

# TUTDoR

## The role of higher education in redressing unemployment: A comparison of three universities based in Tshwane.

Item Type	Thesis
Authors	Babedi, Mantu Peter
Publisher	Tshwane University of Technology
Rights	CC0 1.0 Universal
Download date	2026-03-11 22:29:49
Item License	<a href="http://creativecommons.org/publicdomain/zero/1.0/">http://creativecommons.org/publicdomain/zero/1.0/</a>
Link to Item	<a href="https://hdl.handle.net/20.500.14519/784">https://hdl.handle.net/20.500.14519/784</a>

**THE ROLE OF HIGHER EDUCATION IN REDRESSING UNEMPLOYMENT:  
A COMPARISON OF THREE UNIVERSITIES BASED IN TSHWANE**

by

**Mantu Peter Babedi**

Submitted in partial fulfilment of the requirements for the degree

**MASTER OF ECONOMICS**

in the

Department of Economics

Institute for Economic Research on Innovation (IERI)

Faculty of Economics and Finance

**TSHWANE UNIVERSITY OF TECHNOLOGY**

Supervisor: Dr Rasigan Maharajh

2024

---

## **Abstract**

The Republic of South Africa is known for having the most unequal society in the world with an economy that is characterised by obscene wealth and extreme poverty despite the economy being rooted in the Mineral energy complex and abundance of diverse range of wildlife. It then stands to reason that South Africa's industrial deployment was characterised by the exclusion of an entire race of mainly persons of African descent in favour of the European counterparts to create isolated islands of opulence that is surrounded by a sea of misery even though it is one of the most industrialized countries in Africa, socioeconomic problems like poverty, unemployment, and social inequality still exist (Africa, 2021). The triple mandate of higher education institutions is widely recognized to include teaching and learning, research and development, and innovation in addition to community participation.

This research adds to the body of knowledge already available about the function of universities in the fields of social, economic, political, and ecological studies. It examines how the three institutions located in the City of Tshwane work both independently and jointly to address the problems associated with unemployment in South Africa. This study identifies the distinctive elements in each HEI's approach to problem-solving by providing strategic insights into the ideas behind the three universities' approaches to a shared difficulty. This study evaluated the adequacy of the efforts made by the three Tshwane-based institutions in addressing the clearly stated national concerns. The study focused on the three public universities in the City of Tshwane (TUT, Unisa, and UP) and examined how higher education institutions can lower unemployment. This may be examined by outlining distinct approaches and evaluating their adequacy in resolving the issue, a comparison of the three Higher Education Institutional approaches to and responses to unemployment, concerns may help address the more general challenges facing South Africa in the wake of apartheid.

**Key words:** Higher Education Institutions; City of Tshwane; Poverty, unemployment and Inequality.

## **LIST OF IMAGES**

**Image 1:** City of Tshwane

**Image 2:** Tshwane University of Technology

**Image3:** University of Pretoria Figure

**Image 4:** University of South Africa

## LIST OF TABLES

**Table 1:** University merger and incorporation arrangements

**Table 2:** Configurations of merger and incorporation of former Technikons

## ACRONYMS AND ABBREVIATIONS

<b>CHE</b> COUNCIL OF HIGHER EDUCATION	<b>COVID-19</b> CORONAVIRUS DISEASE
<b>CPUT</b> CAPE PENINSULA UNIVERSITY OF TECHNOLOGY	<b>CUT</b> CENTRAL UNIVERSITY OF TECHNOLOGY
<b>CUT</b> CENTRAL UNIVERSITY OF TECHNOLOGY	<b>DHET</b> DEPARTMENT OF HIGHER EDUCATION AND TRAINING
<b>DOL</b> DEPARTMENT OF LABOUR	<b>DUT</b> DURBAN UNIVERSITY OF TECHNOLOGY
<b>FGS</b> FINANCIAL GROWTH STRATEGY	<b>HEL</b> HIGHER EDUCATION LEARNING
<b>MUT</b> MANGOSUTHU UNIVERSITY OF TECHNOLOGY	<b>NMU</b> NELSON MANDELA UNIVERSITY
<b>NWU</b> NORTH WEST UNIVERSITY	<b>RU</b> RHODES UNIVERSITY
<b>SMH</b> SEFAKO MAKGATHO HEALTH SCIENCE UNIVERSITY	<b>SPU</b> SOL PLAATJIE UNIVERSITY
<b>STATSSA</b> STATISTIC OF SOUTH AFRICA	<b>TF</b> TURNAROUND FRAMEWORK
<b>TUT</b> TSHWANE UNIVERSITY OF TECHNOLOGY	<b>TUTEH</b> TSHWANE UNIVERSITY OF TECHNOLOGY ENTERPRISE HOLDING
<b>TVET</b> TECHNICAL VOCATIONAL EDUCATION AND TRAINING	<b>UCT</b> UNIVERSITY OF CAPE TOWN
<b>UFH</b> UNIVERSITY OF FORT HARE	<b>UFS</b> UNIVERSITY OF FREE STATE
<b>UJ</b> UNIVERSITY OF JOHANNESBURG	<b>UL</b> UNIVERSITY OF LIMPOPO
<b>UMP</b> UNIVERSITY OF MPUMALANGA	<b>UNESCO</b> UNITED NATIONS EDUCATIONAL, SCIENCE AND CULTURAL ORGANIZATION
<b>UNIVAN</b> UNIVERSITY OF VENDA	<b>UP</b> UNIVERSITY OF PRETORIA
<b>US</b> UNIVERSITY OF STELLENBOSCH	<b>USA</b> UNITED STATE OF AMERICA
<b>UWC</b> UNIVERSITY OF WESTERN CAPE	<b>UZ</b> UNIVERSITY OF ZULULAND
<b>VUT</b> VAAL UNIVERSITY OF TECHNOLOGY	<b>WITS</b> WITWATERSRAND UNIVERSITY
<b>WSU</b> WALTER SISULU UNIVERSITY	

## **Declaration and copyright**

I certify that the ideas, case study work, results, analysis, software and conclusions reported in this dissertation are achieved entirely by my own efforts and has not previously been submitted to any other institution of higher education. I further declare that all sources cited or quoted are indicated and acknowledged by means of a comprehensive list of references.

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name: Mantu Peter Babedi



Signature of candidate

Date: 21 July 2024

Copyright © Tshwane University of Technology 2024

## **Acknowledgements**

We frequently lose sight of the road because we are too engrossed in our adventures. It gives me great pleasure to extend my heartfelt gratitude to everyone who helped me during my research. It would not have been possible for me to finish this dissertation without their help.

I am primarily grateful to God for providing me with strength and supporting me throughout everything. I express my gratitude to my colleagues, friends. Together with my daughter Oreneile Babedi.

I also owe a debt of thanks to the Directorate Research and Innovation at Tshwane University of Technology (TUT) for the patient that allowed me to finish this research project, as well as to Mr. Lucas Madia and Dr. Rasigan Maharajh, who did everything in their power to make sure I worked hard for my education.

Thank you to Dr. Lindile Ndabeni, Prof. Mario Scerri, and Babatunde Fagbaibo, my instructors, for shaping me into the socially conscious and aware person I am today. To my knowledgeable colleagues and fellow students, the path we have taken has been paved with obstacles that have put our own worldviews to the test and forced us to work hard in order to see the world for what it could be rather than for what it is.

## **Dedication**

I dedicate this work to my family, who have supported me tremendously during my academic career. The finish of our journey is found in our beginnings. This dissertation is also dedicated to the memories of my parents, Mmapitso and Mogomeleng Babedi, who passed away. At this moment of achievement, their absence is greatly felt (Robala ka kgotso Matebele a moletlane)

## TABLE OF CONTENTS

Abstract	i
List of figures	ii
List of tables	ii
Acronyms and abbreviations	iii
Declaration and copyright	vii
Acknowledgements	viii
Dedication	ix

### CHAPTER 1 INTRODUCTORY DISCUSSION

1.1 Introduction	01
1.2 Background and Motivation to the study	02
1.3 Significance for the study	03
1.4 Problem Statement	03
1.5. Research Objectives	04
1.6 Delimitations of the study	04
1.7 Research Methodology	04
1.7.1 Validity	05
1.7.2 Reliability	05
1.8 Chapter Outline	05
1.9 Conclusion	06

### CHAPTER 2: LITERATURE REVIEW

2.1 Introduction	07
2.2 The Point of View of African Higher Education	08
2.3 South African Higher Education Post 1994	10
2.4 South Africa's Higher Education Overview	14
2.5 The University as enterprise perspective	16

2.6 Background and history of the three Tshwane-based Universities: UP, TUT, and UNISA	18
2.6.1 South Africa's capital city	18
2.6.2 The history and background of three higher learning institutions	19
2.6.3 The Distinctions among TUT, UP, and UNISA	21
2.6.4 TUT, UP, and UNISA as enterprises	23
2.6.4.1 Tshwane University of Technology Enterprise Holdings (TUTEH)	24
2.6.4.2 Unisa Enterprise	24
2.6.4.3 UP Enterprise	25
2.7 Conclusion	26

### **CHAPTER 3 EXECUTION OF RESEARCH DESIGN AND METHODOLOGY**

3.1 Introduction	26
3.2 Research Design	26
3.3 Data Collection	28
3.3.1 Primary data	28
3.3.2 Secondary data	28
3.4 Data Analysis	29
3.5 Validity and Reliability of Data	29
3.5.1 Validity	29
3.5.2 Reliability	29
3.6 Ethical Considerations	30
3.7 Conclusion	30

### **CHAPTER 4 ANALYSES AND OVERALL RESEARCH FINDINGS**

4.1 Introduction	30
4.2 The Framework of Findings and Analysis	31
4.3 Findings Regarding Literature Review	32
4.3.1 The viewpoint of African higher education	32
4.3.2 The context of higher education in South Africa	33

4.4 Findings Regarding Government policies and strategic planning Documents	34
4.5 Findings regarding three universities based in Tshwane in reducing unemployment and as enterprise	38
4.6 Conclusion	40

## **CHAPTER 5: CONCLUSIONS AND IMPLICATIONS**

5.1 Introduction	40
5.2 Realisation of Research Objectives	41
5.3 Recommendations	44
5.3.1 Government policy recommendations	45
5.3.2 Higher education policy recommendations	46
5.3.3 University recommendations	47
5.4 Future Research and Limitations	48
5.5 Conclusion	49
<b>References</b>	<b>50</b>

# CHAPTER ONE

## INTRODUCTORY DISCUSSION

### 1.1 INTRODUCTION

Despite having an abundance of wealthy mineral deposits and a diverse range of wildlife, the Republic of South Africa is known for having the most unequal economy and society globally. Even though it is one of the most industrialized countries in Africa, socioeconomic problems like poverty, unemployment, and social inequality still exist (Africa, 2021). Every facet of life exhibits these disparities (Ashwin & Case, 2018). Ndinga-Kanga et al. (2020) state that despite South Africa's 1994 transition from apartheid to a constitutional democracy, institutional racism and discrimination still exist and continue to impede the country's weak and sluggish economic growth.

Ndinga-Kanga et al. (2020) state that unemployment is a major factor in many of these socioeconomic issues and that it also raises the risk of criminality, hopelessness, and despair, all of which are factors that often accompany growing poverty. South Africa had a 30% unemployment rate prior to the COVID-19 epidemic (StatsSA, 2018; Rivombo & Motseke, 2021). The official unemployment rate as of right now is 33.9%, according to the second quarter report of the labor force survey for 2022 (StatsSA, 2022). South Africa offers a variety of public higher education institutions whose goals are supposedly to bridge the gap between teaching and learning and the working world, despite such dire labor market indicators.

Within its municipal limits, the capital city of South Africa is home to three significant higher education institutions (HEIs). The University of South Africa (Unisa), Africa's largest and most comprehensive distance learning university, the University of Pretoria (UP), a sizable traditional HEI, and the nation's largest residential university of technology, Tshwane University of Technology (TUT), are all located in the City of Tshwane. Rising unemployment rates imply that these three categories of HEIs are not succeeding in carrying out their mandates, even if reducing unemployment is one of their other purposes and goals.

## **1.2 BACKGROUND AND MOTIVATION**

The triple mandate of higher education institutions is widely recognized to include teaching and learning, research and development, and innovation in addition to community participation. According to some, HEIs' primary objectives are to spread information, generate graduates, interact with the community, and support economic growth (Badat, 2010; Yakubu, 2012; Egbule & Oghogho, 2018). All HEI stakeholders ought to recognize and appreciate the academic community's role to economic growth, according to Mapuranga (2016). However, upon completion of their education and training, graduates face a dearth of employment opportunities (DHET, 2018; Africa, 2021).

The 26 public universities in the nation are divided into three groups by the Department of Higher Education and Training: six universities of technology, six comprehensive universities, and fourteen conventional universities (DHET, 2018). While universities of technology also engage in theoretical work, they do not allow students to graduate until they have completed their work-integrated learning, according to DHET, traditional universities offer a wide range of educational options, most of which are theory-based degrees (DHET, 2018). According to DHET (2018), comprehensive universities are hybrids of traditional and technological institutions.

Universities are an essential component of the higher education system, helping to foster local business and providing graduates with skills essential to economic development (Rivombo & Motseke, 2021; Ebgule & Oghogho, 2018). A country's ability to innovate and grow depends on its higher education system (Ebgule & Oghogho, 2018; DHET, 2021). The government spends a significant amount of money on basic and higher education in South Africa, yet the output of this investment is not commensurate with the input (DHET, 2018). This study looked at how the three public universities in Tshwane recognized the problems associated with unemployment, what remedies they suggested, and how effective their attempts were in reducing poverty and addressing the social inequalities that characterise post-apartheid South Africa

### **1.3 SIGNIFICANCE OF THE STUDY**

This research adds to the body of knowledge already available about the function of universities in the fields of social, economic, political, and ecological studies. It examines how the three institutions located in the City of Tshwane work both independently and jointly to address the problems associated with unemployment in South Africa. This study identifies the distinctive elements in each HEI's approach to problem-solving by providing strategic insights into the ideas behind the three universities' approaches to a shared difficulty. Although this study was unable to be as thorough as necessary to serve as a definitive evaluation, it did humbly attempt to add to the body of knowledge for academic scholars, policymakers, and other university stakeholders. The report makes the claim that there is no way to overstate the importance of universities to the South African economy.

### **1.4 PROBLEM STATEMENT**

More focus needs to be placed on the role and contribution of HEIs, and particularly universities, in clearing socio-economic backlogs in light of growing unemployment, poverty, and social inequality. Global coordination issues abound, but government agencies' silo mentality and behaviors—which supposedly aim for the same progressive goals—also need to be addressed. Therefore, even though the Department of Labor (DoL) and the Department of Higher Education (DHET) both want a more dynamic labor market that employs university graduates, shoddy planning and a lack of meaningful industry collaboration frequently lead to an abundance of students with the qualifications they need and a dearth of job opportunities, which has a substantial negative impact on graduates' ability to find employment.

The distinction and "autonomy" that each public HEI is given by its unique institutional statutes further compounds these inconsistencies. As a result, even though South Africa's HEIs are all dedicated to changing and enhancing various facets of their operations, the country's unemployment rate keeps rising.

Debates throughout the modern era have extended the frontiers of knowledge. Strong arguments have been made over the past 20 years that HEIs must support innovation in order to stimulate economic growth (Sandström et al., 2018).

Thus, universities' function has also changed from producing knowledge to being acknowledged as the industry's main source of skilled labor, and more recently, to serving as a platform for innovation and growth to lower graduate unemployment, raise educational standards, and help raise South Africans' standard of living (Audretsch & Lehmann, 2005; Sandström et al., 2018). This study evaluated the adequacy of the efforts made by the three Tshwane-based institutions in addressing the clearly stated national concerns.

### **1.5 RESEARCH OBJECTIVE**

The study focused on the three public universities in the City of Tshwane (TUT, Unisa, and UP) and examined how higher education institutions can lower unemployment. By outlining distinct approaches and evaluating their adequacy in resolving the issue, a comparison of the three Higher Education Institutes' approaches to and responses to unemployment concerns may help address the more general challenges facing South Africa in the wake of apartheid (Baloyi 2015).

### **1.6 DELIMITATION OF THE STUDY**

The study compared the policies, tactics, and programs of TUT, Unisa, and UP in order to evaluate the function of higher education institutions in an economy and their attempts to reduce unemployment. All three categories of universities were chosen according to where they were located in the City of Tshwane in an effort to be as thorough as possible within extremely constrained time frames. The outcome assessments were further restricted to only those indicators that were directly related to work, jobs, and employment as well as how they indirectly manifested in socioeconomic characteristics including inequality, violence, and other crimes (Baloyi 2015).

### **1.7 RESEARCH METHODOLOGY**

This investigation was carried out as a desk research and literature review. While the majority of the study was qualitative, some quantitative data was also cited to emphasize points or provide context for changing behaviors. The goal of implementing qualitative techniques was to consult confirmatory sources. The objective was to employ disparate data sources and methodologies in conjunction with document analysis, a methodical process for examining written or digital documents (Bowen, 2009).

In order to understand and gain knowledge, Bowen (2009) highlights the significance of document analysis and emphasizes the need for facts to be scrutinized and clarified in order to get to the core of the issue. But according to Cardno (2018), policy documents are just one of many other kinds of documents that are typically created in the field of politics and policy. They are also another qualitative method that is typically used as a backup means of gathering data (Cardno, 2018). To concentrate on the policies of the three Tshwane-based universities (TUT, Unisa, and UP), a qualitative approach was adopted. Additional data collection methods are needed for a qualitative approach, such as documentation protocols outlining the proper way to conduct the study through document analysis and policy document analysis (Bowen, 2009).

### **1.7.1 VALIDITY**

By making sure that all of the documents from the three case studies were gathered, compiled, and summarized without any subjective biases or exclusions, the study's validity was increased. The results should be able to show the researcher's comprehension and conclusions, regardless of whether the research is summarized or transcribed (Lewis, Saunders & Thornhill, 2007:35).

### **1.7.2 RELIABILITY**

Fair treatment and the least amount of subjective bias were applied to the data that was taken from the documents.

## **1.8 CHAPTERS OUTLINE**

The five chapters that make up this research paper are summarized as follows:

### **Chapter 1: Introduction**

The issue statement, research aims, delimitations, and importance of the study are presented in this chapter after the framework and rationale for the investigation.

### **Chapter 2: Linkages between the economy and higher education as an enterprise**

In order to support the study, this chapter examines relevant literature on higher education and the economy. It also examines the literature on how higher education as an enterprise hopes to help reduce socio-economic challenges like unemployment, poverty, and social

inequality through quality education, thereby raising people's standard of living. It does this by using official documents from TUT, Unisa, and UP.

### **Chapter 3: Research methodology**

This chapter primarily addresses the research design and the qualitative techniques that were employed to accomplish the study's goals with regard to data collection, analysis, validity, reliability, and ethical considerations.

### **Chapter 4: Data analysis and interpretation and presentation of results and findings**

The results of the data analysis and interpretation are presented in this chapter to show how the three universities in Tshwane comprehend the problems associated with unemployment and what remedies they suggest. This chapter also evaluates how well their efforts have worked to reduce poverty and address the social injustices that remain prevalent in South Africa following the end of apartheid.

### **Chapter 5: Conclusions and recommendations**

This chapter expands on the research findings and outcomes while also offering a summary, research conclusions, and recommendations.

## **1.9 CONCLUSION**

This first chapter's main objective was to give a comprehensive summary of the entire study, covering its main hypothetical and factual components. Both of these are discussed in further detail in this study's other chapters. The logical behind this overview is based on the conception that it, in addition to make the reader aware about the nature of the certain research variables the researcher focused on, introduces them to the many aspects and components of the research process as a whole, thereby modify the abstract into a relevant or useful reality. The South African higher education institutions after 1994 was a novel trend in post-democracy strategy. (Baloyi 2015)

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Although most people, society, and individuals devote a significant amount of time and resources in obtaining higher education levels because they want to enter the workforce, the global viewpoint views higher education as an investment (Kromydas, 2017). This chapter explores the role of higher education in reducing unemployment and promoting innovation and economic advancement, all the while keeping higher education available and moving away from its original goal of providing human development, competence, skills, and human capital for the markets. However, Kromydas (2017) contends that while the objectives of higher education and its impacts on the economy and society have evolved in different ways, the rules governing it still reflect differences between continents, countries, and political regimes.

In Africa, however, higher learning institutions continued to practice, or were told to practice, colonial ideology, disrupting and destroying the African knowledge system. For more than ten centuries, most African history countries were colonized by European world powers such as Great Britain, France, Portugal, Germany, Spain, Italy, and Belgium (Oliver, 2017). Scholars in Africa indicate that educational institutions existed on the continent prior to colonization, such as the Alexandrian Academy, the Al-Quarawiyy University in Fez, Morocco, the Al-Azhar University in Egypt, and Ethiopia's old tradition of elite education, as well as an African script known as Ge'ez. As a result, higher education existed on the continent. Only France and the United Kingdom laid the groundwork for Africa's higher education revolution. This was communicated via Christian missionaries. Except for South Africa, there was an independence movement in Africa during the 1960s. According to Woldegiorgis and Doevenspeck (2013), higher education institutions' duties were not organized to foster interaction between society, the state, and academia. Instead, most African government policies implemented through higher education institutions addressed the obstacles provided by colonial historical interests that were effectively imposed on African nations.

South Africans, particularly blacks, found it more difficult to obtain an education during the apartheid era. However, at the time, the South African apartheid administration considered the four initial entities to be legally independent states (although never receiving international recognition), depriving the majority of the country's inhabitants. As a result, the apartheid regime expanded its ideology by enacting a new constitution in 1984 that identified the cultures and values of colored, Indians, and whites while excluding the majority. The 1984 constitutions intended to divide education in South Africa, with higher education institutions serving as a weapon to exclude one of the four race groups: African, Colored, Indian, and White (Bunting, 2006). When the apartheid government eventually lifted legislative restrictions in early 1990, there were education-related ideas and suggestions.

Higher education policy was disputed between 1994 and 1998 in terms of national government policy, as well as establishing a fair space in the new democratic South Africa's economic development. As a result, a consensus was established, notably in some areas of higher education policy, such as the sort of accountability system required, which resulted in increased government supervision, and the safeguarding of autonomy in higher education institutions (Lefa, 2014). Higher education has recently positioned itself as a labour market supplier, resulting in intense competition among universities and colleges around the world. As a result, this chapter will investigate the possible impact of higher education on business and the benefits that it might bring in terms of enhancing creativity.

## **2.2 THE VIEWPOINT OF AFRICAN HIGHER EDUCATION**

Higher education in Africa was primarily used to facilitate colonial administration rather to enlighten African civilizations, and it was limited to a small number of persons. Whereas its policy-making and reform initiatives reflected historical circumstances at various times, "modern" higher education systems in Africa were entirely the result of European colonial frameworks. Furthermore, they were not meant to alleviate Africa's socioeconomic issues, but rather to help the colonial administration work smoothly (Woldegiorgis and Doevenspeck, 2013).

UNESCO convened a meeting on the "Development of Higher Education in Africa" in September 1962, shortly after independence in 1960, dubbed as the "Year of Africa" and the start of the so-called "development decade". A decade later, in July 1972, the Association of African Universities organized a workshop in Accra to discuss the role of universities in development. The Accra workshop declared that all universities should be "development" institutions. Controversially, workshop participants felt that this was such an important duty that the university could not be left to academics alone; governments must also guide institutions in the right direction (Cloete, Maassen, & Bailey, 2019).

During the 1960s and 1970s, new universities were established in African countries that "symbolized national pride and self-respect" and self-reliance following colonization. However, its objective was to assist the newly independent governments' political and economic goals. As a result, governments were prepared to invest in higher education (Jowi, Obamba, Sehoole, Barifaijo, Oranda, and Alabi). According to Woldegiorgis and Doevenspeck (2013), during the process of transformation from colonialism to independence in the 1960s and 1970s, higher education institutions in Africa shouldered multiple responsibilities as agents of economic growth, creating an African identity, and nation-building. Hence, they were a product of government policies to address the challenges of colonial artifacts imposed on African societies.

However, foreign powers played a role and according to Assié-Lumumba (2006), the World Bank was the most well-known example of these external agencies that profoundly influenced African higher education policies in general. This escalated to the point where most industrial countries, particularly former colonial powers, and international institutions, lending agencies, and foundations played determining roles in formulating and deciding African policies, as well as directly or indirectly setting priorities. Higher education institutions were therefore seen as tools of socio-economic development and political transformation in post-colonial Africa to fulfil the role of training professionals, promoting access, extending the frontiers of knowledge, and serving the national economy. However, Assié-Lumumba (2006) highlights that most African governments did little to promote the development role of higher education in their countries, as many had become increasingly embroiled in internal power struggles, as well as the politics of funding agencies such as the World Bank and others (Cloete, Maassen & Bailey, 2019).

which implies that there is nothing wrong with having European models of higher education but that what is lacking is African knowledge (Woldegiorgis & Doevenspeck, 2013:40). It means that higher education institutions may not necessarily move from their historical colonial roots but rather within the framework of the colonial higher education system their relevance should be contextualized along with the needs of the society.

### **2.3 SOUTH AFRICAN HIGHER EDUCATION POST 1994**

In view of the difficulties resulting from the former apartheid regime, which include racial, gender, social, and educational disparities that pose a serious threat to the nation, South African higher education institutions have made significant progress since 1994 (Bojabotseha, Mkwanazi & Moloji). After 1994, the new South African government and education sector reportedly produced and implemented over thirty higher learning policies in a very short period of time (Bitzer, 2009). The major motivation for the swift implementation of those policies was to employ universities to support the nation's efforts to improve its economic operations, uphold social justice, preserve cultural variety, and advance democratic governance. The National Commission of Higher Education was established in 1994, underscoring the policies enacted in that year and demonstrating the government's and the education sector's dedication to advancing the values of democracy, non-sexism, and non-racism (Brits, 2010:25).

The Higher Education Act 101 and the White Paper, which gave the state and higher education institutions explicit guidelines, were passed in 1997 after the 1996 adoption of the South African Constitution. It was believed that they would represent phases of any advancement that might come from the development and change of higher education in society (Badat, 2010). The South African Constitution, according to Badat (2010), emphasized the government's and higher education institutions' dedication to the principles of equality, human dignity, sexism, and racism as well as their commitment to "respect, protect, promote, and ensure fulfillment of the rights" embodied in the Bill of Rights (Republic of South Africa, 1996). "A single coordinated higher education system" and "programs and institutions to respond better to the human resource, economic, and

development needs" of South Africa were the key goals of the Higher Education Act, according to Badat (2010).

As a result, the majority of South African universities have gained international recognition and have grown to be highly regarded academic institutions that satisfy the requirements of top universities worldwide. Although they are supported by the state, they have freedom and autonomy and answer to their councils rather than the government (Bojabotseha, Mkwanazi, & Moloji). Government realized the importance of high-quality universities and programs for a nation's economic development and expansion, according to Brits (2010). Therefore, it was crucial to set up a mechanism for evaluating the quality of government-sponsored higher education institutions.

The White Paper was issued in 1997, and the National Plan for Higher Education was published in 2001, according to Brits (2010) and Essop (2020). Therefore, the National Plan for Higher Education's primary goal was to make clear the higher learning framework that would be used to carry out the Education White Paper's description of the higher learning system's transition. Consequently, the goal was to reorganize and delineate the higher education system in accordance to the Council on Higher Education's (CHE) analysis, which was predicated on the dimensions required for the public higher education system. According to Brits (2010), the National Plan for Higher Education 2001 authorized Mr. Kader Asmal, the then-Minister of Education, to suggest mergers among higher education establishments. After the Minister announced it in October 2003, the idea was approved and put into effect in 2004 and 2005.

In addition, Essop (2020) notes that in order to analyze and evaluate the higher education system in South Africa, higher education was divided into five categories prior to the merger. It was discovered that the apartheid regime of the past served as the foundation for the system. Two new sorts of universities were established by the educational industry through mergers. These are as follows:

**Table 1: University merger and incorporation arrangements**

<b>Institution 1</b>	<b>Institution 2</b>	<b>Institution 3</b>	<b>Merged institution</b>
1. Potchefstroom University of Christian Education	University of the North West	Vista University Sebokeng campus	North West University
2. University of Natal	University of Durban-Westville		University of Kwa-Zulu Natal
3. University of Pretoria	Vista University – Mamelodi campus		University of Pretoria
4. University of the Orange Free State	University of the North – Qwa-Qwa campus	Vista University – Vista campus	University of Free State
5. Rand Afrikaans University	Vista University - East Rand campus	Vista University – Soweto campus	University of Johannesburg
6. Dental Faculty of University of Stellenbosch	University of the Western Cape		University of Western Cape
7. University of Fort Hare	Rhodes University –		University of Fort Hare

	East London campus		
8. University of Port Elizabeth	Port Elizabeth Technikon	Vista University - Port Elizabeth campus	Nelson Mandela Metropolitan University
9. Medical University of South Africa	University of the North		University of Limpopo
10. University of South Africa	Technikon South Africa	Vista University Distance Education campus	University of South Africa
11. Johannesburg College of Education	University of Witwatersrand		University of Witwatersrand
12. Giyani College of Education	University of Venda		University of Venda

Source: Ministry of Education (2003)

**Table 2: Configurations of merger and incorporation for Technikons**

<b>Institution 1</b>	<b>Institution 2</b>	<b>Institution 3</b>	<b>Merged institution</b>
1. Pretoria Technikon	Technikon Northern Gauteng	North West Technikon	Tshwane University of Technology
2. Cape Technikon	Peninsula Technikon		Cape Peninsula University of Technology
3. Technikon Natal	University of Zululand, Umlazi campus	ML Sultan Technikon	Durban Institute of Technology
4. Vaal Triangle Technikon	Vista University, Sebokeng campus		Vaal University of Technology
5. University of Transkei	Border Technikon	Eastern Cape Technikon	Walter Sisulu University

*Source: Ministry of Education (2003)*

## **2.4 SOUTH AFRICA'S HIGHER EDUCATION OVERVIEW**

An overview of pertinent research on the contribution of higher education to the economy is given in this section. It also supports the study's research objectives and offers proof of the research problem. Since its founding, higher education has been entrusted with greater responsibility, and the political and socioeconomic shifts that affect governments, society, and academia have always shaped the institution's central position. Yet, historical deeds are crucial in shaping higher education policies and reforms, which are also impacted by a country's socio-political and economic conditions (Woldegiorgisi & Doevenspeck, 2013).

The World Bank's assessment of the country's economic situation, which was supported by Rivombo & Motseke, is that growth has essentially deteriorated over the past ten years, despite the South African government's significant and coordinated efforts to improve the lives of its citizens since achieving democracy (World Bank in Africa, 2021; Africa, 2021; Rivombo & Motseke, 2021). Between 2005 and 2010, the nation's upper-middle-class

income earners' share and the poverty line fell by 12%, from 68% to 56%. The economic outlook was predicted to reach 60% in 2020, despite a little uptick to 57% in 2015 (World Bank in Africa, 2021).

Furthermore, the COVID-19 pandemic has made attempts to combat poverty more difficult, as have structural issues and sluggish economic growth (World Bank in Africa, 2021; Africa 2021; Rivombo & Motseke, 2021). The authors claim that the growing unemployment rate has been a constant hindrance to the advancement of household welfare, with the rate among young people between the ages of 15 and 24 being the greatest at approximately 64%. In the second quarter of 2021, the rate reached a record of 34.4%. With a consumption expenditure Gini coefficient of 0.63 in 2015, South Africa has the highest rates of inequality in the world due to its dual economy (World Bank in Africa, 2021). The failure to create enough jobs and the slow economic growth are the main causes of this enormous inequality. As a result, there is a failure to transmit wealth between generations, as seen by the greater levels of wealth distribution disparity and lower levels of intergenerational upward mobility (World Bank in Africa, 2021).

Rivombo and Motseke (2021) claim that these socioeconomic issues have persisted in affecting South Africans' quality of life, particularly in the wake of the pandemic. Given the pandemic, some labor experts estimate that the jobless rate will increase by 4% in the second half of 2020 (Rivombo & Motseke, 2021). The young unemployment rate in South Africa is the highest in the world, and it is expected to rise to 61% by 2020 (Africa, 2021). The first quarter of 2022 saw 63.9% of workers, according to the quarterly labor force survey (Stats SA 2022). In terms of employment outcomes, white graduates continue to do better than black graduates, according to StatsSA (2021). Compared to their Black, Indian, or Colored colleagues, they have a twofold higher chance of finding employment. The current low labor absorption rate in the economy significantly disadvantages South African adolescents with tertiary education who come from previously disadvantaged backgrounds (Kraak & Kareen, 2010; Van Broekhuizen & Hendrik, 2016). Young South African graduates also have the disadvantage of having degrees that do not match or satisfy the demands of the economy, and in certain cases, surpass the nation's requirements (oversupplied) (Kraak & Kareen, 2010; Van Broekhuizen & Hendrik, 2016).

## **2.5 THE UNIVERSITY AS ENTERPRISE PERSPECTIVE**

Thus, over the past 20 years, a number of noteworthy proposals and discussions have been made regarding the role that higher education can play as an enterprise or an agent for the advancement of innovation and economic progress (Sandström et al., 2018). As a result, the conventional wisdom regarding the function of universities and TVET colleges has shifted from that of knowledge producers and guardians to that of a platform for innovation and growth (Audretsch & Lehmann, 2005; Sandström et al., 2018). Because they provide the commercial sector new activities to increase operational efficiency, higher education institutions are therefore seen as actors in the entrepreneurial sphere (Cunningham et al., 2019; Guerrero, Cunningham & Urbano, 2015).

Universities and other research and entrepreneurship policy intervention-focused organizations, however, frequently receive direct funding for innovation from the public and private sectors in addition to indirect support from industry collaborations (Civera, Meoli, & Vismara 2017). Accordingly, the role of "university-industry" entrepreneurial networks has been strengthened by academic research (Colombo et al., 2019; Hayter, 2016). Because of their capacity to characterize, clarify, promote, and convey concepts, ideas, and viewpoints regarding how entrepreneurs engage with their surroundings as economic actors, the consensus regarding "entrepreneurial ecosystems/environments" has thus far enjoyed immense popularity (Acs et al., 2018; Audretsch et al., 2019; Colombo et al., 2019).

A framework that supports entrepreneurs, such as lenders, suppliers, or customers, is known as an entrepreneurial ecosystem or network. It also provides governance, oversees and regulates entrepreneurial activity through the establishment of guidelines and standards (Colombo et al., 2019). Due to entrepreneurial ecosystems, entrepreneurial businesses are both a significant product of economic systems and a means of interpreting their results. According to academic opinion, these ecosystems, or institutions of higher learning, such as universities, play a significant role as organizational anchors because they foster entrepreneurial thinking to help them achieve their economic and social objectives in addition to advancing knowledge, skills, and science and technology (Hayter, 2016; Leiber, Stensaker & Harvey, 2018; Sandström et al., 2018; Civera, Meoli & Vismara, 2019).

Therefore, it can be concluded that there are two ways in which higher education and entrepreneurial environments/systems interact: improving the internal structures of higher education institutions (HEIs) and creating external circumstances through higher education policies and the business environment (Hayter, 2016; Leiber, Stensaker & Harvey, 2018; Sandström et al., 2018; Civera, Meoli & Vismara, 2019). In this scenario, the following crucial query is emphasized: What internal processes allow higher education institutions to encourage an entrepreneurial environment?

Because structural and leadership elements inside university governance structures were found to be the root cause of entrepreneurial and scientific performance (Meoli, Paleari & Vismara, 2019; Civera et al., 2020; Meoli, Pierucci, & Vismara, 2018). The structural side entails a suitable degree of flexibility, capable assistance, and well-equipped facilities (Sporn, 2001); the hierarchy level, incentive and control mechanisms, and the characteristics of the governing bodies are the primary elements (Kirby, 2006; Yokoyama, 2006).

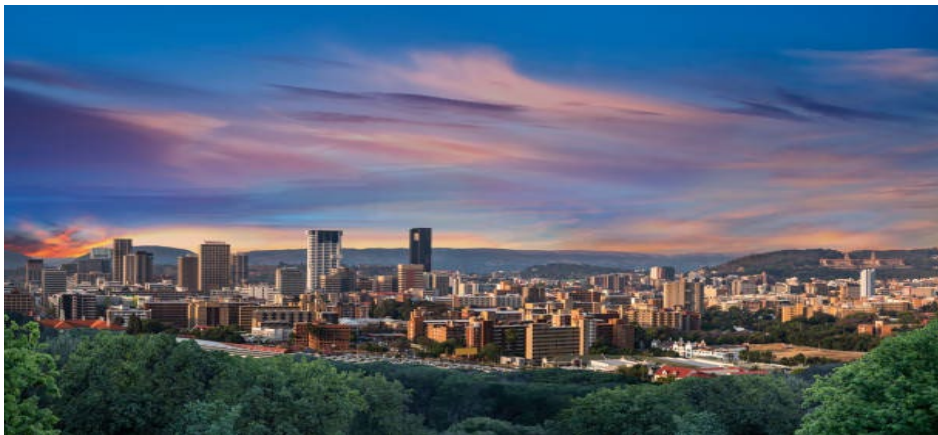
The Department of Business, Innovation, and Skills in the United Kingdom (2014) states that universities and other higher education institutions have made great progress in addressing skill demands in light of employment developments. Its responsibilities range from creating several pathways to high skills to satisfying the skill requirements of the conventional undergraduate study model (Department of Business, Innovation & Skills, 2014). Determining the distinct functions of a traditional university, as an enterprise in economic growth and development, as previously noted, can therefore boost productivity, satisfy employer demands, and promote social mobility in an economy. (Business, Innovation & Skills Department, 2014)

Higher education, in the opinion of Allais & Nathan (2014), offers a route to employment, advancement, and success for every graduate throughout their career. In order to meet the nation's development goals, the Department of Higher Education and Training (DHET) is tasked with developing skilled, informed, and trained South Africans who can compete with their global counterparts in a variety of sustainable ways (DHET, 2021). Therefore, by comparing the distinct responses of TUT, UNISA, and UP, the goal of this study is to investigate and convey how higher education, as an enterprise, can help to

lower the unemployment rate, poverty, and social inequalities, improving the quality of education as well as the standard of living for South Africans.

## **2.6 BACKGROUND AND HISTORY OF THE THREE TSHWANE-BASED UNIVERSITIES: UP, TUT, and UNISA**

**2.6.1 South Africa's capital city** is called Pretoria, or the City of Tshwane. It is home to four universities: Sefako Makgato Health Sciences University, the University of South Africa, the University of Pretoria, and the Tshwane University of Technology. Situated in Gauteng, the most populous province in South Africa, it is considered one of the six biggest metropolitan municipalities in the nation. In contrast, the terrain masses that include the following locations: Rayton, Refilwe, Roodeplaat, Soshanguvhe, Temba, Ga-Rankuwa, Garsfontein, Hammanskraal, Irene, Kudube, Mabopane, Mamelodi, and Winterveldt. Because of this, 2.85% more people—2,818 million—call it home in 2023 than in 2022. The industries that comprise the city's economic activity are manufacturing, equipment, household goods, metal products, finance, and manufacturing. The well-established automotive industry in the city is supported by both the community and the government while In Gauteng, it is the second-biggest city. ([www.Tshwane.gov.za](http://www.Tshwane.gov.za)).



**IMAGE 1: City of Tshwane: Source: *iStock photos & royalty-free image***

## 2.6.2 The history and background of three higher learning institutions



**IMAGE 2: Tshwane University of Technology: Source: iStock photos**

The previous Technikon Northern Gauteng, Technikon North-West, and Technikon Pretoria merged on January 1st, 2004, giving rise to the Tshwane University of Technology. With over 60,000 students enrolled annually, it has grown to be one of Africa's major technical universities and the largest residential higher education institution. It is a product of the new South Africa, impressive in breadth and size, as well as in the caliber of its research, teaching, innovation, and community involvement. With campuses in Gauteng, Mpumalanga, and Limpopo, three of South Africa's nine provinces, it is the only university in the country. ([www.tut.ac.za](http://www.tut.ac.za))



**IMAGE 3: University of Pretoria: Source: *iStock photos***

One of the universities that combined with the Vista Mamelodi campus in 2004 was the University of Pretoria (UP). It is now the biggest research higher education institution in Africa and South Africa, having kept its original name. Its community dynamics, which reflect a variety of backgrounds and cultures and support, exhibit, and represent South African democracy in a global society, are what give it its academic excellence. Thus, according to the University of Pretoria website, it is recognized as one of the universities that keeps changing the corporate and research environments through innovation and new information. ([www.up.ac.za](http://www.up.ac.za))



**IMAGE 4: University of South Africa: Source: *iStock photos***

Unisa is one of the universities that amalgamated with other universities in 2004. These other universities were Technikon of South Africa and Vista Distance Education. As a result, it has grown to be the biggest distance learning institution in both South Africa and Africa. It is also one of the few universities that has kept its original name, the University of South Africa. It is thought to be the oldest remote learning-focused higher education institution in the world. In addition, it was among the first public universities in the world to exclusively offer distance learning (since 1946) and is regarded as the biggest university in Africa with over 400 000 students enrolled ([www.unisa.ac.za](http://www.unisa.ac.za)).

## **2.6.2 The Distinctions among TUT, UP, and UNISA**

TUT offers career-oriented educational programs focused on technology and innovation. It also collaborates with industry to produce creative research solutions and innovative problem-solving programs. Among the programs offered are work-integrated learning and practical training, which demand that students finish a structured program while employed by an organization. This entails completing an internship or in-service training (Department of higher education and training April 2024).

TUT's emphasis on technology, innovation, entrepreneurship, and engagement serves as a foundation for its goal of producing employable, enterprising, and socially conscious alumni. In order to guarantee that its graduates are employable, entrepreneurial, and socially conscious citizens, their strategic plan views them as Pioneering an Enterprising and Transformative Brand of the Twenty-First Century ([www.tut.ac.za](http://www.tut.ac.za)).

UNISA, popularly known as comprehensive universities, was established with the intention of enhancing research in vocational and Technikon-style programs; providing students with access to a wider range of programs with different prerequisites; increasing technical education opportunities nationwide, especially in rural areas where resources are still scarce or non-existent; easing student mobility between programs; and removing barriers to higher education and these become the main characteristics of UNISA. (Department of higher education and training April 2024)

There will be a solid and compressive business model to back the updated approach. Their business model outlines our resources, actions, and results in order to guarantee "How will UNISA win" in the context of its selected focus areas. Their product proposition, customer segmentation, important partners, stakeholder relationships, important procedures, important resources, cost structure, income streams, and delivery methodology are all discussed in the business model. This model will guarantee the strategy's effective operationalization and help identify important revenue streams, our target market, resources, workflows, goods, and financial information for our planned operations. For them, the plan that resulted in the establishment of their company enterprise was to lower unemployment and contribute to the national economy as an enterprise ([www.unisa.ac.za](http://www.unisa.ac.za))

UP offers a range of undergraduate degrees that are professional, formative, and academic in addition to a variety of postgraduate degrees that are research-focused. But among other things, its establishments provide a broad range of undergraduate and graduate study, research, and community service programs. There is an extensive selection of theoretically-focused, academically focused courses offered. They include the requirement to carry out research, produce knowledge that advances scholarship on a national and international level, and display a culture of sustained scholarship as evidenced by peer-reviewed academic publications that have an impact on instruction in all academic subjects. Furthermore, the establishment needs to take part in neighborhood-building initiatives that promote the development of the surrounding area. (Department of higher education and training April 2024)

As stated in their strategic plan, UP saw itself as trailblazers in 2025, assisting the institution in realizing its own 15-year vision and strategic objectives. This long-term strategy is based on principles that have been established through study, talks, and activities carried out by various individuals and groups within the University. The goal of the Strategic Plan is to distil the essentials of a common vision and understanding of the University's mission and identity in the face of diverse and changing demands—nationally, regionally, and in an increasingly interconnected global environment. Shorter planning and execution cycles lasting five years will be placed inside this bigger framework in order to effectively capitalize on the dynamic nature of change. The university's position in the economy must also see it minimize unemployment ([www.UP.ac.za](http://www.UP.ac.za))

All three institutions were founded on the same statutes, which are similar and are listed in the schedule or in accordance with Section 32 of the Higher Education Act of 1997 (Act No. 101 of 1997). The statutes were approved by parliamentarians, a committee on higher education, and the then-education minister, Mr. Sibusiso Bengu. The principal objective of the statutes was to facilitate the effective administration and governance of those universities. As a result, the board members were chosen by the council, which had the responsibility of managing the organization. Each of the three institutions follows its own set of rules as it sets its objectives and missions for the higher education sector. However, the establishment's goal was to make higher education more accessible to all.

### **2.6.3 TUT, UP, and UNISA as enterprises**

Between 1990 and the middle of the 2000s, employability may not have been such a big problem. However, worries concerning employability have been raised globally due to the growth of higher education centers, the entry of subsequent groups, the opening of several new higher learning institutions, the expansion of degree courses, and the backdrop of economic changes (Rae, 2007). Higher education, in the words of Jackson (1990), is about more than just opening doors to well-paying jobs or boosting a nation's economic performance.

According to Hunady, Orviska, and Pizar (2015), entrepreneurship can result in beneficial economic outcomes from higher education; utilizing the framework and range of entrepreneurial techniques can encourage higher learning activities that are connected to economic growth. They also state that universities should be permitted to start their own businesses that might profit from and contribute to the education system, as well as that universities should encourage different areas, continents, and nations to apply entrepreneurial approaches.

According to Salem, entrepreneurship can offer a clear path for economic growth through the implementation of regional economic and social development. This will encourage regional integration and create a network of connections between various stakeholders on the continent, in the region, or in society, as well as higher education institutions. But if graduates and students are prepared to meet the opportunities, challenges, and uncertainties of the global economy, then entrepreneurship via higher education offers distinct advantages. He goes on to say that there have been a lot of changes to the status of contracts, employment, and occupations in the global market for which pupils are ready and equipped. Furthermore, effective government and university leadership will determine the success of entrepreneurship through higher education institutions.

Another approach, called enterprise, was launched by TUT, UNISA, and UP with the primary goal of providing those institutions with a third source of income. The goal of this endeavor was to consolidate the institutions' financial income and restructure and modify them to become financially stable. In addition to making money, the business aimed to produce goods and services that society could use and that would generate enough jobs

for everyone in the city. As higher education institutions set out to preserve the value of an investment while carrying out its mission and key functions, it would aid in closing the gap between generating job opportunities and financial stability, thereby keeping a positive relationship with the government ([www.tut.ac.za](http://www.tut.ac.za), [www.unisa.ac.za](http://www.unisa.ac.za) & [www.up.ac.za](http://www.up.ac.za)).

**2.6.3.1 Tshwane University of Technology Enterprise Holdings (TUTEH)** Following a period of preparation that began in 2015 with the approval of the Turnaround Framework (TF) and the Financial Growth Strategy (FGS) by the TUT Council, the year 2018 got underway. The TUTEH (TUT Enterprise) was founded. Therefore, the primary goal was to serve as the means by which the University's third-stream revenue would be generated, grown, and sustained. According to the TUTEH website, revenue that is not related to government subsidies (first stream) or student fees (second stream) is referred to as third stream income. Their primary business focus is on properties, which result in them providing accrediting accommodations to numerous buildings surrounding its campus. Being the largest residential institution in South Africa, if not all of Africa, the focus is on residents because there has been a long-standing housing scarcity ([www.tutenterprise.co.za](http://www.tutenterprise.co.za)).

**2.6.3.2 Unisa Enterprise** was founded in 2017 with the aim of influencing Africa's future by boosting commercialization, creating robust connections with the outside world, encouraging a collaborative culture, and offering commercial know-how to assist Unisa's objective of self-sustenance. Its mandate was to concentrate on seven strategic pillars: education business solutions, property services, financial services, consulting, research solutions, innovation, and short learning programs. Furthermore, to strengthen connections with the outside world in order to promote genuine entrepreneurship and commercialization. This entails forging close ties with the workforce, clients, partners, academic institutions, and governmental bodies within the industry community.

Through reputable career-focused courses, it addresses the global skills deficit in the public and commercial sectors by offering training and career development services in collaboration with reputable academics. Additionally, that lead offers and makes it simple to access a variety of diverse research abilities and delivers a business-to-business

service that is both professional and of high quality while adhering to sound corporate governance norms. Finally, the organization prides itself on having the best laboratories and conference centers in the Gauteng, Cape Town, and Durban regions, which are easily accessible to internal and external clients. While the research offers services to both individual professionals and businesses through industry-compliant methods and through its subsidiary partnerships, it continues to add value by utilizing their research capabilities to gain insights that drive business solutions ([www.unisaenterprise.ac.za](http://www.unisaenterprise.ac.za)).

**2.6.3.3 UP Enterprise** were founded in 2000 with the aim of helping the university become a leader in the areas of training, consultancy, and contract research. This would improve and ease the university's engagement with both the public and commercial sectors. The University and its employees benefit financially from the process by earning more money. Since then, a number of university-affiliated businesses have been founded to handle various business operations and serve as tools for managing the university's stake in its alliances. Some are owned entirely by the University, including the ones in charge of consultation and continuing education. Partially owned businesses include those entrusted with intellectual property commercialization.

UP enterprise complies with the University's quality standards and uphold its vision and objectives. It is also in charge of developing, carrying out, and overseeing the University of Pretoria's commercial operations. The enterprise's governance, management, and delegation structures are in line with those of the university. The UP enterprise, among other things, is the sole owner of TuksSport (Pty) Ltd (High Performance Centre – hpc), which includes TuksNovation, a technology business incubator that offers corporates an ecosystem to support new and upcoming start-ups and specialized product and business development support to startups. In the meantime, keep working together on student entrepreneurship competitions and events to provide students with the chance to interact with the startup ecosystem. It offers specialized assistance to business owners at every stage of their beginning and expansion (<https://enterprise.up.ac.za>).

## **2.7 CONCLUSION**

This chapter summarized the pertinent research and discussed how higher education might lower unemployment, foster creativity, and spur economic growth. It is founded on higher education institutions that adhere to the government policy framework outlined in the White Paper on Higher Education and Transformation (1997), which outlined how these institutions should be aligned and how they may benefit society. For the masses who were impacted and disadvantaged by the apartheid educational system structure, in particular, its educational system offered a strong foundation for South Africa's new education and training system. But as Dison, Walker, and Mclean (2008) point out, the needs and circumstances of the nation, especially in Tshwane, drive higher education in South Africa, with youth unemployment being one of the most critical issues.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

By contrasting the three Tshwane-based universities—the Tshwane University of Technology (TUT), the University of Pretoria (UP), and the University of South Africa (Unisa)—this chapter elucidates the procedures followed in order to comprehend the role of higher learning institutions in reducing unemployment.

#### **3.2 RESEARCH DESIGN**

Documents were utilized in this report as a qualitative research approach to collect data for the objective of comprehending and providing explanation. Bowen (2009) states that although documents have been utilized as supporting data in qualitative research for many years, their use and impact in research reports and journal articles as a qualitative method are still growing. Information for this report was gathered from a wide range of sources, including radio and television broadcasts, summaries, government, stakeholder, and institutional manuals; background papers from various newspapers; unauthorized and authorized books and journals; summaries; institutional reports; and statutes.

The qualitative method's cost-effectiveness depends on gathering data in an open manner. According to Mahajan (2018), obtaining the most appropriate results through the

qualitative method requires an explicit, methodical, and disciplined approach. He clarifies that it is inductive when examining the revelations and implications in each particular circumstance. According to Ronald, Jackson, Darlene, Drummond, and Camara (2007), the primary goal of qualitative research is to expand on a particular line of thinking. The methodology, on the other hand, identifies the course of action and entails addressing a theoretical or practical context, whereas the qualitative method focuses entirely on data collection techniques. These are the most crucial elements of a research design.

According to Cropley (2022), the qualitative approach is a process that examines how individuals conduct their experiences, whether they be physical or verbal. It does this by going through a meticulous process to comprehend the concept of action and then using the concepts of behavior to analyze these understandings. In his elaboration on certain form and pattern components, Cropley (2022) represents the historical approaches to social science.

According to Golafshani (2003), qualitative research is a strategy that relies on a natural understanding of the topic under investigation, particularly its context or setting. It is commonly understood to be a way to generate results and apply them successfully using quantification techniques. As a result, research is anything that gathers data from the real world, where facts come to light organically.

By contrasting the three Tshwane-based universities, this study used the qualitative research approach to show the contribution of higher education institutions to the reduction of unemployment. According to Cropley (2002), the qualitative approach compares issues in a distinct way, primarily using concepts that make evident how subjective reality is. He draws attention to the challenge of qualitative research, which is to gain a thorough grasp of these real-world acts and to experiment with people's perceptions of the nature of the universe and how it is organized and interpreted in daily life.

Using document analysis, Bowen (2009) demonstrates the benefits and constraints of the qualitative method: Less time-consuming and more effective in analysis; more readily accessible to the general population, Reduced expenses, more reliable data and records,

constant benefits for the research process, and a broad scope of coverage due to the duration.

Finally, the qualitative study, the sole technique or strategy to be employed in order to gather adequate data directly from the university listed in this report was document analysis. It also made it feasible to evaluate the data from those documents clearly in terms of potential solutions to problems encountered.

### **3.3 DATA COLLECTION**

#### **3.3.1 Primary data**

In qualitative research, there are more options for the researcher to gather information from many sources in order to fully understand the current condition. Higher education's ability to lower unemployment could be accurately evaluated by document analysis, and university policies pertaining to social and economic growth needed to be investigated. This implies that actions to improve policy and increase the importance of universities in the economy can be taken using the qualitative technique. This was accomplished by looking through records and analyzing the policies of three Tshwane-based universities (Bowen 2009).

Document analysis was used to collect data for this research from at least three Tshwane-based universities. The report's interpretation was based on a variety of sources, including articles, newspapers, institutional statutes from the three colleges, and broad documents retrieved from their websites (Cropley 2002).

The knowledge on the function of higher education institutions in the economy, particularly in South Africa, was scarce, which is why gathering it from documents and policy research was crucial. Therefore, the most important component of this research was the main data. Information for this report was gathered during the document and policy analysis process, which enhanced the other data collected (Bowen 2009).

#### **3.3.2 Secondary data**

Additional information was gathered from annual reports and articles written by the three universities. Most of those resources were in the public domain. Articles and newspapers were additional sources of secondary data regarding the role of higher education

institutions in tackling unemployment because the websites of the universities were also viewed. Nonetheless, the majority of publications and papers focused mostly on other experts' studies on higher education in Africa (Golafshani 2003).

The data gathered from document analysis paints a clear picture of the traits and function of higher education in the economy, providing further insight into the true purpose of universities and areas in which their jobless policies in South Africa can be strengthened. The rich information and essential data sources contribute to closing the knowledge gap and improving the understanding of the relationship between higher education and the economy (Bowen 2009).

### **3.4 DATA ANALYSIS**

According to Bowen (2009), comprehending how documents are collected for data might lead to the one and only data source required for research design. Sometimes the only thing that can make a connection between the research topic and issue is the original source. Sorting the information gathered from such documents could help the study challenge make more sense.

Data analysis begins with data collection, aiding in the identification and discovery of the issue for which the researcher's completeness of the data is necessary for correction. Nonetheless, the report needs to describe the unexpected findings and the discovery through data analysis. As a result, following document analysis, there ought to be explicit fact checks and reviews that facilitate the process of finding gaps and filling them. Additionally, the research topic and issue will be in line with the data analysis from this report (Golafshani 2003).

### **3.5 VALIDITY AND RELIABILITY OF DATA**

#### **3.5.1 Validity**

According to Brink (1993), the main goal of validity is to show what exists and the extent to which a scientific experiment can measure what it is intended to assess. Validity is concerned with the truth and correctness of scientific results. Forms of validity that are currently employed in a large number of research publications and reports are defined by Brink (1993). These types of validity are referred to as external and internal validity.

Internal validity, according to Brink (1993), is the degree to which research findings accurately represent reality as opposed to being the product of unrelated variables.

### **3.5.2 Reliability**

Brink (1993) asserts that accuracy in data collection and capture, as well as consistency and repetition of information, are the main components of reliability. According to Golafshani (2003), dependability is the degree to which results consistently follow the same pattern while employing the same methodology. According to Golafshani, validity is impossible without dependability, which is usually verifiable through qualitative approaches in research.

### **3.6 ETHICAL CONSIDERATIONS**

However, its goal frequently includes the comprehension of real-life phenomena and the efficient study and investigation of behavior while defending the rights of research contributors, enhancing research validity, and upholding scientific honesty (Bhandari, 2021). Ethical considerations are regarded as a set of propositions that always guide research design and practice.

The university ethics committee applied TUT's ethics policy, and this report fully complied with and satisfied TUT's ethical criteria. The manner in which document analysis was conducted in accordance with the guidelines established by the university's ethical clearance process informed the information and data gathered for this report. The confidentiality of the document was respected during the whole study process, and the data gathered for the reporting process would be kept on file for a period of three years. There was never any risk involved and no interviews were done.

### **3.7 CONCLUSION**

This chapter explained the data collection process, the essential steps taken to comply with the university's ethical policy, and how the ethics applied to this report. It also described the research strategy, methodology, and source verification of the data, which came from a variety of publications, journals, articles, and organizations. The report's Chapter 4 delves into the conclusions and results that emerged from the data analysis discussed in this chapter.

## **CHAPTER 4**

### **ANALYSIS AND PRESENTATION OF FINDINGS**

#### **4.1 INTRODUCTION**

In addition to reviewing the findings and analysis of qualitative data gathered from multiple sources that also connect the chapters from the start of this study until Chapter 4, this chapter explains the part that higher education institutions play in lowering unemployment. According to Van Rensburg, Chapter 3 outlined the research process through measurement and statistical analysis. The study's conclusions and outcomes are the main topic of Chapter 4, which provides useful information about how three universities contribute to City of Tshwane economic activity (Baloyi, 2015). The goal of the study was to evaluate three Tshwane-based universities. The results are presented based on findings from prior studies, documents, literature reviews, websites, and other sources.

#### **4.2 THE FRAMEWORK OF FINDINGS AND ANALYSIS**

In order to build a clear level of details from most sources, the study was able to employ useful information from the qualitative data acquired, which is explored in the framework of the findings and analysis (Mohajan, 2018).

The study's research methodology involved gathering qualitative data under the direction of the most interpretive ideas and experiences, which are typically founded on regional and global knowledge that has been accumulated by a team of men and women. From the commencement of the investigation to its conclusion, the criteria and techniques used to analyze the data were always made clear. This included descriptions and background in great detail (Brink, 1993). This chapter compares three Tshwane-based universities in order to compile and synthesize data that was discovered throughout the process of evaluating the contribution of higher education institutions to the decrease of unemployment (Baloyi, 2015).

The chapter also examines the data that was gathered in an effort to accurately comprehend and analyze it. Establishing the validity and trustworthiness of data requires a comprehension of the collected data as well as its interpretation, guided by a brief

history of the three institutions and their economic function (Brink, 1993). The information gathered relates to how Tshwane's three universities, which are higher education establishments, handle unemployment. Analysts and scholars have been the driving forces behind the extent to which data on higher education have been gathered from both domestic and foreign sources. Electronic data collection and analysis were done.

In order to acquire scientific knowledge, the study combined theory and practice, with the primary goal being to work with people to solve actual problems. It does, however, draw from a wide body of historical writing from a variety of academic disciplines (Mohajan, 2018) and integrate the conclusions and analysis of data analysis, interpreting the research using the qualitative technique.

### **4.3 FINDINGS REGARDING LITERATURE REVIEW**

The majority of the literature related to the research issue was evaluated for this study; nonetheless, the literature's findings emphasized the significance of the study's data collection, data analysis, and information gathering components (Baloyi 2015). The reviews were added as theoretical data that may be further developed in light of the three universities' contributions to the fight against unemployment. The results of the literature review, which validated this chapter, concentrated on the economic contributions of both continental and local higher education institutions. The literature-based conclusions also emphasized the many tenets and developments of higher education establishments as well as their function in the economies of South Africa and other African countries (Mohajan, 2018).

#### **4.3.1 The viewpoint of African higher education**

It was discovered that African higher education institutions underwent distinct transformations. Moreover, the transformation of universities was associated with their role as labor market providers, creating intense competition among communities throughout the continent. As a result, higher education has served as a political tool and a means of advancing government policy objectives. Higher education was shown to have a wide range of tools that might be used to enforce changes that would benefit society

through innovation and economic growth, rather than only being about information and skills.

### **The following findings are interpretations of higher education – Africa**

It was argued that the development sector for economic growth and the abolition of inequality in Africa should adopt the Western system of higher education. However, because higher education in Africa was not developed with economics in mind, it became the focal point of government programs aimed at resolving the various issues brought about by colonial past. The colonial system, which eradicated African knowledge and customs, was sustained by the Western higher education system. Thus, the very Western higher education system on the African continent served as both the basis for the establishment of European or Western countries' economic dominance over other regions of the world and a tool for advancing Western policies and strategies to subjugate African states (Assié-Lumumba, 2006).

#### **The key factors are as follows:**

- Higher education was established without a well-designed framework that addressed economic development and knowledge.
- In order to sustain economic expansion on the continent, they disregarded the introduction of an indigenous learning system that had previously assisted in creating and uniting many African societies and revolutionized African culture.
- They failed to match higher education with an indigenous learning system that could boost productivity, economic growth, and state competitiveness while also serving as a foundation for local sovereignty.
- In order to achieve high performance across all economic sectors and throughout Africa, higher education needs to be better integrated into the drive to reinforce and improve higher learning institutions' efforts to boost knowledge, innovation, development, and skills and was not done by African countries.

### **4.3.2 The context of higher education in South Africa**

The data below pertains to South African higher education institutions: pre-1994 and post-1994. Prior to 1994, higher education supported and underpinned the apartheid system, which benefited Western nations. Therefore, the main goal of the white administration was to advance the superiority of white communities over black communities rather than to recognize the socioeconomic and human rights in the nation (Bojabotseha, Mkwanzazi & Moloji).

Higher education was a component of the internal mechanism used by the white apartheid administration to eradicate knowledge of the black population and establish institutions that viewed black communities as rivals. Under apartheid, the purpose of higher education was to support the white-only apartheid government system, which prevented black populations from accessing economic and high-quality education (Brits, 2010:25).

Higher education after 1994 was intended to correct and reform the system that the white apartheid regime had established and to build a human and value-based mechanism. The major goals were to promote a democratic environment that would benefit the whole country, guarantee access for the majority-black communities, raise the standard of living for all South Africans, establish prosperous, well-run higher education institutions that could impart the knowledge and skills required by the nation, and make sure that the education sector had the resources it needed to address issues of diversity and inequality as well as to concentrate on developing and enhancing the skills of academics who could help solve socioeconomic issues (Badat, 2010)..

### **4.4 FINDINGS REGARDING GOVERNMENT POLICIES AND STRATEGIC PLANNING DOCUMENTS**

These findings specifically address higher education plans and documents issued by democratic governments after 1994. The policies sought to create plans for the seamless transition of higher education to serve all societies, primarily underprivileged ones.

It was evident that the new democratic government was distinct from the previous one since it was a government of progress and change that encouraged the invention, knowledge, and skills necessary to integrate into the global community.

The policy texts, whose main goal was to provide equal opportunities and skills for growth for all, supported long-term solutions to South Africa's higher education concerns. In addition, the goal was to develop marketable talents and abilities for higher education institutions, foster positive ties with business, and increase global knowledge globally. In order to make sure that the system of higher education institutions was prepared to improve other areas of society, encourage economic growth and development, raise living standards, and address socioeconomic disparities in society, five policy documents were written. These are the documents:

- ✓ 1997 Higher Education Act (101 of 1997)
- ✓ Education White Paper 3 (15 August 1997)
- ✓ Reconstruction and Development Programme (RDP 1994),
- ✓ Growth, Employment and Redistribution: a macroeconomic strategy (GEAR 2000)
- ✓ National Development Plan (2012): a vision for 2030.

### **The 1997 Higher Education Act (101 of 1997)**

The Higher Education Act (101 of 1997) was determined to be a document whose primary goals were to reorganize higher education in order to meet the nation's needs for human capital, to create a single educational system that addressed the previous one, to guarantee equal access to higher education, and to ensure that academic quality met international standards. Additionally, laws were established to grant higher education institutions autonomy and freedom, enabling them to report to their councils rather than the government while receiving state subsidies.

The Act coordinated and restructured the nation's higher education landscape by developing transformation principles for education, thereby resolving the majority of issues raised by the previous apartheid higher education system and enforcing equal higher education for all. Therefore, rather than emphasizing the significance of higher education institutions in economic growth and development to reduce poverty, the Act represented the global educational system and access to these institutions.

## **The Education White Paper**

The findings in this area simplified the goal of the White Paper and how it helped establish the groundwork for a policy framework pertaining to education in South Africa by concentrating on the education sector. The government program known as the White Paper of 1995 spearheaded the process of transforming the education sector and creating a single, central system that would benefit everyone in society. The 1997 White Paper came to be associated with the reform of the education system into one that supported the expansion of the economy, the distribution of possibilities, and the development of society in addition to strengthening the recently elected democratic government and serving as a labor market supplier.

The 2001 White Paper aimed to improve special education and ensure that all members of society were included, while also refining the reforms made in the educational sector and expanding its scope to include a variety of learning requirements. The 2004 White Paper followed, with the primary goal of bringing the educational system into compliance with e-education in order to fulfil the demands of the global education sector. The adoption of ICT by society was a crucial step toward improving education, creating new opportunities, and ensuring adequate access to postsecondary education.

In order to create a plan for changing the higher education institution system, South African higher education institutions merged as a result of the advent of e-learning. Higher education institutions were merged in order to reorganize their size and structure, improve the quality of education they offered, and guarantee that all educational institutions adhered to the same criteria.

## **The Reconstruction and Development Programme (RDP)**

The 1997 Higher Education Act (101 of 1997) and the White Papers associated with the Reconstruction and Development Programme materials are mostly covered by the conclusions in this chapter. In terms of higher education institutions, these documents sought to correct the past (apartheid higher education institutions) by establishing a system of higher education sufficient to generate and maintain a new level of knowledge and yield better results for people or society as a whole.

Its primary goals were to address human rights and ensure that people could access higher education, which would lead to the development of knowledge and skills that would benefit the country and the government; to formulate strategies for the educational sector based on democratic principles while creating opportunities and guaranteeing access to higher education; and to rebuild the educational sector so that it is well-organized, manageable, and free from discrimination on the basis of race, gender, age, politics, geography, or religion. (south Africa. 2011. the national development plan: a vision for 2030

### **Growth, Employment and Redistribution: a macroeconomic strategy**

It was discovered that this text saw higher education as the tool that would eventually hold the key to both the development of human resources and economic progress. It was suggested that in order to provide benefits for the public and commercial sectors, the quality of education should be improved. The first priority was to establish a path for employment and investment so that people could support the economy and enhance society by earning decent wages that would raise living standards.

1. It placed a strong emphasis on the knowledge that investing in higher education may have to promote both the nation's economic growth and the long-term viability of educational institutions. The report looked at ways for universities to uphold the values of freedom and encourage the higher education system to be a major force for excellence. This could lessen social unrest and political instability while boosting access to higher education, particularly for underprivileged communities. It also sought to establish a prosperous and efficiently run network of universities that would transform lives and advance the information, skills, and development that the nation sorely required. (south Africa. 2018. growth, employment and redistribution: a macroeconomic strategy).

### **The National Development Plan (2012): a vision for 2030**

The conclusions of the National Development Plan's Vision 2030 for higher education build upon the points made in earlier papers. In addition, the text concentrated on the innovation and research required for the long-term development of the nation. This paper views higher education as a major factor in influencing people's lives for the better and as a means of resolving issues with inequality, poverty, and other social ills.

Therefore, it sees higher education as the only path to achieving the nation's goals of being globally competitive in terms of technology and productivity. To this end, it will do the following: first, establish a strong foundation for scientific achievement and higher education; second, carry out high-quality research and development related to public services; third, construct robust institutions that will prioritize science, technological innovation, and skill development; fourth, support higher education to increase the capacity for innovation and production within society; and, finally, develop a national science system within the higher education sector.

The findings from the above discussion, which included the citation of five policy documents, demonstrated how the government created and planned higher education policies after 1994 with the intention of undoing the policies of the apartheid government and restructuring higher education to become the main instrument for resolving social issues, advancing freedom and democracy, and enhancing human rights. Higher education is seen as a key tool for implementing good governance and producing more income, savings, and investment, which turns it into a major driver of economic growth and national development. (south Africa. 2011. the national development plan: a vision for 2030

#### **4.5 FINDINGS REGARDING THREE UNIVERSITIES BASED IN TSHWANE IN REDUCING UNEMPLOYMENT AND AS ENTERPRISE**

The evidence supporting the findings guides this section of the chapter. The conclusions are based on data that was compiled and categorized to represent the three Tshwane-

based universities. The purpose of the study was to identify the responsibilities of the government and to provide strategies for realizing the potential contribution of higher education to economic growth. The three universities under investigation were TUT, UP, and Unisa. As a result, data from those three universities plays a crucial role in this investigation.

The three universities—a university of technology (TUT), a conventional university (UP), and a comprehensive university (Unisa)—were selected according to their respective classifications. Their fundamental goal of being effective and efficient was realized by the successful implementation of their academic programs, as evidenced by the high rate of enrolment growth and the fact that the majority of students come from underprivileged backgrounds.

The Higher Education Restructuring and Transformation Guidelines for Mergers Plan 2002 (Asmal), which was implemented in 2004 by the South African government (higher education sector), governs the university mergers that the three universities are a part of. The framework supported both the accomplishment of the higher institutional aims and the application of government policies. In addition, the primary goal of the merger was to create a new academic model and program with an eye toward expanding their curriculum offering. This was done in addition to developing a solid institutional operating plan that included the ability to either increase or decrease the number of programs offered, improve teaching and learning techniques, and establish a uniform standard for high-quality education, among other things.

The institutional statute outlined in accordance with Section 32 of the Higher Education Act of 1997 governs all three universities. The goal is to comply with legislation pertaining to the council and the university policies. They do, however, have boards, which are assemblies that make decisions and carry out laws that are advantageous to their own organizations. However, it is evident that the majority of government programs have been centralized, and the department of higher education places limitations on institutions and politicizes them while pressuring them to comply with political goals. By centralizing those regulations, colleges now face barriers to their efforts to become more productive and efficient in generating employment, sharing information, and engaging in economic activity.

The government, operating under the auspices of higher education institutions, prudently makes sure that the objectives of public higher education institutions are aligned. In addition, rules governing higher education are established by the government to stop institutions from enacting their own policies. Due to this, the majority of foreign communities attempted to force their rules on South African higher education institutions, not for the benefit of the nation but rather of other countries.

In terms of providing the highest caliber education and turning out the most graduates, the three universities in the Tshwane region play a pivotal role in transforming the city and fostering community development. As a result, the city's student population has increased and its student body is now more diverse in terms of race. One of the city's accomplishments in terms of diversification and its greatest means of bringing the business community, corporate organizations, and society together.

In conclusion, the data shown above demonstrates that by establishing those businesses to contribute to economic growth, the three institutions can lower unemployment in Tshwane. Higher education can contribute to the economy as an industry to generate a significant number of job possibilities if the government were to consider such a proposition. Additionally, the enterprise was incorporated into the business model as a result of a business that adopted the following actions, placing its policies outside of the academic model:

- ✓ The aim is to foster a culture of job creation and business development in the city to tackle environmental issues and enhance the provision of best-placed services.
- ✓ To recognize how graduates and non-graduates have improved their abilities and understanding to work together, build their confidence, and increase their income through entrepreneurship, all of which have a positive impact on the creation of jobs.
- ✓ To contribute to the expansion of both public and private enterprises that benefit society by encouraging saving and investment.
- ✓ To assist people in being more productive over extended periods of time in order to improve lifetime earnings, quality of life, and employment.

- ✓ To raise expenditure in order to maintain income growth, which promotes economic expansion, reduces poverty, raises tax revenue for governments, and strengthens public finances.

The reply above went on to say that the government and higher education needed to undertake a lot more effort in relation to those three universities. On the other hand, one reply asserts that there is ample proof that higher education may employ universities as instruments through business and economic models that are essential to the process of creating jobs and economic progress. According to this chapter, universities contribute to the economy by introducing new ideas into the political system, and regulations that are put into place shouldn't impede education.

#### **4.6 CONCLUSION**

As higher education works to address issues in a society that has high rates of poverty, unemployment, and crime, among other issues, it will become increasingly pertinent and significant. While it may be argued that universities will eventually fail to prioritize teaching and learning, this will not come to pass because universities' success as agents of economic development and growth will eventually enable universities or the higher education sector to guarantee the success of research and development as well as innovation missions.

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The primary goal of this chapter is to offer recommendations based on the research findings by contrasting the study's aims and findings with its analysis of the study report. But this chapter's goal is to examine the advantages and usefulness of policy development and implementation with relation to the function of higher education institutions with regard to research topic and research problem (Baloyi, 2015).

In keeping with this goal, this chapter also explains through research a number of variables that can support the contribution of universities to the decline in unemployment,

while also modifying the plan and tactics to lessen some of the risks associated with policy execution. This guarantees that the conclusions and suggestions derived from the literature present both local and global viewpoints in addition to general and particular viewpoints from others.

This chapter aims to improve the study's efficacy in two ways: first, by taking a comprehensive approach, such as examining how the knowledge-based economy in the global economy supports the role of higher education institutions in economic growth; and second, by examining topics that the apartheid government and post-apartheid policies that were created to transform higher education in the nation previously promoted or endorsed. This brings us to the main focus of this chapter, which is the findings and recommendations from the standpoint of the conclusions and recommendations (Bloom, Canning & Chan, 2006).

## **5.2 REALISATION OF RESEARCH OBJECTIVES**

The goal of the research was fulfilled to the extent that it supported the validity and authenticity of the study results examined in earlier chapters, which resulted in suggestions and conclusions. Chapters 1 and 2 primarily provided an overview of the research objective, including the research problem, background information, and a literature review that ultimately enhanced the study by examining the features of higher education institutions' roles in the economy (Baloyi, 2015).

The goal of this was to strengthen the responsibilities that universities have performed throughout the world since their foundation. Higher education has always played a part in shaping and directing history under the direction of socio-political and economic policies (Woldegiorgis & Doevenspeck, 2013). This investigation found that, as a result, higher education functioned as a worldwide repository of knowledge and expertise, which facilitated the creation of formal institutions that studied knowledge in order to address production. However, wealthy (Western) nations mostly exploited the higher education system as a tool to force colonialism frameworks on developing nations.

The primary objective of Western nations was to establish a unified system of higher education that would govern the global educational landscape and serve their economic, cultural, and social objectives, among other purposes.

The goal of this study, which focuses on three institutions (TUT, UP, and UNISA), was to determine whether higher education in Africa, and particularly in South Africa, has changed to meet the nation's socio-economic and socio-political demands with the help of economic initiative. Accordingly, the focus of this study's investigation was on how far higher education institutions in South Africa and other African nations have changed their systems to function as businesses that lower unemployment and improve people's quality of life (Baloyi, 2015). This should describe, among other things, the relationship between the government and its citizens through the implementation of policies, and it should be formed around societal needs and in line with African culture.

The study identified the key ideas and used them to establish a connection to the research topic. Examples of these ideas include government policies and strategic planning documents, interpretations of higher education from African continents, higher education institutions as businesses, and an overview of higher education. Nonetheless, the majority of the data used in this research study was analyzed to support its development and came from documents, the internet, and media. As a result, this study offers insight into the historical frameworks for higher education that sparked changes in both local and global higher education institutions.

By contrasting the expansion of those three universities, the study went on to discuss how higher education in South Africa is being transformed to support economic growth. The points made in this study make use of the African higher education framework, which offers proof that international communities, rather than working for the good of the continent as a whole, are the driving force behind issues in higher education, with specific reference to South Africa.

The limitations of the study are covered in this chapter. Three Tshwane-based universities, TUT, UP, and Unisa, were selected to determine how South African universities decreased unemployment. It was emphasized how important higher education is as a system that can boost output, skills, and knowledge while also advancing the social, cultural, and economic development of the nation (Wall, 2020). The

survey found that although universities are a part of society, there is a divide between them, the government, and society.

The study discovered that, in contrast to the apartheid administration, the government tried to exert more influence over the higher education sector through policy. The study also demonstrated how, in an effort to reform the South African higher education system, the post-apartheid administration used higher education as a vehicle to erase the historical harm brought about by the apartheid government. Therefore, it was discovered that government strategies for higher education institutions would create chances for everyone, rather than associating higher education with a particular national identity.

The government used the higher education system to create a third class, the middle class, further dividing society than it had previously.

Rather, the present government, which replaced the apartheid regime, has prioritized increasing student enrolment in order to increase access to higher education for all groups, particularly those that have been marginalized. It was anticipated that increased access to postsecondary education would spark nationwide economic expansion and, in turn, raise societal demands for economic and developmental engagement. But in order to provide wider access to education, the government needs to support universities more (UNESCO Institute for Statistics, 2014).

The interaction between universities and the government was examined in the study using higher education policies as a reference. However, this study's framework revealed numerous elements that contributed to the divide between the government, higher education, and universities, which constituted a serious threat to the implementation of policies. As a result, the public was given the impression that the government might undermine university autonomy, whereas this study explained how the government preferred to have complete control over the higher education industry for political reasons as opposed to raising the nation's economic competitiveness by enabling universities to function as businesses (Wall, 2020).

The study emphasized the role that higher education institutions play in fostering economic growth and decreasing poverty in the nation as well as the framework that could

result in positive relations between educational institutions and the government by highlighting the importance of these institutions in fostering sustainable economic growth. The majority of the data included in this analysis came from studies that clarified the existence and magnitude of higher education's contribution to economic growth. The study recognized that the numerous universities in the nation were diverse and had characteristics that may affect the function of higher education in the economy, therefore it was decided to focus on three universities, the majority of which are located in Tshwane. Due to the fact that some regulations have unfavorable effects, universities across the nation have various policy settings and conduct when it comes to how they might support the national economy. Some academics contend that historical and political obstacles have influenced higher education in the nation and melded university operations. Even if the study believes that some conclusions may apply broadly, Bloom, Canning, and Chan (2006) stated that the higher education system or sector must allow universities to be role participants in economic growth by recognizing the many various methods among those universities.

### **5.3 RECOMMENDATIONS**

Drawing from the findings of earlier chapters as well as the research conducted for this study, the following suggestions are made. Thus, by highlighting a few topics for further research, the study advances knowledge of higher learning values and their significance to the economy (Karalasingam, 2019). These suggestions are designed to draw attention to the conclusions and analysis from earlier study chapters. The recommendations logically build on and classify all information pertaining to the research topic, research problem, research point, and objectives, and they also analyze the data gathered from various sources.

The results of this study provide evidence that higher education institutions play different roles in different parts of the world. However, compared to Western nations, the USA, and Asia, the understanding of the importance of higher education institutions in Africa may differ. Additionally, it could cause people to perceive things differently, particularly in African societies, which could lead to the belief that, in comparison to other continents, higher education has little bearing on the continent of Africa's economy.

### **5.3.1 Government policy recommendations**

After the 1994 election, the apartheid government's policies were formally and legally abolished. New policies designed to include the oppressed majority of Black people in particular were developed when the new government—a democratic government—formally took office.

The study employed several methods in Chapter 4's examination of the documentary data, and these proved effective in examining the intricate relationships between governmental policies and the higher education system as a whole. This study's theoretical framework reflected the nature of government policy, which aimed to upend the injustices and inequalities of the previous administration (apartheid) and enhance the standard of higher education institutions and their contribution to the economy.

Remember that political currents dictate how the government affects society through policies related to higher education. As a result, the study considered the actions that would clarify the background of the government policy changes pertaining to the higher education industry. According to Wall's 2020 research, the majority of policy documents emphasized variables that would present chances for government policy to change higher education institutions.

The study discovered that political and historical narratives characterized the post-1994 government's policymaking for higher education. The report also found problems in the higher education system, including the absence of a unified vision across government agencies, universities, and higher education ministries; the absence of interaction between academia and society in the development of higher education policies, as well as the communication gap between higher education, universities, and society.

It was also discovered that academics were not involved in the execution of higher education policies, which contributed to the widespread belief that the nation's leaders were constantly trying to exert control over the higher education industry. The results supported the theory that the politicians and policymakers were more interested in defining the governance strategy in terms of the apartheid laws, so asserting a direct connection between the nation's goal of reforming higher education and societal values.

The study did, however, affirm the significant role that academic institutions may play in an economy as businesses and allies with legislators who have society's best interests at heart.

### **5.3.2 Higher education policy recommendations**

According to the report, higher education has become more significant in national economies as a result of the rising rivalry in the global economy, which calls for improvements in societal standards of living and quality. Higher education institutions must change in order to change the political economy and society, as they play a crucial role in changing the economy and people's quality of life. But in order to execute policies that would support economic growth, higher education transformation requires a radical strategy (Baloyi, 2015).

Both higher education and university policymakers must integrate ideas that define the features of society to link with the higher education system in order to employ extended ideology to improve and expand higher education policy solutions. This could lead to the creation of a modernized national identity for South Africa and act as a link between socioeconomics and higher education in terms of policy.

The report also made clear that more students would leave South Africa for other nations, particularly Western nations, where higher education is offered. The rationale is that variety is diluted when it is accommodated to the population's heterogeneous makeup. It may be argued that Western academic traditions and intellectual cultures are preferred over African cultures in the majority of South African higher education regulations (Baloyi, 2015). Universities must play a major part in the nation's economic development in order to improve their enterprise competitiveness and contribute to economic growth. Because universities are a part of society, their development policies ought to connect them with it.

According to the study, instead of relying solely on research and development, higher education might enable universities to fully open up their participation in the market as businesses, collaborative businesses, or private businesses. Higher education has the

ability to greatly benefit young people and recent graduates in this way, as well as to lower unemployment and increase the number of appropriate jobs available to all graduates.

### **5.3.3 University recommendations**

According to the report, most universities were not set up to take advantage of their potential to help the economy by reducing unemployment and poverty. This primarily impacts the vast majority of youth and recent graduates who require rescue and emancipation from criminality and mental health issues in order to mitigate the public issue.

Owing to the space in South Africa's multicultural society, universities ought to take on a wider range of responsibilities as an economic enterprise, including job creation and unemployment reduction. Additionally, it will serve the interests of the people for colleges to compete in the market since it will enable them to emphasize economic knowledge that will benefit the nation as well as skills over knowledge.

Curriculums centered on expanding and boosting the economy through employment development will also be of interest. But curriculum modifications ought to concentrate on fostering competitiveness that will grow the capital economy sector as well as the productivity of commercial interests (Baloyi, 2015). To further social development and ease the budgetary limitations that impact the nation's economy, universities need to offer substantial proposals to bridge the divide and ease tensions with the higher education department.

Another suggestion is that universities should contribute to the market rather than try to impress by expanding their role in the economy, as this will force the private sector and other sectors out of their comfort zones. As a result, people may start competing directly with one another while society gains. According to this study, TUT and UP are the two largest residential universities. As such, they have enormous potential for engaging with society and connecting it to the economy. However, in order to realize this potential, it is crucial to concentrate solely on the Tshwane region rather than the entire nation. Unisa may contribute to TUT and UP by expanding its research and development, thereby fulfilling the function as a provider of economic knowledge.

The report recommends that universities work with departments of higher education to develop policies that are based on community engagement and participation. In addition to facilitating collaboration, collaborative policy creation will allow the higher education sector to continue to hold its leadership position in economic knowledge and national growth. The study recommends that government policymakers adopt a new strategy to enable universities to support the economy through enterprise growth as well as research and development.

The study discovered that similar policy styles of negotiation and consultation are used by higher education and the government, but not by their equivalents in society. This research also shows that if higher education institutions and departments speak with one voice, it will help lower unemployment and give South Africans access to high-quality education.

#### **5.4 FUTURE RESEARCH AND LIMITATIONS**

The study's limitation was its concentration on just three Tshwane-based universities (TUT, UP, and Unisa) that are part of the higher education sector (Baloyi, 2015). Nonetheless, the study made use of qualitative research methods. Additionally, the study explored the function of universities as an enterprise in an economy by utilizing changes to higher education policies. The study also emphasized the role that universities have played in the evolution and modifications of higher education policies, as well as the global experiences of some higher education institutions (Wall, 2020).

It is accepted that the study only collected a limited amount of data through the examination of documents, newspapers, and media, which may have aided in the generation of more information. Nonetheless, the utilization of organized data that enhanced and concluded this study's examination was made possible by the documentary analysis. Another drawback of the study is the absence of other stakeholders, including representatives from government and academia, higher education departments, and university administrations. Nonetheless, the alternative data was obtained from a few websites run by government agencies, universities, and the department of higher education, all of which were crucial to this investigation.

## **5.5 CONCLUSION**

The analysis made it clear that universities should leverage the economy's potential rather than try to regulate it. Clear policies that encourage institutions to participate in the market and give graduates, students, and society at large access to jobs should be part of higher education. Examining the capacity of those graduates, students, and society to advance their skills and knowledge will be their function in the economy. Nonetheless, by creating curricula specifically designed for this purpose, higher education policy development will provide universities with an alternate method of measuring output. Therefore, the growth strategies of higher education institutions are what give universities their power and how they contribute to the economy.

## **REFERENCES**

2. AFRICA, S. 2021. *Youth still find it difficult to secure jobs in South Africa*. |Statistics South Africa [online]. Available from:<<http://www.statssa.gov.za/?p=14415>> [Accessed: 03/12/2021].
3. ALEMU, S.K. 2018. The meaning, idea and history of university/higher education in Africa: a brief literature review. *FIRE: Forum for International Research in Education*, 4(3):210-227.
4. ANIS MAHOMED KARODIA, AHMED SHAIKH & DHIRU SONI 2015: *The South African Universities Post – Merger Mess: Problems and Challenges of Transformation; ISSN 2039-2117 (online) ISSN 2039-9340 (print) Mediterranean Journal of Social Sciences MC SER Publishing, Rome-Italy Vol 6 No 3 S1 May 2015*
5. ASHWIN, P. & CASE, J.M. 2018. *Higher education pathways: South African undergraduate education and the public good*. African Minds.
6. ASSIÉ-LUMUMBA, N.T. 2006. *Higher education in Africa: crises, reforms, and transformation*. Working paper series. Council for the Development of Social Science Research in Africa.
7. AUDRETSCH, D.B. & LEHMANN, E.E. 2005. Does the knowledge Spillover theory of entrepreneurship hold for regions? *Research Policy*, 34(8):1191-1202.
8. AUDRETSCH, D.B., CUNNINGHAM, J., KURATKO, D., LEHMANN, E.E. & MENTER, M. 2019. Entrepreneurial ecosystems: economic, technological, and societal impacts. *The Journal of Technology Transfer*, 44(2):313-325.
9. AUDRETSCH, D.B., LEHMANN, E.E. & PALEARI, S. 2015. Academic policy and entrepreneurship: a European perspective. *The Journal of Technology Transfer*, 40(3):363-368.
10. BADAT, S. 2010. *The challenges of transformation in higher education and training institutions in South Africa*. Paper commissioned by the Development Bank of Southern Africa.
11. BALOYI, M.C. 2015. *Mergers in South African higher education: realization of policy intentions?*
12. BITZER, E. 2009. *Higher education in South Africa: a scholarly look behind the scenes*.

13. BLASS, E. & HAYWARD, P. 2014. *Innovation in higher education; will there be a role for “the academe/university” in 2025?*
14. BLOOM, D., CANNING, D. & CHAN, K. 2006. *Higher education and economic development in Africa.*
15. Book Title: Places of Engagement 2021, **Huang Hoon Chng**: The Idea of the University: National Asset or ivory tower; Book Subtitle: Reflections on Higher
16. BOWEN, G.A. 2009. *Document analysis as a qualitative research method.* Western Carolina University.
17. BRINK, H.I.L. 1993. *Validity and reliability in qualitative research.* (Paper delivered at SA Society of Nurse Researchers’ Workshop, March 19, RAU).
18. BRITS, H.J. *The South African higher education sector.*
19. BUNTING, I. 2006. *The higher education landscape under apartheid.*
20. CARDNO, C. 2018. Policy document analysis: a practical educational leadership tool and a qualitative research method. *Educational Administration: Theory and Practice*, 24(4):623-640. Available from: [www.keuey.ne](http://www.keuey.ne)
21. CIVERA, A., DONINA, D., MEOLI, M. & VISMARA, S. 2020. Fostering the reation of academic spinoffs: does the international mobility of the academic leader matter? *International Entrepreneurship and Management Journal*:1-27. doi:10.1007/s11365-019-00559-8
22. CIVERA, A. LEHMANN, E.E. PALEARI S. & STOCKINGER, S.A.E. 2018. Higher education policy: why hoping for quality when rewarding quantity? *Conference on Higher Education in Modern Ecosystems: Efficiency, Society, and Policies, held in Augsburg, Germany on 12-14 March.*
23. CIVERA, A. & MEOLI, M. 2018. Does university prestige foster the initial growth of academic spin-offs? *Economia e Political Industriale*, 45(2):111-142.
24. CIVERA, A., MEOLI, M. & VISMARA, S. 2017. Policies for the provision of finance to science-based entrepreneurship. *Annals of Science and Technology Policy*, 1(4):317-469.
25. CLOETE, N., MAASSEN, P. & BAILEY, T. 2015. *Knowledge production and contradictory functions in African higher education.* Cape Town: African Minds. Available from: [www.africanminds.org.za](http://www.africanminds.org.za)

26. CLOETE, N. 2014. The South African higher education system: performance and policy. In: *Studies in higher education*. do10.1080/03075079.2014.949533
27. COLOMBO, M.G., DAGNINO, G.B., LEHMAN, E.E. & SALVADOR, M.-P. 2019. The governance of the entrepreneurial ecosystem. *Small Business Economics*, 52(2):419-428.
28. CUNNINGHAM, J., LEHMANN, E.E., MENTER, M. & SEITZ, N. 2019. The impact of university-focused technology transfer policies on innovation and entrepreneurship. *The Journal of Technology Transfer*, 44(5):1451-1475.
29. CUNNINGHAM, J.A. & LINK, A.N. 2015. Fostering university-industry R&D collaborations in European Union countries. *International Entrepreneurship and Management Journal*, 11(4):849-860.
30. DAYTON, D. Reviewed by: Thompson. J, 2019. Peace University 15 East Peace Street Raleigh, NC 27604 Job Board: Economics subject leader: Round wood Park School, Harpenden Hertfordshire
31. DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS (DBIS). 2014. *Corporate report. Improvement plan*.
32. DEPARTMENT of Higher Education and Training (DHET) see SOUTH AFRICA. Department of Higher Education and Training.
33. DEPARTMENT of Higher Education and Training (DHET) see SOUTH AFRICA. Department of Higher Education and Training April 2024.
34. Dr. Pitso 2020 Mail & Guardian October 2019 article on VUT
35. DUNJWA, L. 2010. *Statement on the launch of "A hi fambeni"*. African National Congress parliamentary caucus.
36. Education in 2040 - A Global Approach Book Editor(s): Armand Heijnen and Rob van der Vaart Published by: Amsterdam University Press
37. EGBULE, P.O. & OGHOGHO, O. 2018. *Leapfrogging education for sustainable national development in Nigeria: addressing some pessimism*
38. ESSOP, A. 2020. *The changing size and shape of the higher education system in South Africa, 2005-2017*. Ali Mazrui Centre for Higher Education Studies, University of Johannesburg.

39. GOLAFSHANI, N. 2003. Understanding reliability and validity in qualitative research. *TQR*, 8(4).
40. GUERRERO, M., CUNNINGHAM, J.A. & URBANO, D. 2015. Economic impact of entrepreneurial universities' activities: an exploratory study of the United Kingdom. *Research Policy*, 44(3):748-764.
41. HAYTER, C.S. 2016. A trajectory of early-stage spinoff success: the role of knowledge intermediaries within an entrepreneurial university ecosystem. *Small Business Economics*, 47(3):633-656.
42. HUNADY, J., ORVISKA, M. & PISAR, P. 2019. What matters: the formation of university spin-offs in Europe. *Business Systems Research*, 10(1):138-152.
43. JACKSON II, R.L., DRUMMOND, D.K. & CAMARA, S. 2007. *What is qualitative research?* 21-28.
44. JACKSON, R. 1990. *Higher education, industry and the economy*. (Lecture given at Bolton Institute of HE).
45. KIRBY, D.A. 2006. Creating entrepreneurial universities in the UK: applying entrepreneurship theory to practice. *The Journal of Technology Transfer*, 31(5):599-603.
46. KRAAK, A. & PRESS, K. (Eds.). 2010. *Human resources development review 2008: education, employment, and skills in South Africa*.
47. KROMYDAS, T. 2017. *Rethinking higher education and its relationship with social inequalities: past knowledge, present state and future potential*. doi:10.1057/s41599-017-0001-8
48. LEFA, B.J. 2014. History and background of South African education. *History of higher education in South Africa*.
49. LEIBER, T., STENSAKER, B. & HARVEY, L.C. 2018. Bridging theory and practice of impact evaluation of quality management in higher education institutions: a SWOT analysis. *European Journal of Higher Education*, 8(3):351-365.
50. LEWIS, P., SAUNDERS, M. & THORNHILL, A. 2007. *Research methods for business students*. 4th ed. Harlow, Essex: Pearson Education.

51. MAPURANGA, B. 2016. The role of universities in economic development. *Journal of Economics and Sustainable Development* [Online], 7(6). Zimbabwe Open University, Mashonaland East Region.
52. MANKOLO Lethoko: *Taking Stock Thirteen Years Later: An Investigation into the Impact of Mergers on Institutions in the Higher Education Landscape in South Africa; Alternation 23,1 (2016) 15 – 39 ISSN 1023-1757*
53. MASELWANYANE, O.P. 2018. *The potential of urban maker spaces as common-based peer production in innovation, education, and community building in Braamfontein.*
54. MEOLI, M., PALEARI, S. & VISMARA, S. 2019. The governance of universities and the establishment of academic spin-offs. *Small Business Economics*, 52(2):485-504.
55. MEOLI, M., PIERUCCI, E. & VISMARA, S. 2018. The effects of public policies in fostering university spinoffs in Italy. *Economics of Innovation and New Technology*, 27(5-6):479-492.
56. MOHAJAN, H.K. 2018. *Qualitative research methodology in social sciences and related subjects.* Munich Personal RePEc Archive.
57. NDINGA-KANGA, M., VAN DER MERWE, H. & HARTFORD, D. 2020. Forging a resilient social contract in South Africa: states and societies sustaining peace in the post-apartheid era. *Journal of Intervention and State Building*, 14(1):22-41
58. OLIVER, E. & OLIVER, W.H. Department of Christian Spirituality, Church History and Missiology, University of South Africa, South Africa.
59. O'LEARY, S. 2015. The role of enterprise and entrepreneurship within higher education and effective economic governance across Central and Eastern Europe. *Economics and Sociology*, 8(2):143-153. doi: 10.14254/2071-789X.2015/8-2/11
60. Programme on Innovation, Higher Education and Research for Development IHERD; Government of Higher, research and Innovation in Ghana, Kenya, and Uganda

61. RAE, D. 2007. *Connecting enterprise and graduate employability challenges to the higher education culture and curriculum?* Lincoln Business School, University of Lincoln, Lincoln, UK.
62. RIVOMBO, A.M. & MOTSEKE, M. 2021. The failure of a community college to address unemployment in a South African province. *Community College Journal of Research and Practice*:1-13.
63. SALEM, M.I. 2014. Higher education as a pathway to entrepreneurship. *International Business & Economics Research Journal*, 13.
64. SANDSTRÖM, C., WENNBERG, K., WALLIN, M.W. & ZHERLYGINA, Y. 2018. Public policy for academic entrepreneurship initiatives: a review and critical discussion. *The Journal of Technology Transfer*, 43(5):1232-1256.
65. SCHLEICHER, A. 2006. *The economics of knowledge: why education is key for Europe's success*.
66. Shantini S Karalasingam CHAPTER 5 2019: SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER STUDIES
67. SHIN, J.C. 2012. Higher education development in Korea: *Western university ideas, Confucian tradition, and economic development* [Online]. Springer Science Business Media B.V. 201.
68. SOUTH AFRICA. Department of Higher Education and Training (DHET). 2018. *Teaching for all: inclusive teaching and learning for South Africa*. A study guide for university education students.
69. SOUTH AFRICA. Department of Higher Education and Training (DHET). 2021. *Annual performance plan*.
70. SOUTH AFRICA. 2018. *Growth, Employment and Redistribution: a macroeconomic strategy*.
71. South Africa - Higher Education - University, Universities, Students, and African:StateUniversity.com <https://education.stateuniversity.com/pages/1392/South-Africa-HIGHER-EDUCATION.html#ixzz722kk35nJ>
72. SOUTH AFRICAN HIGHER EDUCATION: PAST, PRESENT AND FUTURE; CHAPTER 13
73. SOUTH AFRICA. 2011. *The National Development Plan: a vision for 2030*.

74. SOUTH AFRICA. 1994. *The Reconstruction and Development Programme (RDP) policy framework*.
75. STATISTICS SOUTH AFRICA. 2018. *Mid-year population estimates 2018*.
76. STATISTICS SOUTH AFRICA. 2022. *Quarterly employment statistics Q2 2022*.
77. StatsSA see STATISTICS SOUTH AFRICA.
78. UNESCO INSTITUTE FOR STATISTICS. 2014. *Higher education in Asia: expecting out, expanding up; the rise of graduate education and university research*.
79. VAN DER ZWAAN, B. 2017. *Higher education in 2040: a global approach*. Amsterdam University Press.
80. WALL, G. 2020. *Governance of Scottish higher education: an analysis of institutional governance reform (2011-2017)*.
81. WIHLBORG, M. & ROBSON, S. 2018. Internationalisation of higher education: drivers, rationales, priorities, values, and impacts. *European Journal of Higher Education*, 8(1):8-18.
82. WILLIAMSON, N., BEADLE, S. & CHARALAMBOUS, S. 2013. *Enterprise education impact in higher education and further education: final report*. Department for Business, Innovation and Skills.
83. WOLDEGIORGIS, E.T. & DOEVENSPECK, M. 2013. *The changing role of higher education in Africa: a historical reflection*. Available from: <http://dx.doi.org/10.5539/hes.v3n6p35>
84. WORLD BANK IN SOUTH AFRICA. 2021. *Economic report. Overview: key development challenges*.
85. www. Tut.ac.za
86. [www.Univen.ac.za](http://www.Univen.ac.za) : Understanding the Role of Higher Education in South Africa: Perspective on the Proposals of the National Working Group
87. www. UP.ac.za
88. www. Unisa.ac.za
89. YOKOYAMA, K. 2006. Entrepreneurialism in Japanese and UK universities: governance, management, leadership, and funding. *Higher Education*, 52(3):523-555.

## **ANNEXURE A: DECLARATION OF COPYRIGHT**

TUT emphasises integrity and ethical behaviour with regard to the preparation of all written assignments, abstracts, proposals, dissertations, and theses. Although the lecturer will provide you with information regarding reference techniques, as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before submitting your written tasks.

You are guilty of plagiarism when you extract information from a book, article, web page or any other information source without acknowledging the source and pretend that it is your own work. This doesn't only apply to cases where you quote verbatim, but also when you present someone else's work in a somewhat amended (paraphrased) format or when you use someone else's arguments or ideas without the necessary acknowledgment. You are also guilty of plagiarism if you copy and paste information directly from an electronic source (e.g., a website, email message, electronic journal article, or CD-ROM), even if you acknowledge the source. You are not allowed to submit another student's previous work as your own.

You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own. Students who are guilty of plagiarism will forfeit all credits for the work concerned. In addition, the matter will be referred to the Committee for Discipline (Students) for a ruling. Plagiarism is considered a serious violation of the University's regulations and may lead to your suspension from the University. For the period that you are a student at the TUT, the following declaration must accompany all written work that is submitted for evaluation. No written work will be accepted unless the declaration has been completed and is included as an annexure in the particular assignments, abstracts, proposals, dissertations, and thesis.

**Declare the following:**

I Mantu Peter Babedi:

Student number:200200632

## ANNEXURE B: ETHICS REVIEW CHECKLIST

<p>The following checklist provides a quick way to establish whether your research project involves potential ethical issues. This checklist must be completed before potential participants are approached to take part in any research. If you answer YES to any of the items, you MAY require ethical approval for the research project. Please contact any member of the TUT Research Ethics Committee for guidance.</p>		
	<b>YES</b>	<b>NO</b>
Does the project involve a clinical trial, i.e. the testing of any novel medical or pharmaceutical interventions?		x
Is physiological/physical stress, pain or more than mild discomfort likely to result from participation in the study?		x
Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the research participants?		x
Is emotional/psychological stress, anxiety, or more than mild discomfort likely to result from participation in the study?		x
Could any research participant or his/her family/community be at risk or be adversely affected by their participation in the research project? It includes any form of cultural, social or financial risk/harm.		x

Are the research participants asked potentially sensitive, incriminating, confidential or personal questions about themselves (e.g. sexual activity, drug use) or their organization (e.g. work satisfaction)?		x
Does the project require the collection of any body tissues (e.g. muscle biopsy) or fluids (e.g. blood, urine) from the research participants?		x
Does the project involve the use of human/animal specimens and/or samples that were originally collected for purposes other than this research?		x
Will the study involve recruitment of TUT staff and/or students as research participants? <b>Note 1</b>		x
Are any of the research participants limited in their ability to give informed and voluntary consent, i.e. a member of a vulnerable population? This includes clinic patients, TUT staff members, TUT students, children, elderly, terminally ill patients, mentally disabled, institutionalized and prison groupings. <b>Note 2</b>		x
Do you have a known/special relationship with any of the research participants (e.g. lecturer-student, practitioner-patient and friend/family relationships)?		x
Will it be necessary for participants to take part in the study without their knowledge and consent at the time (e.g. covert observation of people in non-public places)?		x
Will any kind of incentive (including compensation for time and transport) be offered to research participants?		x

Are any intellectual and/or cultural property right issues (e.g. traditional healer practices) relevant to the data/results of the research?		x
Does the project involve specialized procedures that are by law reserved for registered professionals, e.g. physicians, biokineticists, nurses?		x

	YES	NO
Does the project involve the genetic manipulation/modification of any organism/plant?		x
Does your project involve any experiments on vertebrate animals?		x
Will the research project have a direct impact on the natural environment/eco-system (e.g. collection of soil samples or plant material, the implementation of a rehabilitation programme and the disposal of chemical waste)?		x
Has any organization provided financial or in-kind support for this project? This refers to potential conflict-of-interest issues that may affect the unrestricted publication of the research results. It includes direct material, the implement-station of a rehabilitation programme and the disposal of chemical waste?		x
<b>Note 1:</b>		x

<p>Where the study involves recruitment of TUT staff and/or students as research participants the <u>following documents must be submitted for review:</u></p> <ul style="list-style-type: none"> <li>• Research questionnaires (i.e. paper-based format, electronic format, structure interview)</li> <li>• Information Leaflet</li> <li>• Informed Consent documents for the respective participant groups</li> </ul>		
<p><i>Note 2:</i></p> <p>Where the study involves participants of a vulnerable population (this includes clinic patients, children elderly, terminally ill patients, mentally disabled, institutionalized and prison groupings), the following documents must be submitted for review:</p> <ul style="list-style-type: none"> <li>• Research questionnaires (i.e. paper-based format, electronic format, structure interview)</li> <li>• Information Leaflet</li> <li>• Informed consent documents for the respective participant groups</li> <li>• Letters seeking consent to enter domains</li> <li>• Assent in the case of minors</li> </ul>		X

**SCHEDULE FOR THE STUDY**

## Timeline

	2022				2023			
Research phase	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
Proposal development	█	█						
Departmental proposal presentations		█						
Assessors submission & permission		█	█					
Ethics committee submission		█	█	█				
Interview with TUT Management				█	█	█	█	
Data analysis						█	█	
Write-up							█	█



