a “community that has shared practices creates boundaries between different communities” (Wenger, 2000, p. 233). This suggests that boundaries are connected to communities of practice because we learn through boundaries. He implies that if you belong to a community of practice in the field of education, lecturing at a college and introducing a new concept you are unfamiliar with, then a boundary is created in your community of practice. You are responsible for gaining knowledge on that concept through training to remove that boundary. If you do not learn the new concept, your community of practice will become ineffective because learning will no longer occur, and it could stagnate (p.229).

## What kind of changes are required for learning?

Wenger says that for a community of practice to be effective, it needs to be “competent”, and its competence would be defined by its “joint enterprise, mutuality and shared repertoire” (p229). Figure 1 below illustrates Wegner’s notion of a CoPs competence applied in an entrepreneurship learning environment in a TVET college.

**Figure 1:** Illustration of Wegner’s notion in TVET context



An example of a participant’s role as a TVET college lecturer would be a joint enterprise in that the TVET college entrepreneurship lecturer shares the same view, and that is educating the youth of a local college; their mutuality would comprise their purpose/role and interactions with each other to get the teaching done, and their shared repertoire would consist of lecturers sharing business ideas and experiences, ideally drawn from expanded communities of practice, to be able to teach their students.

Very few lecturers have been exposed to entrepreneurship before becoming lecturers or having small businesses they run. For example, a lecturer at one of the mentioned TVET colleges has their own business and has been seconded to assist with skills development at the colleges CFERI; the lecturer can thus deliver first-hand experiences of what running a business entail to the students. Another lecturer/participant has experience assisting a friend in running a skills-based centre; this significantly impacts the type of knowledge and examples used in the classroom. Lecturers with industry experience or formal entrepreneurial education and training have the confidence and expertise to deliver curriculum-based education by teaching students to turn their business ideas into successful business concepts/ventures. However, very few lecturers have formal entrepreneurial education and training or personal experience with running their own business, which affects their ability to connect with the content and skills taught to their students.

Wenger (2000, p. 230) suggests three dimensions which will determine the state of progression of a community of practice. The first is “leadership”, where Wenger asks if participants guide and respect one another within a shared tradition. The second is “productivity, ” which checks that all participants work together doing what is expected and learning. The third dimension is “reflection”, which reflects on practices in place and, if the community of practice is not progressing, what measures need to be put in place to adjust current practices.

A healthy identity of a community of practice is based on their “connectedness, expansiveness and effectiveness” (Wenger, 2000, pg. 239-240). This would create a sense of belonging while members connect; expansiveness is growth because of multi-membership, and effectiveness is achieved by socially interacting and learning. No learning community will ever be smooth sailing; social interactions could highlight differences, leading to conflict. However, the aim should be to identify weaknesses and then move towards improving the organisation.

Wenger refers to new members as having “foreign competence” (p.233) and says that if you can manage their cultural differences and their different pre-lived experiences because of boundaries, then a learning community would be able to progress and move into the desired direction which is being a thriving social learning community. Wenger suggests that learning in a social system occurs because of “competence, experience and different ways of belonging” (pg. 225 -226).

Communities of Practice has been extensively studied and therefore not presented without critique. Hodkinson and Hodkinson (2004) discuss six challenges to workplace learning

literature, citing Lave and Wenger's paper as a starting framework. This highlights that there are many crucial issues in education and social learning. They indicate that communities of practice are unaware that it creates "divisions amongst people which create social inequality".

Hodkinson and Hodkinson (2004) highlight the critique created by power and that divisions of power affect learning. They emphasise that levels of power in an organisation increase levels of inequality, thus allowing leaders to remain in their positions, and this mainly occurs because leaders are afraid to delegate and enable employees to develop.

Hodkinson and Hodkinson (2004) emphasise that formal and informal learning are not the same, indicating that the misconception of the advantages of informal learning is that it is seen as not holding the same value as formal learning.

Lastly, Hodkinson and Hodkinson (2004) speak of the assessment measures/procedures for off-site/informal learning and note that from a "social perspective", there is a need to understand how learning takes place in informal education settings. Fox (2022) suggests that Lave and Wenger (1991) discuss socially situated learning and draw on Hutchins' research (1995) to assert that learning occurs separately from formal educational contexts 'in the wild' as it were. Fox (2022) compares CoPs to a form of learning through networking. He claimed that networked learning should not only refer to formal designed education through learning through electronic networks, but it should include everyday experience. He suggests that networked learning can either continue as a supporting feature of CoPs or it can take part with the networks of learning beyond, which undeniably form CoPs.

Critiques of Communities of Practice are valid, but this paper asserts that it is a sound theoretical approach to understand better practical entrepreneurship initiatives and the need for educators and students to be involved in communities of practice for successful entrepreneurship. The most significant benefit of incorporating CoPs into the entrepreneurship curriculum of TVET colleges is that it encourages skills-building activities and shared practices amongst TVET college lecturers, various TVET colleges and external stakeholders. I, therefore, intend to incorporate this critique to strengthen my theoretical approach and broaden Lave and Wenger's original work on communities of practice.

Musteen et al. (2018) refer to a community-of-practice approach for teaching international entrepreneurship, suggesting a gap between knowledge and the success of educational programs. Musteen suggests that to bridge this gap CoPs should be implemented where "students are allowed to participate in the construction of their knowledge through interactions

with their counterparts in other countries” (p.1). This study thus suggests that “promoting learning through practice, the CoP-based teaching method has impacted upon students’ emotions, self-efficacy, and self-perceptions of their entrepreneurial intentions”; therefore, TVET college students would be able to benefit hugely from CoP in their local TVET colleges.

Therefore, to facilitate students’ situated learning, a (CoP) approach was adopted to create knowledge derived from learning methods through practice (Handley et al., 2006). Musteen (2018) notes that CoPs are defined as a “group of individuals in a community sharing similar interests in a certain area, the domain, and gain a greater degree of knowledge and expertise on that topic through regular joint experimentation in practice” (Wenger, 2011) (p.3). Through this exercise, practitioners exchange information and cultivate knowledge through the collaborations from members engaging in joint practical activities and discussions (Wenger, 1998). Musteen suggests, “Here exists an extensive theoretical and practitioner-oriented literature advocating CoP as a collaborative approach for promoting situated learning” (Wenger, 2000) (p.3).

## **2.4 Conclusion**

The literature has shown the purpose of entrepreneurship at TVET colleges, and equipping students with entrepreneurial skills is essential for creating self-employment. This approach would, therefore, enforce the necessary skills students need to build local communities, boosting the economy.

The above literature has indicated a range of opinions where the researchers acknowledge the importance of effective entrepreneurship training and the lack of practical entrepreneurship training. The literature highlights a need to explore and understand how entrepreneurial training occurs at TVET colleges and whether it prepares students for self-employment upon graduation. The chapter also presented the theoretical and conceptual framework, illustrating the theory used for this study. The theoretical framework and its relevance to the study were also highlighted. The next chapter presents the methodology that was employed for this study.

### **3. Research Methodology**

#### **3.1 Introduction**

This chapter describes the research methodology used for this paper and is based on the research paradigm and design used. This chapter also includes the research population, sampling, data collection, and analysis. The measures to ensure the ethical considerations of the study and its limitations are also included in this chapter.

#### **3.2 Research approach**

Malawu (2022) defines research as “a systematic study of a problem carried out using a determined strategy”, therefore this strategy comprises selecting a method and then navigating through different processes to gather data, analyse the data, reach findings and provide recommendations. Okeke & van Wyk (2015) describe the research process as “the meticulous strategy adopted by a researcher to conduct a research study, " making selecting an appropriate approach difficult. This study's qualitative approach has been identified as the most appropriate.

#### **3.3 Research paradigm**

Mackenzie and Knipe (2006) suggest that paradigms provide meaning to the aims and objectives of the research. Cohen et al. (2018) describe that no theory can cover every aspect of a research study, but rather, it tries to explain a framework from a single angle. Theory is essential to research as it underpins the methodology and helps us to learn (Cohen et al, 2018, p. 77). Theory enables us to “select, classify and organise ideas, processes, and concepts” (Cohen et al., 2018, p. 71). It provides direction to research work by highlighting the research purpose and consequences. It also “connects the researcher to existing knowledge in the field” (Cohen et al., 2018, p. 71). Therefore, using a specific theory helps researchers guide their study and identify working methods to evaluate and critique their research. Recent methodologists encourage paradigmatic approaches because researchers often have complex matters to unravel and layers of information to mine. For this reason, I think an exploratory approach (Ponelis,2015) is suitable for my research interest.

I will draw upon Lave and Wenger's (2008) socio-cultural pedagogy to understand how TVET College lecturers work with external stakeholders through communities of practice to provide improved entrepreneurship training opportunities for TVET College students. I will study traditional learning (theoretical learning with minimal practical application) and established incubators that involve practical learning and entrepreneurs' development within practice communities. I use communities of practice to analyse how TVET College staff interact with broader stakeholders to improve entrepreneurship training within TVET Colleges.

This research focuses on applying concepts and exposure to entrepreneurship education in ways involving practice communities. Communities of practice are used to understand how TVET College lecturers have formulated their different approaches to entrepreneurship education and training, which involve external stakeholders and peer learning. Storberg-Walker (2008) suggests that communities of practice offer value to learning but do not always take "recognised theory-building steps", meaning that scholars should be given tools to gain knowledge and cannot be expected to produce knowledge independently. Lecturers should teach students skills by introducing them to the tools needed to start businesses and become self-employed.

The design of this research study links the research objectives and questions to the data collection process to provide recommendations for the necessary changes to occur in entrepreneurship education. Adams et al. (2007) describe research design as a master plan stipulating the methods and procedures for gathering and analysing the data. This case study investigates participants in the TVET College sector who are linked to entrepreneurial education and development. Yin (2009) perceives case studies as the ideal strategy for how/when/why questions, especially if the emphasis is on real-life context.

Therefore, I used a case study to investigate ways TVET colleges could assist students in becoming self-employed through improved entrepreneurial training. I chose the case-study method as it allows for "flexibility and adaptability" (Malawu, N. 2022. p.72), which is permitted when using semi-structured interviews.

### **3.4 Sampling of the college and participants**

The primary analysis participants for this research are TVET Colleges and their role in preparing students for self-employment. This case study adopts an approach where staff from three TVET colleges were interviewed to collect the data needed. For this study, a sample size

was drawn from 11 TVET College staff involved in entrepreneurship education. These participants were purposefully identified, allowing for access to the research participants. Etikan et al. (2016) discuss convenience sampling as applicable where persons from the study population meet the inclusion criteria, including being available and willing to participate. A targeted sampling method was used to interview two CFERI managers, one senior entrepreneurial development officer, an entrepreneurship senior lecturer, and seven lecturers across the three colleges. The CFERI managers of two colleges were interviewed to understand how on-campus incubation hubs assist students in gaining the skills and training needed to run successful businesses. The semi-structured interview questionnaire was based on the main and sub-questions and the research paradigm identified for this study. The key emphasis of the questionnaire focused on investigating ways TVET colleges could assist students in becoming self-employed through improved entrepreneurial training. The main research and sub-questions assisted in creating a semi-structured interview questionnaire, which was used to interview the identified lecturers/participants.

The main research question of this study is an investigation into ways TVET colleges could assist students in becoming self-employed through improved entrepreneurial training.

The following sub-questions were identified to construct a valid research approach for this question.

Sub questions:

1. How are entrepreneurship skills taught and practiced at South African public TVET Colleges?
2. To what extent do public TVET Colleges involve external stakeholders and resources for entrepreneurship training?
3. In what ways have TVET Colleges enabled lecturers to develop their expertise, networks and knowledge of entrepreneurship?
4. What are the general perceptions of how entrepreneurship is taught and practised?

Table 1 provides a brief profile of each participant (age, gender, subject lectured, level of subject and years of lecturing experience) and the subjects they offer. For confidentiality purposes, the participants have been identified as Participants 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 & 11.

**Table 1:** *Participants and the subjects they offer*

Participant	Gender	Age	Subject and level taught	Years of experience teaching EBM
P 1	M	62	Entrepreneurship & Business Management (EBM) N4	15 years
P 2	M	44	EBM N4	6years
P 3	F	26	Intro EBM EBM N4	One year
P4	F	34	EBM N4	Six years
P5	M	58	Entrepreneurship Advancement Officer	Two years in this position.
P6	M	38	EBM N5 EBM N6	8years
P7	F	46	Acting Senior lecturer EBM N4 & New venture creations	7years
P8	F	29	EBM N4 EBM 5	Three years
P9	M	50	EBM N5	13years
P10	M	50	Assist students in entrepreneurial training – CFERI manager	Three years
P11	F	45	Assist students in entrepreneurial training – CFERI manager	20 + years

### **3.5 Data Collection Procedure**

Semi-structured interviews are used to collect qualitative data in a research study and are best described as a “two-way communication method” (Tutty et al., 1996). As mentioned above, the study aims to investigate how TVET colleges are preparing students for self-employment, and all interview participants were chosen because of their relation to the subject. Most interviews were held on MS Teams and recorded with the participants' permission. This helped the participants who worked in distant locations and could meet face-to-face.

Seven TVET College lecturers, one senior lecturer, an entrepreneurship advancement officer and TWO CFERI managers were interviewed. The semi-structured interview questions were based on the main and sub-questions and the conceptual framework used for this paper. The main emphasis of the interviews was to identify the role TVET Colleges are currently playing in preparing students for self-employment. The interviews took a month and were carried out in November 2023.

The first TVET College is situated in the northern suburbs of the Western Cape and has seven campuses to meet its diverse students' individual interests/needs. This college offers vocational, occupational and skills training to its students. Many lecturers teach entrepreneurship and business management at the NATED campuses; however, five were chosen to participate in the interview process: three post-level lecturers, one senior lecturer and one Head of the Department of Business Studies to collect substantial data. These lecturers were not all on the same Campus for variation and a diverse response. This college does not have a CEFRI, although one is planned for, and the TVET College only allows students to gain a formal theoretical qualification. Interviewing these lectures assisted the research process in understanding formal entrepreneurial training without a practical component.

The second TVET College also offers vocational, occupational, and skills training to provide students with skills and practical experience. It is situated in the southern suburbs of the Western Cape with five individual campuses. This college aims to offer students an enhanced learning experience, and they have training hubs that allow students to gain both formal and practical education in various streams of education. This College has an entrepreneurial incubation hub equipped with the necessary infrastructure, facilities, equipment and tools providing entrepreneurs with the resources needed to design and make their products, with support and coaching. This facility helps students/businesses in the manufacturing and technical fields create innovative products. This incubation hub was established due to funding

from Space Environment Database and Analysis Tools (SEDAT) and Department of Economic Development and Tourism (DEDAT), and this funding permits a CFERI to offer an 18-month program to entrepreneurs with formal qualifications and essential experience in a skill-based program. The CFERI manager was interviewed to gather data on how the centre operates and what value it adds to formally qualified entrepreneurs lacking practical skills. There are many lecturers teaching entrepreneurship and business management at the NATED campuses of this College. Three lecturers were chosen to participate in the interview process: one lecturer, one senior lecturer, one Head of the Department of Business Studies, and the manager of the CEFRI to collect substantial data. These lecturers were not all on the same Campus for variation and a diverse response.

The third TVET College also offers vocational, occupational and skills training to provide students with the necessary skills and practical experience to become successful graduates. This College is situated in the rural Western Cape. It has five campuses over 100 kilometres apart due to smaller communities with fewer students searching for further education and training. This college provides students with a CFERI, a multi-sector business incubator to support SMMEs. This incubator serves all campuses of the College and surrounding communities. The critical areas supported are engineering, manufacturing and ICT. In 2023/2024, the Centre offered support for businesses, including the generic business incubation program, digital entrepreneurship, a trades business development programme and an entrepreneurship development programme to provide entrepreneurship awareness among students. The centre conducts entrepreneurship workshops for students to create awareness and ignite their desire to be job creators instead of job seekers.

Four of the five participants of the first college were interviewed on Ms TEAMS at a range of campuses in the northern suburbs of the Western Cape. The fifth participant was interviewed face to face, and handwritten notes were taken and transcribed. The participants of the second and third Colleges were interviewed via MS Teams. All participants were asked to participate in the interview process and then issued consent letters to confirm their participation in this interview. All participants of the three Colleges' responses were transcribed. The CFERI managers of both the second and third Colleges agreed to a Teams interview whereby these interviews were recorded. Most participants agreed to have their interview responses recorded, which allowed for a detailed gathering of responses to questions. The section below describes the data analysis process used.

### **3.6 Data collection methods**

This process entailed selecting participants to participate in this study and obtaining their consent to include them. Adam et al. (2007) suggest that “data collection is an essential aspect of research design and the ability to achieve the research objectives and answer the research questions rests on the effectiveness of the data collection”. This process involved collecting and managing data from 11 participants while adhering to all ethical procedures. The interview aimed to help the researcher understand the current entrepreneurial provision at TVET colleges from directly involved persons. To collect the required data for this study, the following steps were followed:

I as the researcher informed the TVET college principals or Head of Academics of the intended study by emailing a study Information Sheet Consent form and Ethical clearance. Once permission was granted, identified participants, entrepreneurship and business management lecturers, CFERI managers and entrepreneurship advancement officers at TVET Colleges were provided with an information sheet, consent form, and possible interview questions. Most participants wanted the questions sent beforehand to prepare for the interview adequately. Upon agreement to participate in the study, Ms Team meetings, face-to-face meetings, and WhatsApp calls were scheduled to suit the individual needs of each participant while bearing in mind the evidence needed. I assured all participants that their participation was voluntary, their responses to interview questions would remain anonymous, and they could withdraw from participating in this study at any time.

### **3.7 Data analysis**

Miles and Huberman (2014) suggest that a “qualitative analysis has to handcraft appropriate data display formats because of the uniqueness of each problem” (p.108). A Manual data analysis method of analysing my data was used as this worked for collecting qualitative data. The manual analysis allows for manually gathering collected data to get an actual feel of the issue, the participants and how the problem impacts society.

70% of the interviews were recorded on MS Teams and were transcribed by myself, with the written consent of the participants. The other interviews were done via WhatsApp, and notes were made during the process. The data was transcribed, which allowed for the creation of themes. Once themes were created/identified from research data, a qualitative software program was used to assist in codifying the data collected from the interviews. The coding

process thus created fundamental themes from the research data, which were subjected to further analysis.

Fundamental themes were identified as follows:

1. The current entrepreneurial curriculum
2. Increased industry partnerships
3. Incorporating soft skills with entrepreneurial training
4. Lack of TVET College Lecturer Industry Training
5. Importance of CFERIs/Support Services for Forming Communities of Practice

The abovementioned themes are directly linked to this study's research, sub-research questions, and the theoretical framework of entrepreneurial education in TVET Colleges.

### **3.8 Limitations of the Study**

TVET College lecturers and CFERI managers were the main focus of this study. Therefore, this study excluded other stakeholders, such as the government, workplace learning programmes and private training facilities, which could also ultimately assist students in becoming self-employed through improved entrepreneurial training. The timeframe allocated for completing a long paper prevented me from researching other stakeholders.

I initially envisioned including all six TVET Colleges in the Western Cape in the study as I wanted to collect abundant data to support this study. However, I soon realised that this would be too broad, bearing in mind the specifications of this lengthy paper. Therefore, narrowing down my data collection process to three Western Cape TVET Colleges allowed the necessary data to be collected.

Of the three colleges that participated in this study, only two had CFERIs, which indicated the effectiveness of these incubation hubs and their effect on students' skill enhancement. The distance between a college and its different Campuses was also noted, where only one campus has an incubation hub to serve all its campuses.

Semi-structured interviews face criticism and challenges as they require extensive resources to collect accurate data. Kakilla (2021) alludes that the main disadvantage of semi-structured interviews is that "interviewees' main responses may be based on the emotional impact or

perceived purpose of the interviewers” (p.51). Another critique is that “the number of interviewees is often limited due to time and financial resources” (p.52).

There were many challenges to acquiring the research as the participants are not all based at the same TVET college; they are situated within far distances, and therefore, MS TEAMS meetings seemed like the best option. However, interviewing participants online presented challenges such as load shedding which interrupted some of the interviews due to the loss of signal, the time constraints due to the various schedules of participants and internet connections as not all campuses have reliable internet connections. Fortunately, these challenges were overcome, and the research was conducted effectively.

### **3.9 Ethical considerations**

Tracy (2010) highlights the importance of ethical consideration during the research process, which has been maintained to a more significant extent. Therefore, ethical consideration is critical in interviewing humans/people. Being ethically considerate was an essential part of this study, which was considered to a large extent throughout the research process. Mason (2002) highlights the proper ways of accessing settings and participants for a study; therefore, a formal letter, information sheet and the research ethical clearance statement are included in the Appendix below.

A letter of consent which guaranteed the anonymity and the use of codes was sent to all participants of this study, and this is included in Appendix C. All participants were informed before the interview that their participation in this research/study was voluntary and that they could withdraw at any given time. Of the 11 participants, the participants signed the consent form and were satisfied and content with the information provided by the interviewer, guaranteeing their anonymity. The participating TVET colleges have been referred to as colleges one, two and three, confirming that anonymity has been maintained. The lectures were referred to as lecturer1 (L1), L2, etc., to protect the identity of all participants, considering a few are workplace colleagues. Despite the researcher being an entrepreneurship lecturer, the lecturer consciously sought not to impose any personal views of intervention in any way that could show any form of biased research.

### **3.10 Summary**

This chapter explores the methodology and design used for this study, emphasising a qualitative data collection approach. It highlights the research paradigm based on communities of practice and why this paradigm was chosen. The sampling technique and methods of the data collection process are emphasised. Furthermore, the importance of ethical clearance and why adhering to ethical considerations in handling participants' data is explained.

## **4 Data analysis and critical research findings**

### **4.1 Introduction**

This chapter represents the results from the data collected through semi-structured interviews and the analysis thereof. The study focused on a case study investigating ways TVET colleges could assist students in becoming self-employed through improved entrepreneurial training. This chapter discusses the findings that emerged from this study under the chosen broader themes: the current entrepreneurial curriculum, increased industry partnerships, incorporating soft skills with entrepreneurial training Skills needed (soft-skills), lack of TVET College Lecturer Industry Training and the importance of CFERIs or Support Services for forming communities of Practice. These themes are, therefore, discussed and analysed in line with the existing literature.

### **4.2 Thematic analysis of research data**

This part of the data analysis identifies themes arising from the semi-structured interviews, which then forms the basis for further analysis in terms of the theoretical framework, the literature review and the research questions of this paper. Each theme is sub-titled, where symbols or numbers are used to protect the identities of the TVET college staff members.

#### **4.2.1 The current entrepreneurial curriculum**

##### **Mainstream TVET College approaches to Entrepreneurship education and training**

The first theme developed from this research was mainstream TVET college approaches to entrepreneurship education and training. The participants describe the current entrepreneurial curriculum similarly but share different perspectives on specific questions. P10 emphasises the difference between entrepreneurship and business management whereby P10 asserts:

“There is a difference between small business management and entrepreneurship. There is confusion; our entrepreneurship education/curriculum focuses on business management, and entrepreneurship is not focused on it; it is about that ability to see/identify problems and provide solutions, being proactive and looking at what is happening in society and bringing about change”.

Several participants indicated that the current entrepreneurship curriculum for TVET colleges is too theory-based (compact). A participant stated that:

“The current curriculum as “the entrepreneurship education taught is basic entrepreneurship skills, like teaching student is to write a business plan, formally” (P 2).

Several participants voiced their frustration with the intensive theory-based entrepreneurship curriculum. P1 and P5 underscores the lack of practical training that students receive, stating:

“The current curriculum has a 20% practical component where students do not need to start a business physically, so they do not get the practical experience” (P1). P 5 specified that “entrepreneurship is currently offered as curriculum-linked, new venture creation, Entrepreneurship and Business Management N4 (the first level of course in any NATED program), N5 (the next level of the course) and N6(the last level of the course), it is a program specific, formal education curriculum”, P1, mentions “this subject is +95% theory based” therefore highlighting that only a tiny part of the curriculum exposes students to practical training.

Instead, students are assessed on their theoretical knowledge learned in N4, N5 and N6, as stated by P8:

“Students are evaluated by, for NATED, they have N4, N5, N6 and after those internships, they get a logbook with expectations of what they should be doing and break down all four subjects they are doing but do not necessarily focus on entrepreneurship, they did not get exposed to entrepreneurship, the hustle/how to start their own business, but instead learn how to manage someone else business with given resources”.

Participants stressed the need for a more “balanced approach when teaching entrepreneurship to TVET college students” (P1), demonstrating that “Students are taught and examined this subject formally, which does not allow for enough practical training” and then proposed, “I think 50% practical and 50% theoretical for updating the current entrepreneurship program” is required (P1).

The above analysis highlighted that most participants indicated that the current mainstream entrepreneurship TVET college curriculum taught to TVET college students is too theory-intensive and lacks a practical skills component.

#### **4.2.2 Increased Industry Partnerships**

The theme of increased industry partnerships was developed from the data collected, where many participants highlighted the need for an increase in industry partnerships. The

participants' responses divided the data into current partnerships and the benefits of increased partnerships.

### **Current Partnerships**

Several participants mentioned that there are currently very few industry partnerships at their TVET colleges, affecting entrepreneurial development at TVET colleges. The Allan Gray partnership, a South African investment company focused on entrepreneurship training, is mentioned by five of the participants. A lecturer stated, "The college does not have enough external stakeholder relationships; the only one I know of is the Allan Gray partnership, which I believe can be increased to produce more skilled entrepreneurs." (P1) Another lecturer corroborated this by noting "There are supporting structures, the Allan Gray competition assisting young entrepreneurs" (P2), thus emphasising that the Allan Gray partnerships initiative was one of the few external interventions that TVET College lecturers were aware of. The participants were not directly involved in introducing the Allan Gray partnerships to TVET colleges, as this was an intervention from DHET. Therefore, this suggests that TVET college lecturers and leaders are not centrally involved in a Community of Practice with Allan Gray and are, therefore, only peripherally involved in the CoP through their students participating in the Allan Gray competition.

Another lecturer noted the existence of broader external partnerships: "Various industry, corporate and business partners also run joint on-campus and off-campus events which expose students to entrepreneurship and enterprising opportunities". The participant below emphasises this by highlighting that working with partners improves entrepreneurial education and thus allows for developing communities of practice between businesses and TVET colleges.

A TVET College lecturer stated the importance of TVET College partnerships:

"TVET colleges must form partnerships with the industry, and TVET colleges must know what is needed in the industry. TVET colleges are working with businesses to improve entrepreneurship education" (P9).

Another view shared was as follows:

"There is a structure set up in partnership with DHET to drive entrepreneurship across all Colleges. Partnerships are shared, bringing annual entrepreneurial programmes such as the annual Allan Gray and Future Manager Annual TVET Inter-College Entrepreneurial Competition" (P10).

By establishing external partnerships, TVET colleges allow relationship-building with these partners. The TVET college participants in this study did not establish their partnerships; all of these were introduced to the colleges externally.

The participants describe broader Vodacom and the NYDA partnerships as external partners who offer practical support to entrepreneurship students, as shown by

“The Step program and the Allan Gray Makers program are outside stakeholders forming partnerships with TVET colleges”.

Vodacom, a telecommunication provider, provided in-class training to recruit students for employment and self-employment as a small provider of its products:

“Vodacom is another initiative we work closely with; they focus on N6 business management students, but this is a rigorous process where they are interviewed and selling exercises; this is linked to what is done in class in Sales management” (P10).

“Last year our students partook in the Vodacom entrepreneurship competition, it was a collaboration with our college”, emphasising “a student in my N6 class was so good as they had to sell Vodacom sim cards and sign people up, but within that year our college and some Department of development also had something where they had to come up with a sustainable concept they can use to come up with a business and our students progressed to the semi-finals” (P6). The Vodacom intervention is an entrepreneurship intervention.

Other partnerships alluded to include:

“Supporting structures for clothing students are students being linked to small businesses, the NYDA for funding support and support structure”. These partnerships were established by management with a SETA.

The existence of formal business partnerships was noted:

“We do collaborate with outside stakeholders. For example, we have the NBI project, which is the National Business Initiative, which is an organisation which provides funding and support to small businesses but also for the youth to be prepared or provided with technical skills for those who want to start their businesses to be incubated. With NBI, the first phase, skilling, is where you get the technical skills at our Atlantis campus, working closely with Atlantis SEZ. Those students are taken

through the process of installation, repair and maintenance projects where those students are taken through where they learn different skills, plumbing, plastering, tiling, painting and electrical repairs, so they are given those skills with the aim that once they complete the first part they go on to be placed at a small business that is in that sector”.

A TVET College lecturer stated that the existence of external partnerships was solely related to those formed through their incubation hub:

“We work with a small business enterprise, a non-government/maybe semi-government, I am not sure, taking and training students. There is no formal relationship with outside stakeholders besides our incubation hub.” (P6). This would suggest weak linkages with Communities of Practice.

### **The benefits of increased partnerships**

TVET College lecturers/managers stressed the importance of external partnerships:

“The collaborations with outside stakeholders/incubators help students to gain practical experience with various business chambers, industries, and the business sector” (P11).

“This year, we were part of the Allan Gray challenge, which was the first year; we were part of the pilot at the different colleges across the company; it is a game students play; they can play it on their cell phones or computers taking them through the whole process of starting a business, and the focus is tech business, so developing mobile apps for education, financial sector and health, food, small business in townships, it was to get students to be problem solvers” (P10).

The lecturer further explains:

“They went through five modules from the idea on how to start your own business, the CIP process, mentorship and where to look for funding, then giving them a broad prospect of entrepreneurship.... Some students initially were not interested when I presented this challenge. However, one of the students could not stay away and helped others by guiding them, which was another way of linking entrepreneurship to what students were studying” (p 10).

P11 mentions:

“Various industry, corporate and business partners also run joint on-campus and off-campus events which expose students to entrepreneurship and enterprising opportunities.”

This proposes the forming of communities of practice within the TVET college sector as colleges do not only support registered students but also community and township entrepreneurs. The academic streams have entrepreneurial practical activities as outcomes, allowing students to apply entrepreneurship. The different colleges share the learnings through the structures set up to bring together the players tasked to drive entrepreneurship.

The participants’ responses above demonstrate the current partnerships between their TVET colleges and other entrepreneurial initiatives for assisting students with self-employment.

Several participants identified the need for industry collaborations and partnerships as they realise their importance, and the participants suggest that industry collaborations will support the alignment of theoretical classroom knowledge with skilled/industry experience.

#### **4.2.3 Incorporating soft skills with entrepreneurial training Skills needed (soft skills)**

Several participants highlighted a need for various soft skills to be taught to students.

Most participants identified the need to integrate soft skills within the entrepreneurship curriculum and developed a broad theme from the data. Several participants believe that besides the basic entrepreneurship education that students receive, there are other skills not taught that are needed for self-employment. However, students are expected to have these skills.

Examples from participants on the need for soft skills noted

“What should be focused on is business planning skills, not just theory, how to draft a business plan, financial literacy(basic), basic managerial skills and communication” (P4).

“The challenges faced after graduating, many of them are with funding, as materials are expensive, funding, not having the right soft skills (they struggle with not knowing how to run a business). Therefore, there is an enormous need for integrating soft skills training such as communication, teamwork and presentation skills into the current curriculum” (P3).

Several participants mentioned the business plan assignment as a component of the entrepreneurship N4 theoretical curriculum and their critique of this approach.

“They do not do market research or proper SWOT analysis of the business they want to start...We only teach students the basic skills of starting a business for 18 months, which is not enough”.

The respondent further reports, “The students should be taught “soft skills such as interpersonal skills”. (P8)

Numerous participants suggested ways students can be better prepared for self-employment by incorporating a soft skills component within the curriculum.

“The students should be taught “soft skills such as interpersonal skills. The lack of soft skills can be improved by incorporating additional skills into current entrepreneurship education and training programmes” (P9).

The importance of improving students’ skills in business plan design was emphasised by highlighting that a student should be taught how to structure their business plans in such a way that they could present them to financial institutions and possibly receive funding:

“Improving entrepreneurship practical skills in Ebn N4 business plan, because you try as a lecturer to make it more real to them but at the end of the day to get that practical implementation of your business plan to be structured in such a way that you can approach financial institutions is where they lack that skill, So the practical implementation of it is quite important” (P6). One of the problems of a business plan is that banks will not provide loans unless they have some form of guarantee that the business loan will be repaid. Most students are poor and lack the economic capital to assist their business ventures.

A multi-prong approach is referred to, which includes personal development, including TVET colleges creating an entrepreneurial mindset amongst their students.

Our multi-prong approach includes program components specifically designed for the entrepreneur's personal development and are essential and fundamental skills if we want to build resilient entrepreneurs. The key component for us is to create an entrepreneurial mindset”.

“Entrepreneurial skills provide participants with the required 21st-century skills to succeed in their career, or business or in being able to have the tools and be empowered with what is required as fundamental; these include skills that provide them with problem-solving skills, leadership, financial literacy, analytical skills, critical thinking skills, planning skills, prioritising and execution skills, project management skills, marketing skills, etc. (to mention a few)” (P11)

Other views expressed were as follows:

“The updating of the current entrepreneurship training, yes, we need to show skills. We need to expose them to the practicality and the digital world”. This would expose students to gaining both the practical and digital skills they need to start and run successful businesses.” (P8)

Soft skills should be focussed on, such as presentation skills and learning to accept failure as part of a growth process; they also need teamwork, empathy, and creating and managing a new business” (P7).

Another lecturer emphasised the importance of practical training to complement theoretical learning:

“A more skill-based program can be offered whereby multifaceted, like the eight pillars Step program I am busy with, students should be provided with the Step program skills, post that opportunities student should participate in events like competitions, extracurricular activities should be implemented. Skills programs for exit students should receive training from the legacy program for ten years, its specific skills linked to their industry” (P5).

#### **4.2.4 Lack of TVET College Lecturer Industry Training**

##### **Lack of industry training**

The lack of TVET college lecturer industry training creates a barrier between theory and skills for lecturers, as lecturers have not experienced industry training and cannot provide students with the necessary skills for self-employment.

“Lecturers are not sent to industry to return to the classroom with practical experience, so we cannot bring any practical examples back to the classroom to our students; the job training is needed”.

Several participants felt that lecturers are not allowed to become subject experts as they are not exposed to entrepreneurial industry training, as shown below.

“Lecturers not given any assistance to develop expertise; when I got here, they hosted a training for us to go on a wholesale and retail training, but that was in my 2<sup>nd</sup> year, then management told us they wanted us to go out into industry, but the manner which they said it was “you need to go out and find places that you can do your WBE, like our students going out to be evaluated for certain hours. However, how they structure this course is not very lecturer-friendly, asking us to do this during our vacation/holiday; I do not think this is structured correctly as we teachers are pressured and have many deadlines, so you need to use your holiday to do this training, it is too much to ask”. (P6).

Another Lecturer was more supportive of TVET College approaches to upskilling lecturers with business experience:

“Another innovative project of the college was to second an entrepreneurship lecturer in business management and also a business entrepreneur to the position of entrepreneurship development coordinator who coordinates all activities at the campus, running entrepreneurship mindset workshops, working closely with the champion and the clubs to assist” (P11).

Changes required within TVET College entrepreneurship education were signalled:

“We need an exponential solution, change the lingua in the classroom, add entrepreneurial lingua, move lecturers to add the language of mindset training, change the culture of entrepreneurship and shift the entrepreneurship role in society” (P5).

Several participants emphasised the need for lecturers to gain industry training or work-based learning. Participants suggested that lecturers are placed in industry to gain practical experience to match/enhance their theoretical knowledge. This is key and central to lecturers being centrally involved in communities of practice.

“Lecturers need work-based experience to bring practical examples into the classroom, even sending lecturers to other countries to gain experience on how they teach the subject” (p 7).

“Lecturers should develop themselves and know more and keep updated with latest trends” (P4). Another lecturer commented on the need for centralised support from the DHET for entrepreneurship:

“Lecturers are being trained on the concept of entrepreneurship, different curricula and content, and how to introduce it into the academic programs. A structure is set up in partnership with DHET to drive entrepreneurship across all TVET Colleges” (P11).

#### **4.2.5 Importance of CFERIs or Support Services for Forming Communities of Practice**

A lecturer described the central role of CFERIs as:

“Offering non-credit bearing entrepreneurial programs customised for the various target groups it services. Programmes range from 3 to 12 months and are focussed on pre-incubation, staged-gate incubation, and post-incubation programmes. The differentiated approach also enables the Centre to develop appropriate and fit-for-purpose entrepreneurial and SMME development programs as part of its Entrepreneurial Learning and Development offerings or as part of its Incubation and Acceleration Programs. These are bespoke programs designed to support aspiring, emerging, existing, and growing entrepreneurs. The programs focus on the jockey (the entrepreneur), the business, the market and building an enabling ecosystem for its diverse entrepreneurs”.

The participant understands that entrepreneurship should not be taught as a theory module for examination purposes because TVET college students need exposure to skill-based programs that allow them to gain entrepreneurial skills.

Numerous participants agreed on the need for CFERIs (incubation hubs) at TVET colleges. They suggested that CFERIs are crucial for linking theory and practical skills in entrepreneurship education at TVET colleges. Incubation hubs allow for the development of practical skills amongst students, which develops an entrepreneurial mindset among TVET college students. This provides students with the practical skills needed for fostering entrepreneurial development.

“We need an incubation hub concentrating on small businesses; it will help support and develop the students. Also, remember that we are not speaking about big businesses

employing over 500 people; we want to teach students to open something in a garage that will give them a decent monthly income” (P2).

“At the moment, we fly through modules to finish the syllabus, but very actual training highlights the need for incubation hubs to assist students with practical business skills” (P1). Incubation hubs provide students with industry experience and continued support while developing entrepreneurial skills.

Several participants highlighted that practical entrepreneurship training could reduce poverty and high unemployment rates in communities, as the curriculum was created to provide students with the required knowledge and skills to become successful entrepreneurs.

“It is a long way to alleviating poverty and bringing equality in our society, and South Africa needs to be more innovative as we are faced with water and electricity challenges, so we need entrepreneurs to provide solutions; that is why all our programmes are geared towards providing students with the skills and knowledge and support they need to become innovative” (P10).

“Education is based on a formal education setting; we started an entrepreneurship incubation hub last year. We try to get community members to speak to students about evolving as entrepreneurs to grasp the entrepreneurial concepts and how to do it” (P6). These comments stress the importance of moving from formal theoretical entrepreneurial classroom training to incorporating a skills component through on-campus CFERI.

### **Support services offered by CFERI’s**

CFERIs were designed to provide entrepreneurial support to TVET college graduates seeking self-employment skills. Several participants have highlighted the importance of incubation hubs and their services.

“That is why we have the Sea Fairy [name of their CFERI] so that they can articulate between their studies and self-employment. The Sea fairies will form a bridge to assist those students to apply their technical skills or business management skills to start their own business” (P10).

Participants emphasised their use of feedback, reviews and surveys to measure the success of their CFERIs. The feedback from students and stakeholders is an essential tool for measuring the success of the CFERI.

“We require student feedback to monitor the centre's effectiveness by surveys to tell us what is working and what is not. This space is new, so all stakeholders (campus manager, academic heads, HOD, lectures, etc.), right from the top, need to understand and ensure that there is feedback in all programs the college is involved in” (P10).

“Regular reviews of our programmes, student feedback surveys, programme reviews, assessments, monitoring and evaluation systems and processes. Lecturer/Facilitator Feedback, Review of Performance & Progress reports, Impact Measurement, Post Incubation Programs – Alumni programs, sharing experiences and lessons learnt amongst the TVETs. Learning Conferences to share best practices and Research – Entrepreneurial Trends” (P11).

The above participant and several others identified the need for CFERI's and mentioned the value it holds for TVET colleges needing to assist students with self-employment through entrepreneurship.

will, therefore, present a discussion of the findings in Chapter Four and include supporting literature.

### **4.3 Summary**

This chapter presents the interview findings, highlighting five key themes that emerged from participant responses. The analysis reveals that the current entrepreneurship curriculum is too theory-intensive and needs a stronger practical component. This can be achieved through increased industry partnerships (like Allan Gray and Vodacom) and integrating soft skills training. Additionally, a lack of industry training for TVET college lecturers was identified, hindering their ability to impart practical knowledge. The chapter also emphasizes the importance of CFERIs and incubation hubs in fostering self-employment. Chapter Five will further discuss these findings, connecting them to the literature review and theoretical framework.

## **5 Discussion and Findings**

This chapter will discuss and explain the research results of this study by referring to the literature review literature and the theoretical framework adopted for this study. Endres and Woods (2006) underscore that “entrepreneurial education has different origins and therefore there is no single theory that can be used to explain all its versions and clarifications” (p191). This chapter, therefore, discusses the findings of the research as well as the concept of communities of practice described in the theoretical framework. The purpose of the study is to investigate ways in which TVET colleges could assist students to become self-employed through improved entrepreneurial training. Therefore, this research focussed on three TVET colleges in the Western Cape and how the current entrepreneurship programs/curriculum prepare the student for self-employment upon graduation. The discussion below is arranged from the findings of the interview data to the theoretical framework.

### **5.1 The current entrepreneurial curriculum**

The research findings highlight that the participants share similar views on TVET colleges' curricula. Most participants described the existing TVET college entrepreneurship curriculum as “too theory intensive, no practical component, and the curriculum needs to be updated”. (P10) Lecturers emphasised the difference between small business management and entrepreneurship, expressing that the focus should not be on teaching business management as an alternative; they should foster entrepreneurial mindsets by teaching students problem-solving skills. Ditlopo (2021) mentions that “there are key course components in an entrepreneurship education programme that were important for gaining the needed skills and knowledge base for starting and managing self-owned businesses (p.46). These key subjects are also called “core subjects” (p.46), including business management, computer practice and introductory accounting/financial accounting.

Despite the theoretical methodology for the entrepreneurship TVET college curriculum, Buthelezi (2017) emphasises his dissatisfaction with most TVET colleges' entrepreneurship curriculum as only an academic subject that does not expose students to real entrepreneurship. As mentioned in Chapter 4, students are assessed on their theoretical knowledge learned in N4, N5, and N6 stated. “Students are evaluated by, for NATED, they have N4, N5, N6 and after those internships, they get a logbook with expectations of what they should be doing and break

down all four subjects they are doing but do not necessarily focus on entrepreneurship, they did not get exposed to entrepreneurship, the hustle/how to start their own business, but instead learn how to manage someone else business with given resources” (P8). The minimal exposure to the practical entrepreneurial skills needed to start your own business and become self-employed is thus conveyed.

Legusov (2017) highlighted that the primary role of TVET colleges is to prepare students for self-employment. UNESCO’s SDGs aim to promote sustainable development through TVET colleges. However, TVET colleges face many challenges, such as an outdated curriculum and syllabus and minimal financial resources for students to create self-employment.

Terblanche (2017), therefore, proposes a “two-stream curriculum” (p.236) that links TVET colleges and industries by connecting TVET college students to industry and the classroom, thus linking theory to skills. Lackéus (2015) indicates a great need to balance theoretical knowledge and practical skills in entrepreneurial education.

The Human Resource Development Council (2013) acknowledged that “entrepreneurial education is an important component of a milieu of critical conditions required to drive innovation and entrepreneurship successfully and ultimately economic growth in any economy” (p.13).

Allias (2012) mentions that “most institutions have been known for knowledge-building instead of skills development sites. In questioning how to improve vocational education, she responded that it is necessary to focus on “the education side of it” (p. 16), and this would occur through creating resilient academic institutions, improving the current curriculum and employing lecturers with skills to teach students entrepreneurship.

Terblanche (2017) suggest that it is essential for “TVET College's curriculum to be restructured to match industry needs” and that “reforming the curriculum would ultimately lead to employability” or self-employment, which is a massive problem in South Africa (p.iii). Terblanche (2017) thus suggests that for change to occur, TVET college leaders must navigate the necessary change and ensure that it is implemented to equip students with the necessary self-employment skills.

Littledyke (1997) mentions that a theory-intensive curriculum and stubborn management can hinder the process of curriculum development or change, thus stating, “Hence, the curriculum of any institution is expected to be localised towards suiting and meeting the needs of its host

society inclusive of entrepreneurial, job creation needs among others” (Uleanya et al., 2018, p.19). As a result, numerous participants mentioned that the curriculum does not match the needs of their particular students. Therefore, the curriculum does not teach students practically how to start a business, for example, a car wash, hair salon or a spaza shop in their local communities.

Ncube (2022) highlights that entrepreneurial education could increase self-employment, boosting economic growth and development. Therefore, the government created entrepreneurial education programmes to create an increase in entrepreneurs or self-employed citizens.

## **5.2 Increase industry partnerships**

Several participants mentioned the Allan Gray Makers program and the Allan Gray competition by mentioning that “creating awareness and opportunities to enhance the attractiveness of starting your business competitions of this nature creates a safe space to experiment with ideas for products or services” (p.18). P11 says that “many colleges are accessing SETA funds to introduce a diversity in entrepreneurial programs and activities on and off campus supporting township entrepreneurs”. Akhoobaai & Bambo (2022) describe that Allan Gray as a private financial institution, created the Allan Gray inter-college competition initiative, which started in 2020; this was designed to support youth development through entrepreneurship. This initiative aims to provide students with entrepreneurial knowledge through “fostering entrepreneurial culture in TVET students” (p.64). Many other private institutions could collaborate with Allan Gray in this initiative, as it would benefit both the student and the institution. More initiatives similar to this could foster entrepreneurial development and lead to an increase in the number of self-employed students/graduates. However, the research findings of the centralised partnership between the Alan Grey initiative and DHET suggest that TVET college lecturers are not equal members of this community of practice for entrepreneurship.

## **5.3 Incorporating soft skills with entrepreneurial training**

The analysed data on incorporating soft skills with entrepreneurial training provided an essential analysis to integrate entrepreneurial and other basic skills to TVET college students.

These skills include presentation, communication, and completing documents needed to start a business.

The UNESCO 2030 Agenda for Sustainable Development (UNESCO documents) argues that sustainable development is more important than growing the formal economy. Therefore, teaching entrepreneurial education and skills to South African youth is essential and should become a priority. To reach the SDGs stipulated by UNESCO, fostering an entrepreneurial mindset among TVET college students is essential.

Ditlopo (2021) mentions that the entrepreneurship curriculum consists of key course components that are important for gaining the necessary knowledge and skills for starting and managing a business. He highlights that a practical component of entrepreneurship education is necessary for developing knowledge, skills, and economic growth. Consequently, practical skills are essential for self-employment and the economy's future.

Letseka (2004) extends this by stating that developing skills through SETA programmes will allow students to acquire the necessary skills to create employment. Thus, practical skills can be developed by learning how to run and manage small businesses such as a hairdresser, carwash or a small internet café in local communities. However, there are concerns because “the SETAs who are largely responsible for providing funding for skills-based programs are already facing logistical problems which could interfere with their initial purpose of skills development” (p.20).

Buthelezi mentions that from its “inception TVET colleges are viewed as a vehicle for providing skills that respond to the economic needs of the country’ by addressing the “priority needs” in the country (Buthelezi 2016, p. 2). This accentuates TVET colleges' role in responding to the growing demands of industries and producing students with the necessary skills to create self-employment.

Ncube (2022) in his paper refers to Ghosh 2019 that says, “successful entrepreneurs should be innovative, creative and risk-taking” (p.37). Therefore, this aligns with the demands of industries and suggests that instilling these qualities within students is essential and will benefit TVET college students in becoming self-employed. Ncube (2022) reacts to whether “entrepreneurship can be taught or not” (p38), by acknowledging the complexity of entrepreneurship education, thus questioning whether entrepreneurial skills can be taught formally in the classroom.

Abrahams et al. (2021) suggest that by integrating STEM (science, technology, engineering and mathematics) skills and fostering an entrepreneurial mindset and skills, we recognise the requirements for the future labour market and self-employment. This perspective highlights that developing the skills currently required in the labour market and fostering entrepreneurial skills and mindsets, particularly enhancing STEM skills, it thus enables students to develop critical thinking skills, problem-solving skills and innovation skills essential for self-employment.

Ponelis (2015) describes the exploratory method as a “multi-paradigmatic approach” with complicated matters to unravel with layers of information, thus indicating that using an exploratory method would assist in teaching students how to learn the necessary skills for self-employment.

Integrating soft skills is not in the traditional curriculum; therefore, lecturers should be encouraged to create those skills. The analysis, therefore, allowed for research between the themes of creating soft skills within TVET college students to become successful entrepreneurs for sustainable development. It highlights the need for a ‘multi-facet method’ to prepare students for the challenges and opportunities of entrepreneurship. Soft skills would also be encouraged by talking to entrepreneurs, which points to weak communities of practice in entrepreneurship that do not provide opportunities for learning from an entire entrepreneurship community of practice. Lecturers should focus on learning strategies to teach soft skills in a TVET college classroom, including presentation lessons, business document completion, and increased financial literacy activities. Hosting market days will allow students to develop various soft skills, including business concept planning, operating on the day and evaluating success afterwards.

#### **5.4 Lack of TVET College Lecturer Industry Training**

In the analysis, Terblanche (2017) emphasises the importance of TVET college leaders understanding both national and international markets and the ‘global educational demands’ so that students are taught skills matching the needs of the industry, resulting in self-employment. Understanding the market needs is crucial for adjusting the TVET college sector to meet the economy's needs. If the market needs to suggest a specific skill shortage, TVET colleges should prepare students to acquire and start a business offering that product or skill. Lecturers can acquire these skills by sharing ideas on new global business trends and different ways

international VET colleges teach entrepreneurial skills to students in their communities of practice.

Buthelezi (2017) proposes that providing lectures with experiential training enhances their understanding of industry needs and their ability to teach students based on what is needed. Buthelezi (2017) suggests that “had lecturers been considered when creating this educational reform, their opinions may have assisted in creating more effective courses that would have caused less wastage of resources” (p.15). This would have been more beneficial to students in helping them graduate, become self-employed and then become sustainable through entrepreneurship. South African TVET Colleges offer the same curriculum to its students. Therefore, all mainstream NCV and NATED curricula have been centrally prescribed. This means that TVET Colleges cannot adjust their curricula to local needs, hindering students from gaining the necessary entrepreneurial skills needed at DHET. TVET colleges cannot adjust a centrally prescribed curriculum, but TVET college lecturers can work together to broaden their skills through CoPs; for example, they can improve their understanding of specific course modules when sharing content and knowledge with colleagues.

Akhoobaai and Bambo (2022) mention that Allan Gray, a private financial institution, created the Allan Gray inter-college competition initiative in 2020 to support entrepreneurial development for students at TVET colleges. The initiative aims to provide students with the necessary entrepreneurial knowledge and skills by “fostering entrepreneurial culture in TVET students” (p.64). Many other institutions could join this initiative as it would benefit both the student and the institution. They would gain recognition for assisting students by producing entrepreneurs for individual-need communities.

Allias (2012) offers a ‘solution’ to improve vocational education, by emphasising that it necessary to focus on “the education side of it” (p. 16). She suggests that to form solid academic institutions, focus should be placed on improving the current curriculum at TVET colleges and the entrepreneurial knowledge of TVET college lecturers, as this will, in the end, improve the quality of education TVET college students receive.

The data collected on the lack of lecturer industry training highlights the lack of industry training TVET college lecturers receive. This problem occurs mainly because TVET college lecturers are not exposed to industry to gain the practical skills needed to expose their students and include them in the lessons.

The above literature and the research findings suggest that TVET college lecturers are not part of a fully formed CoP as every TVET college promotes entrepreneurship differently. Even though they may all follow the same academic prescribed curriculum, they do not develop entrepreneurial skills using a blanket approach. Colleges B and C have a well-established CFERI for assisting graduates with entrepreneurial development. In contrast, College A has not formed a CFERI yet and relies on other programmes such as the Allan Gray competition and the Step programme to assist their students with entrepreneurial development. It is therefore suggested that there is a need for efforts to be directed towards getting lectures to be part of an entrepreneurship CoP because this will result in better outcomes as far as entrepreneurial education at TVET colleges is concerned. Hence at present, TVET college lecturers are not members of this CoP but actions should be directed towards realising that forming a CoP would be beneficial for all TVET colleges, their students and stakeholders. This would help create the intended purpose of entrepreneurial education in TVET colleges.

A single Cop would work better because it would allow for an ‘integrated focus’ with one shared goal as this would allow for knowledge sharing and collaborating amongst its members, allowing resources to be used effectively reduces the redundancy of similar initiatives and activities at colleges. However, if a CoP is too broad, specialized areas could be overlooked and that is what is needed in entrepreneurship, where one wants to encourage individuality as well as community interventions. A single CoP can also threaten the diversity which occurs when various lectures share ideas and best practices leading to narrowed ideas and initiatives. Therefore, ascendancies might work better if broad skill development is encouraged through offering various training and skills development activities. Networking should allow lecturers to connect and share with others in smaller or more specialised CoPs. For CoPs to enhance collaboration and resource efficiency, specialisation and diversity must not be omitted from this initiative.

### **5.5 Importance of CFERIs for Forming Communities of Practice**

The analysed data on the importance of CFERI’s at TVET colleges for forming communities of practice indicates firstly that CFERI’s are an essential mechanism for assisting graduates in their journey towards self-employment. The Centre for Entrepreneurship-Rapid Incubator (2021/2022) suggests that developing entrepreneurial skills through an entrepreneurship incubator helps to encourage students to start small businesses, which could create self-

employment and help boost the South African economy. A small business called Soil For Life and BOLTIT has stemmed from CFERI support and is positively impacting the South African economy. CFERI has been created to expose students to the practical skills component, which the current entrepreneurship curriculum lacks.

Li et al. (2020) suggest that incubation hubs assist new businesses in “creating value by combining the entrepreneurial spirit of start-ups with the resources that are typically available to new businesses” (p.1). Li et al. (2020) proposes that CFERI’s role in entrepreneurial development is to develop entrepreneurial skills. Many participants indicated that CFERI assists graduates to start businesses and then offers support while in the start-up process. The participants also mentioned that these CFERI’s are a great initiative and that all TVET colleges should be allowed to have a CFERI and experience the value it holds for promoting entrepreneurship. Li et al. (2020) refer to Mahmood et al. (2016), who suggest that “business incubators provide the most effective strategies to promote community entrepreneurship and to support job creation by supporting new businesses” (p.3) and that “exposure to entrepreneurial opportunities is a form of integrating the work of preparing entrepreneurs to build successful businesses” (p.4). They highlight that many businesses often lack “the required skills for business survival, so these incubators offer knowledge-based services and long-term use of their physical infrastructure” (p.5). Participants 10 and 11 mentioned the various support structures and what CFERIs do to assist their entrepreneurs to succeed; for example, they allow their students to use their machinery and workspace when starting their business, and they also offer skill-based workshops and mentorships to avoid possible failures of new ventures. Li et al. (2020) suggests that “Networking services have a positive effect on entrepreneurship development” (p.13). They also suggest that “communities with a wider network of peers tend to enjoy higher levels of entrepreneurship and economic growth” (p.13), indicating that communities of practice allow entrepreneurial development due to shared practices.

Several participants mentioned that students need to be exposed to assistance mechanisms that CFERI offers small businesses. Most CFERI managers and lecturers are not entirely immersed in CoPs or equal partners or aligned. This is where the problems originate, as partnerships need to be formed to grow and develop entrepreneurship in TVET colleges. When a lecturer works with a CFERI and shares personal experiences and practices with the graduates or takes back experiences to the classroom from engaging in a CFERI, this will aid the growth of CoPs at TVET College within the entrepreneurship sector.

## **5.6 CFERI alignment to the development of sustainable development**

Legusov (2017) indicates the challenges TVET colleges face in promoting sustainable development. These challenges include outdated curriculum, industry mismatches and a lack of financial resources. P10 responds by indicating that “regarding the alignment of SDG 4, the TVET sector is quite well placed, we are providing technical educational training to our students and once it is linked to entrepreneurship, that makes it more valuable or impactful. So, giving students from different backgrounds access to an entrepreneurial mindset helps to change how students view the world in which we live, how we can become problem solvers and how to create value. Giving them access to education, gaining technical skills, and knowing how to use those skills will create a better world. The increase in female entrepreneurship students is also encouraging”. This approach instils practical skills and creates an entrepreneurial mindset by teaching students problem-solving and basic financial skills.

As discussed in Chapter 2, UNECO’s SDG 4 emphasises the priority of achieving sustainable development goals. Thus, highlighting that the youth need to be educated for change to occur, and underlining the priority of entrepreneurship education. SDG 8, emphasises that decent work will lead to economic growth. Particular emphasis is placed on entrepreneurial development amongst youth as it allows for self-employment and economic growth.

One of the ways that TVET colleges can reach this goal is by partnering with CFERIs to ensure the development of entrepreneurship amongst students. When asking participants about the importance of CFERIs at TVET colleges, P5 mentioned that “The step program is a German-created student training program, for sustainability, which works with the SDGs with UNESCO, could be offered for 2<sup>nd</sup> part of the year, 12-week program, teach how to do business, then end of the program how to register a business”.

P 9 suggests forming incubation hubs, “I would advise those TVET colleges to start incubation hubs as they are a great benefit to students and the country’s economy “this is imperative as Incubation hubs are therefore regarded as “valuable tools for fostering entrepreneurial education amongst students” (Li et al. p.3). P10 mentions, “the Sea Fairy is CFERI/incubation hub well known for assisting entrepreneurs with their business initiatives. They provide entrepreneurs the necessary assistance to turn a business idea into a reality” (P10).

P11 explained the current state of entrepreneurship education at TVET: "The academic streams have practical entrepreneurial activities as outcomes, allowing students to apply entrepreneurship. However, more can be done in this space if available resources exist.

Colleges are at different stages of developing, introducing, and offering entrepreneurial programs; some are only starting, and others are advanced. The different colleges share the learnings through the structures that have been set up to bring together the different players that are tasked to drive entrepreneurship”. This information provided by the participant highlights that colleges should collaborate, “these approaches should include sharing of academic material, skills building activities and partnership programs to form a collective effort to grow entrepreneurial development at TVET colleges”. There are internal Communities of Practice amongst college lecturers but limited involvement in broader external CoPs.

Li et al. (2020) state that “given the fact that there are many challenges entrepreneurs face, this includes the lack of technical and educational skills, inadequate infrastructure and facilities, and support systems, it is hardly surprising that most small businesses do not survive in the first year” (p.15). Therefore, business incubators play a crucial role in supporting entrepreneurship development.

### **What does this perspective consider to be a requirement for learning?**

From the Sociocultural perspective, we learn through interaction with others and through learning communities, which form a community of practice. For example, the participants of this interview are all entrepreneurship TVET college lecturers or CFERI managers, making them part of a community of practice.

There are three approaches(modes) to belonging to a community of practice: “engagement, imagination and alignment” (Wenger 2000. pg. 227-228). Engagement is being physically involved in activities or practices such as soccer or business classes, imagination is ‘imagining’ yourself being part of a specific community (a school/college community), and alignment is sharing in everyday activities consisting of socio-cultural activities, customs and expectations, doing what fits in with that specific community of practice.

Lave and Wenger’s (2008) socio-cultural pedagogy on communities of practice indicates ways in which TVET College could work with external stakeholders through communities of practice to provide improved entrepreneurship training opportunities for TVET College students. For example, several participants mentioned the Allan Gray competition, where students from all colleges enter an entrepreneurial competition and present their ideas to the audience. This created communities of practice because all participants share the concept of entrepreneurial development. However, TVET college lectures and Allan Gray do not engage

as equal partners when interacting. Allan Gray has tools they have created to steer their programs for instilling entrepreneurial skills amongst TVET college students. In contrast, lectures are merely there to accompany their students as a support structure. Therefore, there is no equal partnership, but lectures are peripherally involved in the skills-building process.

Lave and Wenger (1999) define a Community of Practice (CoP) as “participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities” (p.98). Lave and Wenger argue that a “learning curriculum unfolds in opportunities for engagement in practice” (p. 93). P11 “Many colleges are accessing SETA funds to introduce diverse entrepreneurial programs and activities on and off campus supporting township entrepreneurs. Colleges do not only support registered College students but also community and township entrepreneurs, which bring them together and expose students to enterprise and SMMEs within the locality”. These learning opportunities are shaped by work practices, as well as through peer engagement and learning occurs through “centripetal participation in the learning curriculum of the ambient community” (p.100).

TVET colleges engage in communities of practice through varied approaches based on their needs. However, as stated above, communities of practice are formed to improve entrepreneurship at TVET colleges and steer students towards self-employment. TVET colleges form CoPs through workshops and training sessions, where shared practices and experiences are discussed and used as tools for improving entrepreneurship at TVET colleges. Partnerships and collaborations, for example, the Allan Gray partnership with DHET and TVET colleges, assist in forming CoPs amongst students and staff from all TVET colleges as conferences, meetings and online forums were created as an entrepreneurial support mechanism. TVET college lectures have engaged in communities of practice through shared practices by sharing resources, assessments, and weekly subject meetings to have a unified subject approach. TVET college lecturers have also joined CoPs through their involvement in CFERI’s where they encourage students to further develop their skills training at their college incubators. In some cases, lecturers get personally involved and offer assistance to their college CFERI’s by inviting the coordinators to their classrooms or subject meetings to inform students and other lecturers about the services offered at the CFERI. TVET college lecturers understand the purpose of CFERI and its aims. However, they know they are separated from the CoP as there is no component in the curriculum linking TVET college lecturers and CFERIs. Although TVET college lecturers understand the role of CFERIs, they do not consider themselves equal

partners to CFERIs because there is no correlation between theory versus practicality yet, and they are therefore not viewed as a compulsory practical component which hinders the further development of CoPs.

The data analysis indicated that there are both challenges and positive initiatives in entrepreneurship education at TVET colleges. The TVET college sector has implemented ways to align the SDGs to foster entrepreneurial mindsets and college collaborations through the use of Lave and Wenger's communities of practice. TVET college lecturers engage in entrepreneurial CoPs daily and realise that CFERI's will further develop the intended purpose of entrepreneurship education. However, the connection is hindered because there is no formal connection through the curriculum.

## **5.7 Summary**

This chapter discussed and explained the research results of this study by referring to the literature review literature and the theoretical framework adopted for this study. The findings of the research as well as the concept of communities of practice were described in the theoretical framework. Furthermore, the chapter highlighted ways in which TVET colleges could assist students to become self-employed through improved entrepreneurial training through a focus on three TVET colleges in the Western Cape and how the current entrepreneurship programs/curriculum prepared the student for self-employment upon graduation.

## **6 Key research findings and concluding remarks**

### **6.1 Conclusion**

This study investigated ways TVET colleges can assist students in becoming self-employed through improved entrepreneurial training. This chapter concludes based on the interview findings and discussions relating to the theoretical framework and how communities of practice were used to meet the study's objective. Lastly, recommendations for each theme, study limitations and suggestions for further research are presented.

### **6.2 Key research findings**

This study's key research findings indicate that improved entrepreneurship education and training at TVET colleges could equip students with the necessary knowledge and skills for self-employment. These skills may guide students with self-employment skills, teaching them self-sustainable mechanisms in a very challenging economic climate. Improved entrepreneurship education in TVET colleges could encourage students to be more creative and innovative, which is needed to survive when self-employed. TVET college lecturers rely on creating a culture of entrepreneurship that will lead to the creation of new businesses led by TVET college students. This relates to communities of practice as demonstrated by CFERIs because shared practices will be formed, where TVET colleges across the Western Cape could collaborate by sharing resources and partnerships and become one combined entrepreneurship community. This has not yet been realised, partly because of limited involvement in broader entrepreneurship communities of practice.

By developing entrepreneurship training in TVET colleges, CoPs are formed through lecturers' emphasis on fostering an entrepreneurial culture through external industry and stakeholder collaboration. There is limited evidence of this and TVET Colleges appear to be clients rather than equal members of CoPs with external industry. When TVET colleges foster entrepreneurship, they collaborate with other campuses, and then with other TVET colleges through sharing ideas, partnerships and resources. This occurs through sharing theoretical knowledge and social context (CoP), where students can actively engage through shared experiences, allowing them to develop the necessary skills needed to be a self-employed, successful entrepreneur. This approach allows for the development of communities of practice and situated learning. Lave and Wenger (1991) define the process of situated learning as "learning is inherently tied to the social and physical context in which it occurs (p.205). This

will thus lead to new venture creations through entrepreneurs, which could create jobs and a more developed economy.

The findings below emerged from the data analysis, which developed from the themes of the interviews:

The findings of theme one, a theory-intensive curriculum, suggest many challenges in changing the current entrepreneurship curriculum. The challenges are because the current curriculum does not include a practical component. There is currently minimal integration of the academic curriculum with practical skills. Several participants recommend a more balanced approach consisting of an equal allocation between the theory and practical taught.

P10 mentions that “UNESCO thus acknowledges the potential TVET colleges have to adapt their current curriculum and teaching methods by collaborating with industry, being fully aware of the complexity these adjustments may entail”.

Several participants felt that lectures are not being allowed to gain subject expertise to become subject experts. The findings of an increase in industry partnerships suggest that the participants agree on the importance of industry partnerships with corporate companies, as this collaboration will foster entrepreneurial education in TVET colleges. There is a need for relationships between industry and TVET colleges so that the training methods in colleges can be improved through these collaborations. Collaborating with partners will improve students' entrepreneurial skills and development as they will gain curriculum knowledge and industry experience. Therefore, TVET colleges and existing partners should collaborate to include the current curriculum with entrepreneurial skill-building activities. This study thus emphasises that there should be a link between theory and skills gained when collaborating with partnerships. This demonstrates the potential for forming entrepreneurship communities of practice.

The recommendations for integrating soft skills with entrepreneurship at TVET colleges suggest that soft skills are needed for students to communicate effectively and make sound decisions based on their possible business ventures. Therefore, soft skills such as basic interpersonal skills should be integrated into the current entrepreneurship curriculum. These skills include teaching students' business problem-solving skills and communicating clearly and appropriately. These skills should be alongside the theory so that when they approach banks for funding, they know how to present their business plans, communicate with

stakeholders and understand how to operate their business. If students could learn soft skills from existing entrepreneurs, this would demonstrate learning within a practice community. However, this is not the case, and the curriculum relies on TVET college lecturers who are not entrepreneurs to improve their theoretical teaching.

The lack of lecturer industry experience suggests that industry training for TVET college lecturers is essential for developing entrepreneurship training at TVET colleges. When lecturers are not exposed to practical industry experience at TVET colleges, they cannot integrate theory with practical examples as they have not been exposed to them. This, therefore, affects the quality of entrepreneurship education provided to students. It is therefore recommended that emphasis be placed on lecturer industry exposure and that further education and training opportunities are provided to improve the capabilities of lecturers. Continuing the partnerships with partners, such as Allan Gray, Vodacom and other stakeholders, could provide lecture industry exposure opportunities. This thus indicates the effort to improve the quality of entrepreneurship education in TVET colleges but also shows the current limited involvement of TVET college lecturers within CoPs.

The findings on the importance of CFERIs or incubation hubs at TVET colleges are essential. CFERI assists TVET colleges with entrepreneurial development but is primarily assisting TVET college graduates due to time constraints in the current entrepreneurship curriculum. It was suggested that the practical skills offered by CFERIs be integrated into the current entrepreneurship curriculum so that students gain practical skills with theoretical knowledge. CFERI allows TVET colleges to form Communities of Practice through entrepreneurial training by allowing lecturers and external stakeholders to form relationships by “sharing best practices” (Wenger, p.225) and collaborating on improving challenges faced and possible solutions to overcome these challenges. It is thus further recommended that TVET colleges with CFERI should guide other TVET colleges or partner with other colleges by forming form mentorship programs on how to start and operate successful CFERI’s.

### **6.3 Concluding remarks (Where to from here?)**

Li et al. (2020) state that “given the fact that there are many challenges entrepreneurs face, including the lack of technical and educational skills, inadequate infrastructure and facilities, and support systems, it is hardly surprising that smallest businesses do not survive in the first

year” (p.15). Therefore, business incubators play a crucial role in supporting entrepreneurship development.

Various efforts have been put in place to assist TVET college students with self-employment through entrepreneurial training activities, for example, the Allan Gray maker’s competition, incubation hubs and other stakeholder contributions. However, it has become clear that the TVET Colleges in the Western Cape do not share an integrated approach but instead support students in different ways, yet they are all governed by the same syllabus from DHET.

Therefore, it is appropriate to say that insufficient entrepreneurial guidance is provided to assist TVET College students in becoming self-employed upon graduation. Students need more exposure to the SMME sector. TVET Colleges need to become more unified by increasing communities of practice activities through exploratory methods to learn from each other so that all TVET college students will eventually receive the same learning opportunities. Researchers, therefore, need to investigate further ways to encourage shared practices by DHET so that all students from all TVET colleges can experience the same entrepreneurial education and learning opportunities.

#### **6.4 Implications for further research**

TVET colleges play a significant role in entrepreneurial education and the development of students. By improving entrepreneurial training methods, TVET colleges could contribute towards economic growth and self-sustainability. There are many opportunities for further research in this area to improve entrepreneurship education at TVET colleges, and I will discuss the ones I deem most important. Researchers should focus on finding more effective teaching methods to teach entrepreneurship education to TVET college students. The focus on improving the existing curriculum should be prioritised and deemed urgent.

Encouraging partnerships and collaborations between DHET, TVET colleges, and outside stakeholders could lead to successful partnerships and increased partnerships with more partners. Allan Gray has a very effective entrepreneurship program that encourages students to participate in their Allan Gray Maker's Challenge, where students start small businesses and are guided through the process. This partnership is successful because students are encouraged to take chances on their business ideas and show a nascent community of practice.

The findings for communities of practice in TVET colleges are that TVET college lecturers are currently weakly or peripherally involved in entrepreneurship communities of practice.

Therefore, the recommendations include formalised programmes to increase lecturer exposure to successful entrepreneurs/businesses and networks. For example, TVET colleges could offer lecturers the opportunity to gain industry or entrepreneurial experience by partnering with small businesses in local communities, whereby lecturers go to industry for two weeks a semester and shadow the business owners. One of the participants mentioned that their college wanted to send them workplace/industry training during their holidays, which created negativity towards the initiative from lecturers. This type of initiative should be well planned and not presented to staff as a coercive option, or it will not work. This will allow lecturers to gain practical experience with the curriculum knowledge they already hold and enhance their professional development. Another benefit of entrepreneurial industry exposure for lectures is that it allows lectures to integrate the curriculum with knowledge and skills and understand how to apply theory to practical examples.

International TVET colleges demonstrate many successes of TVET college lecturer industry experience and how it enhances student entrepreneurial development. For example, in Germany, they have a dual education system at their VET colleges, which allows students to gain both classroom knowledge and industry experience; this allows students to learn how to become entrepreneurs and the necessary skills through practical exposure. Many lectures at these international colleges provide the opportunity to gain industry experience and thus integrate it with the curriculum. Thus, entrepreneurial development is encouraged through partnering with businesses in local communities so that students may learn the necessary skills to start their businesses. Practical learning activities encourage the development of entrepreneurial skills in TVET college students.

Shumar and Robinson (2019) critique Lackéus (2017) and Peschl et al. (2021) by stating that entrepreneurship training should not just be about raising capital for financial gain but that entrepreneurship should also address sustainable development initiatives such as supporting communities through green entrepreneurship that uplifts communities rather than individual profit. Shumar and Robinson (2019) therefore also emphasise that generating financial capital should not be the focus of entrepreneurship training, but look at SDGS and entrepreneurship within a sustainable development context. Therefore, there is a need for a broader focus on entrepreneurship for sustainable development, instead of individual profiteering. This indicates the need for further research in this regard.

I have identified the limited literature on South African entrepreneurial training, international literature and the theoretical framework of Wenger's communities of practice. I purposefully interviewed lecturers from South African mainstream and CFERI TVET colleges to understand key differences in these models. The key findings were that CFERIs show emerging thriving communities of practice due to a separation of mainstream curricula and informal postgraduate support offered by CFERIs. Reflecting on the theoretical framework has enabled me to analyse the state of entrepreneurship education in the Western Cape TVET colleges and the necessary linkages required for entrepreneurship to succeed, including the need for engagement in broader communities of practice.

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# APPENDICES:



University of the Western Cape

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## Appendix A

### Semi-Structured Interview Questions

Thank you for agreeing to participate in this interview for the research of Entrepreneurship improvement in TVET Colleges and your responses to the following questions will help to tackle this problem.

This interview should take one hour and will be recorded to review the notes easily afterward.

Name of interviewer:

Name of interviewee:

Place of interview:

Date of interview:

Time:

Duration:

Personal information:

Gender:

Age range:

Years of experience:

Qualification:

Subject field:

### **Introduction**

1. Can you briefly introduce yourself and your role at this TVET College?
2. How long have you been teaching entrepreneurship at this college?

### **Entrepreneurship education at your institution:**

1. Describe the type of entrepreneurial education currently offered at your TVET College?
2. Is the current entrepreneurship education preparing students for self-employment?
3. What challenges do students face in becoming self-employed after graduating?
4. Are you aware of any supporting structures currently available to address these challenges?

### **Improving entrepreneurship education:**

1. Which skills should be focused on together with the entrepreneurial education Programs at TVET Colleges?
2. How can TVET Colleges deliver a more skill-based training program to their students to help reduce unemployment?
3. Are TVET Colleges currently forming partnerships with businesses to improve entrepreneurial education?

### **Student performance:**

1. How are students evaluated upon completing their entrepreneurial qualification?
2. What is in place to assist students with further development after completing their qualification/entrepreneurial training.
3. Are there any success stories of students who became successful entrepreneurs?
4. Do you think updating the current entrepreneurship training program is needed?
5. What advice do you have for other TVET Colleges wanting to start incubation hubs?

Thank you very much for participating in this interview.

Kind regards

Researcher: Tercia Mabutha

0795767228

**To report any serious or adverse effects emergent from this research, please contact our research office below:**

Humanities and Social Sciences Research Ethics Committee Department of Research Development

University of the Western Cape Private Bag X17

Bellville 7535

Tel : 021 959 4111

Email : [research-ethics@uwc.ac.za](mailto:research-ethics@uwc.ac.za)

**This information sheet is for you to download so that you can be aware of the purpose of the study. With your signature on the attached consent form, you indicate that you understand the purpose of the exercise.**



## **Appendix B**

Consent form for TVET College Principal for permit lecturers to participate in a

### **Research Study**

Dear Principal of TVET College

Principal's name:

TVET College Name:

College Address:

**Research Topic: How can TVET Colleges lectures can assist students to become self-employed through improved entrepreneurial training?**

### **Dear Principal:**

I trust this letter finds you well. I am writing to seek your consent to conduct a research study on how TVET College lecturers can assist students in becoming self-employed through entrepreneurial training at your college. The aim of this study is to gain understanding on how to assist students and contribute towards the improvement of entrepreneurship education at TVET Colleges. This research will evaluate current practices, the challenges faced and possible ways to improve current entrepreneurial education programs offered at TVET Colleges with the aim of encouraging self-employment in students.

### **Research objectives:**

1. To identify the current methods of entrepreneurial training provided to the students at your institution.
2. Measure the effectiveness of the current entrepreneurial training occurring.
3. Determine how to improve current entrepreneurship education programmes offered.

4. Explore the various relationships between the college and its stakeholders.
5. Evaluate the success of your incubation hubs to determine whether it will help other TVET Colleges students with self-employment skills.

The research will be conducted in a qualitative method using a semi-structured interview. All collected data will be treated with strict confidentiality and all participant's information will be protected in a secured file to protect their identities. The time needed for the interview will be 45 minutes to one hour. All findings and recommendations of the study will be compiled in a report which can be shared with the participating TVET Colleges and all relevant stakeholders with the purpose of improving entrepreneurship education programmes at TVET Colleges.

Your support will be highly appreciated for the success of this research study.

**By granting me your consent, you are agreeing to:**

1. Access your premises to collect all necessary information from the participants.
2. To allow me to interview staff and other relevant stakeholders (CEFRI coordinators).
3. To inform participants of their rights and that they are allowed to withdraw from the study at any given time.
4. To review and provide feedback to participants as and when needed.

Please be assured that the research will be conducted in the most professional and ethical manner and all data collected will only be used for the purpose of this research study. This research is voluntary and all lecturers have the right to withdraw from the interview process at any time.

If you have any questions, please contact me ([tercia.mabutha@gmail.com](mailto:tercia.mabutha@gmail.com)) or my supervisor ([sneedham@uwc.ac.za](mailto:sneedham@uwc.ac.za)).

Thank you for your time and I look forward to a favourable response.

Kind regards

Tercia Mabutha

UWC Masters Student

0795767228

[2362477@uwc.ac.za](mailto:2362477@uwc.ac.za)

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**This information sheet is for you to download so that you can be aware of the purpose of the study. With your signature on the attached consent form, you indicate that you understand the purpose of the exercise.**

## Appendix C

Key Informant (interview)



### Consent Form

University of the Western Cape

**Project Title:** An investigation into ways in which TVET colleges could assist students to become self-employed through improved entrepreneurial training.

**Researcher:** Tercia Mabutha

Please **initial** the boxes to show your agreement and understanding of what is expected for this study.

1. I confirm that I have read and understood the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I wish to withdraw, I may contact the lead researcher at any time to do so).
3. I understand my responses and personal data will be kept strictly confidential.
4. I give permission for members of the research team to have access to my responses without revealing any part of my identity.
5. I understand that my name will not be linked with the research materials, and that I will not be identified or identifiable in the reports or publications that result for the research.
6. I agree for the **anonymized** data collected to be used in future research.
  
7. I hereby agree to be audio recorded. (Circle the appropriate answer).    Yes    /    No

---

In terms of the requirements of the Protection of Personal Information Act (Act 4 of 2013), personal information will be collected and processed:

- I hereby give consent for my personal information to be collected, stored, processed and shared as described in the information sheet.
- I do not give consent for my personal information to be collected, stored, processed and shared as described in the information sheet.

\_\_\_\_\_  
Name of Participant  
(or legal representative)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of person taking consent  
(if different from lead researcher)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

*Copies: All participants will receive a copy of the signed and dated version of the consent form and information sheet for themselves. A copy of this will be filed and kept in a secure location for research purposes only.*

**Researcher:**

**Tercia Mabutha**  
0795767228  
tercia.mabutha@gmail.com

**Supervisor:**

**Dr Seamus Needham**  
0825559175  
sneedham@uwc.ac.za

**HOD:**

**Prof Rouaan Maarman**  
021 9593900  
rmaarman@uwc.ac.za

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## Appendix D

Research information sheet

Tercia Mabutha

University of the Western Cape

Masters in Adult Learning and Global Change

Date: 25 September 2023

**Topic: An investigation into ways in which TVET colleges could assist students to become self-employed through improved entrepreneurial training.**

Thank you for agreeing to participate in my research study. This information sheet is to provide you with the aim of this study and what is required in your participation. Please, carefully read the information below and feel free to ask questions before proceeding to complete it.

The purpose of this study is to examine how TVET College lecturers can better serve students through improved entrepreneurial training, with the aim of identifying effective strategies and practices that can contribute to the development of students' entrepreneurial skills.

I will collect the necessary, relevant data through interviews and participants are invited to share their experiences, insights and perspectives on entrepreneurial education. These interviews will be conducted in person, telephone, or online, depending on personal preference. All data collected will be treated as strictly confidential and all personal information will be removed to ensure your protection and privacy. This information will be securely stored and be password protected. Time allocated for the interview will be, approximately one hour.

Your participation in this study, will be highly valued and appreciated so to contribute to improving entrepreneurship within TVET colleges. You have the right to withdraw your consent at any time without any repercussions. If you choose to participate you may refuse to answer any uncomfortable questions when feeling uncomfortable at any given time.

This research study has the approval from the UWC ethics board and will be conducted according to all ethical guidelines, data protection regulations and POPI Act to ensure the privacy and confidentiality of all participants.

If you need any further information regarding this study, please contact me at [tercia.mabutha@gmail.com](mailto:tercia.mabutha@gmail.com).

Thank you in advance for participating in this research project.

Kind regards

Tercia Mabutha

[2362477@myuwc.ac.za](mailto:2362477@myuwc.ac.za)

Supervisor: [sneedham@uwc.ac.za](mailto:sneedham@uwc.ac.za)

**To report any serious or adverse effects emergent from this research, please contact our research office below:**

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## **Appendix E**

### Semi-Structured Interview Questions

Dear CFERI Managers

Thank you for Agreeing to participate in this interview for the research of entrepreneurship improvement in TVET Colleges. Your response to the following questions will help to tackle this problem.

This interview should take one hour and will be recorded to review the notes easily afterward.

Name of interviewer:

Name of interviewee:

Date of the interview:

Time:

Duration:

#### **Personal information:**

Gender:

Age range:

Years of experience:

Qualification:

Subject field:

#### **Introduction**

1. Can you briefly describe your role at your TVET College?
2. Describe the current entrepreneurial education offered at your TVET College?
3. Which skills should be focussed on together with entrepreneurial education?
4. What challenges do students face in becoming self-employed after graduating?

We continually strive to enhance the impact of TVET colleges; therefore, I am seeking your insights on a critical aspect of student development for the improvement of entrepreneurship and self-employment. I am interested in understanding how CFERI's envision TVET colleges playing a role in assisting students in becoming self-employed.

**Please answer the questions below to guide our discussion:**

1. How are CFERI's working towards integrating entrepreneurship education into the curriculum of TVET colleges? Are there any programs which assist in instilling entrepreneurial mindsets in students?
2. How are TVET colleges providing students with practical experience in entrepreneurship?
3. Are there any collaborations with outside stakeholders or incubators for students to gain practical experience?
4. How are CFERI's trying to ensure TVET college students gain access to resources such as funding, networks and workplaces?
5. Do you know of any success stories where students have progressed and successfully started their own businesses? What key lessons can be learned from these successes?
6. How does CFERI allow for continuous improvement in order to support aspired entrepreneurial students?
7. How aligned are CFERI in the development of suitable development and reaching UNESCO's SGDs?
8. Are there mechanisms in place to gather feedback from students on the role CFERIs play in their entrepreneurial journey?

I am very eager to understand the strategies and visions that CFERIs play in the future of entrepreneurship in TVET colleges and I appreciate your assistance during this interview.

Thank you very much for participating in this interview.

Kind regards

Researcher: Tercia Mabutha

To report any serious or adverse effects emergent from this research, please contact our research office below:

Humanities and Social Science Research Ethics Committee Department of Research Development University of the Western Cape Private Bag X17

Bellville 7535

Tel: 021 959 4111

Email: research-ethics @uwc.ac.za

This information sheet is for you to download so that you can be aware of the purpose of the study. With your signature on the attached consent form, you indicate that you understand the purpose of this exercise

## Appendix F



UNIVERSITY of the  
WESTERN CAPE

Directorate: DVC: Research and Innovation  
Research Development & Postgraduate Support  
Tel: +27 21 959 4111  
Email: research-ethics@uwc.ac.za

03 November 2023

Ms TN Mabutha  
IPSS  
Faculty of Education

**HSSREC Reference Number:** HS23/7/35

**Project Title:** An investigation into ways in which TVET colleges could assist students to become self-employed through improved entrepreneurial training.

**Approval Period:** 1 November 2023 – 31 October 2024

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology, and ethics of the above-mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

*Please remember to submit an annual progress report at least two months before expiry date. Failure to submit your annual progress report on time will result in the immediate lapse of your ethics approval and you will have to resubmit an entirely new ethics application.*

For permission to conduct research using student and/or staff data or to distribute research surveys/questionnaires please apply via: <https://sites.google.com/uwc.ac.za/permissionresearch/home>

*The permission letter must then be submitted to HSSREC for record keeping purposes.*

The Committee must be informed of any serious adverse events and/or termination of the study.

A handwritten signature in black ink that reads "Josias".

Ms Patricia Josias  
Coordinator: Research Ethics  
University of the Western Cape

NHREC Registration Number: HSSREC-130416-049

University of the Western Cape, Robert Sobukwe Road, Bellville 7535, Republic of South Africa

## Appendix G

# Long Paper

*by* Tertia Mabutha

Submission date: 22-Oct-2024 09:53AM (UTC+0200)

**Submission ID:** 2493411537

**File name:** Final\_Long\_Paper\_-\_21Jan\_2024\_SN\_Final\_edits\_22102024\_- Tii.docx  
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