A COMPARATIVE STUDY OF THE DEVELOPMENT OF VOCATIONAL

EDUCATION

IN SOUTH AFRICA AND CHINA BETWEEN 1948 AND 1993

Thesis presented to

Education Studies Department

Faculty of Education,

University of the Western Cape

Bellville

In fulfilment of the requirements for PhD

By

Arong

Supervisor

Professor Beverley Thaver

October 2016

I, Arong, hereby declare that this thesis is my own work and has not been

submitted previously in any form and for any degree at any university.

Signature: _Arong, X._

Date: _7 October 2016_

UNIVERSITY *of the*
WESTERN CAPE

Dedication

I dedicate this work to my father Senge, my mother

Shuxian, and my son Suyi. You are the precious treasures of

my heart.

Acknowledgment

This thesis has been the result of an effort in which numerous people participated. First, I would like to thank the Inner Mongolia Business Vocational College in China, where I have a permanent position, for helping me realize my long coveted dream of studying for a doctoral degree overseas. Without their generous support, I could not have persisted in attempting to complete the study over such a long course. I extend my profound appreciation to Professor Beverley Thaver, my supervisor. Her meticulous guidance, numerous and wise suggestions poured my work into a mould. I am also greatly thankful to Dr. Monica van Heerden. Her prompt careful correction and comments helped me to develop consistently. I feel deeply indebted to my family. They have accepted being separated from me for long periods and supported me morally and materially. Your love and encouragement are the pillars that enabled me to confidently pay full attention to my intellectual pursuit. Particular thanks to Prof Peter Kallaway, for his assistance in organising and maintaining the continuous stay in this country. Valerie and Dennis, you gave me your love on numerous occasions that reenergized my studying process. Special acknowledgement needs to be given to the staff and colleagues at UWC for their friendship and academic help. My sincere thanks also goes to all the householders where I have lived in South Africa, for looking after me to make my life and study comfortable and secure. I will never omit the beloved 'ever' people, whom I could not see, but I could truly feel the existence of their kind, objective and wise help. I have taken the long-lasting bumpy journey alone. However, I have not felt alone. This journey has added far more value and meaning to my life beyond achieving a doctoral degree. During the journey, I have been enlightened, challenged and tested as I experienced the splendid cultures of the fine people of this beautiful land. This period marks another milestone in my life.

Abstract

This study has compared and investigated the historical evolution and development of public vocational education in South Africa and China, between 1948 and 1994. The purpose of the study has been to understand and trace the relation between the internal and external socio-economic, and educational factors and determine how these impacted on the development of vocational education in both countries. The main focus was on the public senior secondary-level vocational educational systems in South Africa and China, referred to as technical colleges and skilled workers schools, respectively. In setting up the study, it discovered that in the period preceding 1948 in South Africa and 1949 in China, that while there were multi-track systems in both countries, the roles and functions were different. Following this, the thesis took as the starting point two key periods, namely, 1948/9 and 1978. While 1948/1949 marked the establishment of centralised political adminstrations and nation-state processes; the year 1978 marked the start of economic liberalisation. In both instances, the thesis addressed the question how these two powers made meaning in terms of the nature of vocational education. In this respect, it investigated the ways in which the practices that unfolded were connected to the broader political economic forces in both countries. It drew mainly on primary, secondary and tertiary documentary sources to build a broad historical descriptive narrative of vocational education during this period.

Key words: South Africa, China, Vocational Education, Development of Vocational Education System, Historical Institutionalist approach, Case Study, Historical Comparative Method.

Key acronyms

International

GDP   Gross Domestic Product
ILO   International Labour Organization
VE   Vocational Education
VET   Vocational Education and Training
TVET   Technical Vocational Education and Training
CEDEFOP Office for Official Publications of the European Communities

South Africa

ANC   African National Congress
CNE   Christian National Education
CTCP   Committee of Technical College Principals
DoE   Department of Education
FET   Further Education and Training
NQF   National Qualifications Framework
SAQA   South African Qualifications Authority
SAIRR   South African Institute of Race Relations
NCV   National Certificate Vocational

China

MoE   Ministry of Education
MoL   Ministry of Labour
NPC   National People's Congress
SSS   Secondary Specialized School
SWS   Skilled Workers School

Table of Contents

List of Tables

UNIVERSITY *of the*

WESTERN CAPE

Chapter 1   Historical Background

My study has focused on the comparison of vocational education histories between two atypical countries in a particular period. The two countries are China and South Africa with specific focus on the period between 1948 and 1994. It considers the evolution and development of vocational education systems as these were tied to the specific social and political administrations. More specifically, the thesis has sought to understand how the phenomenon vocational education in both countries relates to the political and social regimes. In the same vein, it wants to understand how the administrations in turn influenced and shaped vocational education. In the next section, I show how I arrived at this research focusing on the histories of vocational education in China and South Africa. I begin with personal experiences.

Personal Biography

One of the reasons for conducting this study has to do with my professional experience in vocational education and training in China. Before I embarked on this project I worked in a tertiary vocational educational institution, the Inner Mongolia Business and Trade Vocational College (http://www.imvcc.com), for the previous 21 years.

The College originated in 1952 and is located in Hohhot, the capital city of the Inner Mongolia Province, China. The aim of the College is to cultivate high quality applied business talents in students. At the beginning of the 21st century the College was staffed by 488 people, and had around 10 000 tertiary vocational students (http://www.imvcc.com).

During this period, I first taught biochemistry as well as food nutrition and hygiene in the food hygiene inspection major group section. After the removal of this major, I started teaching management skills and commodity science in the Business Faculty. Because of my position in the College I became interested in the managerial responsibilities of teaching staff.

The senior staff's main objective has been to introduce students and the wider public to the advantages of vocational education inasmuch as it is directly related to work production.

A second reason for conducting this study is based on certain social factors in China at the time. These were the policy initiatives of the *Opinions on Further Strengthening Vocational Education, 2004* (of seven Ministries and Commissions of the Party Central Committee, 2004), and the *Decision on Vigorously Developing Vocational Education, State Council, 2005*. Both these initiatives strongly emphasize the relevance of vocational education, the occupational qualifications system, employment entry regulations, as well as academic credit systems and outcomes assessment. By the end of the first decade of the 21st century the emphasis shifted to the articulation of vocational education In China.

In addition to the professional motivation, my personal location in South Africa was a further incentive. During my stay in South Africa, early this century, there was much debate and practices in vocational education in the country that dealt with the topic that interested me. For example, according to the *National Report* (Department of Education, 2008), The National Senior Certificate aiming at promoting transparency between vocational and general sectors was being challenged. With the National Qualification Framework, the education system was divided into three sub-frameworks, with three governance councils. The three councils Umalusi, Higher Education Quality Council and the Quality Council for Trades and Occupations could play an important role in future development of education in the country. They were established to represent the three parts of the education system, namely Basic Education, Higher Education and Trades Education, respectively (Allais, 2012). Since 2009, the Further Education and Training colleges have been governed under the newly established Department of Higher Education and Training (DHET) for the provision of post-school education within the further education and training sector. The general aim of the DHET framework is to promote articulation across the further and higher education training bands.

With the Post-School Sector established after 2011 (and the White Paper on Post School Education and Training, 2014), vocational education and training was moved to the foreground.

The fact that similar issues were prevalent in both countries at the same time has been of great interest in my research field, which is my third reason for conducting the study. Vocational education has been of special interest in both countries at the time as far as policy issues were concerned. I wanted to find an answer to the question that interested me namely: What has been the historical trajectory of vocational education in both countries? As this question raised my interest I wanted to do a comparative study across the two countries over the crucial period in the second half of the 20th century. Although the two countries are different in many respects both countries have been emphasizing the importance of vocational education in their country. Both countries have been defined as emerging economies (OECD, 2010b). In this respect, vocational education could be viewed as meeting the need of expanding markets in the face of youth unemployment (OECD, 2010b). Given my interest, it seems that a vibrant vocational education system is needed to boost the economy.

In addition to the above, the interest in the specific period in these two countries arose from the fact that the 1948/9 time line marked the beginning of two new political dispensations that have been regarded as centralized forms of political administration in South Africa and China. In China, the People's Republic of China was established in 1949 when the Communist Party came to power under the leadership of Mao Zedong. In South Africa, 1948 was the year that heralded the beginning of Nationalist Party power. It was the beginning of the political period framed by the apartheid policy of separate development. It meant the separation of people on the basis of race (Malherbe, 1977). This was also the beginning of a centralized political system that emphasized racial differences. All aspects of

people's social, economic and educational lives were being governed by this system (Rose & Tunmer, 1975).

Given these centralized administrations, I wanted to know how the two vocational education systems evolved in each country in the period from 1948/9 to 1993/4. I was interested in finding out how the vocational education practice and policies differed at systems levels. I also wanted to understand what happened in each country in order to draw inferences from some of the trends that have been at work in both countries. In other words, how have the different forms of vocational education provisioning in the two countries been linked to social and political and economic factors and administrations in each of these settings.

The following brief explanation draws on references of scholars who have studied these political systems.

Background: Historical-social Context of China and South Africa

Since the study adopted a historical angle as a historical and descriptive narrative some understanding of the historical facts about the two countries prior to 1948/9 is essential. In the sections below aspects of the early history of vocational education are outlined to provide the historical backdrop. Such a broad picture could lead to understanding the history and evolution of vocational education in China and South Africa between 1948/49 and 1993/94. It would also enable me to compare and contrast the developmental processes in the respective countries.

Historical Factors Influencing the Shape of the Vocational Education System in China

The information about the early history of China covered various centuries starting in the feudal era with final closure in the mid-twentieth century. In the early Chinese (feudal) society under a single centralized government, the content of the feudal education was dominated by Confucianism. This system was originally based on the teachings of Confucius.

He has been revered as a Chinese philosopher through the ages. He has been named the founder of mass education with the credo "provide education for all people without discrimination".

Confucianism focused on human morality and good deeds and aimed to train young men for service in government with the belief that a society should be ruled by a meritocracy. It is a complex system of moral, social, political, philosophical and quasi-religious thoughts (Zhang & Zhou, 2007, pp. 17-22).

The feudal education system consisted of two tracks, a bureaucratic track and a private education track. The bureaucratic education was founded by government and was responsible for higher education. The curriculum followed the principles of Confucianism and aimed to cultivate bureaucrats. On the other hand, the private education institutions were responsible for pre-higher education and mainly prepared their students for entry into the bureaucratic institutions. Thus, according to Zhang and Zhou (2007) it educated students in terms of literacy, numeracy, reading and writing.

In the education system, any student at the bureaucratic educational institutions, or an 'ordinary' citizen, could become a government official as long as candidates passed the imperial examination which tested the candidates' understanding of Confucianism (Zhang & Zhou, 2007, pp. 100-103). As a result, the educational institutions tended to prepare their students more for the examination than for skills in crafts and technology (Zhang & Zhou, 2007, p. 108).

Thus, while there was without question informal transmission of handicrafts between generations, it would seem that didactic vocational education was lacking in favour in the feudal education system. By the mid-19th century, there were some changes that impacted on future approaches to educational governance.

The Opium War (1840-1842) between the Chinese and the British led China to become a semi-feudal and semi-colonial society. Subsequently, there was the rise of a Westernization Movement which had been initiated by some of the central and local officials and intellectuals. These people's aim was to learn from the West to achieve self-strengthening power (Zhang & Zhou, 2007, pp.197-201). At the beginning of the second half of the 19th Century, a few of these officials started the launch of military and civilian industries, and Western-styled schools. These schools were classified as three types. There were schools of foreign languages, military affairs, and science and technology. The schools introduced modern vocational education in China (Zhang & Zhou, 2007, pp. 195-197). The schools were characterized first, by remaining outside the feudal education system. Second, the schools were supported by the departments in the relevant sectors. For example, the School of Vessel Affairs launched in 1866 was an associate institution of the Fuzhou Department of Vessel Affairs (Yu, 2010, p.14). Then, there were also some forms of integration.

Integration of industrial education in Chinese schools. The Sino-Japanese War (1894-1895) convinced many Chinese scholar-officials that further learning from the West and more fundamental institutional-level reform were both necessary and urgent (Zhang & Zhou, 2007, pp.208-210). This led to the abolishment of the imperial examination and the establishment of the first modern national education system in 1904 (Zhang & Zhou, 2007, pp.211-215).

In this education system, the aim of education was to develop students to be patriotic and loyal and to be educated in public service, military, industrial and commercial affairs (Zhang & Zhou, 2007, p. 215). In this system, the term Industrial Education emerged aiming to cultivate students to promote the development of all industrial sectors such as agriculture, industry and commerce (Zhang &Zhou, 2007, p. 213).

This education system covered the lower grades (1-5), the higher primary (6-9) and the secondary and tertiary levels (10-14). Within the respective grades, industrial education consisted of, in parallel, high primary level of industrial education and apprentice training, secondary industrial education, and about 4 years of tertiary industrial education. At this stage there was some progression and articulation among the three levels (Zhang & Zhou, 2007, p. 212).

At the beginning of the 20th century, the Chinese bourgeois democratic revolution overthrew the feudal system and founded the Republic of China (1912- 1949) under the Nationalist Party. The question to be asked has been: What was the nature of vocational education at this time? During the term of the interim government, the aim of education was to stress loyalty and moral education, while industrial and military training was supplementary (Zhang & Zhou, 2007, p.230). A new national education system followed during 1912-1913, which straddled grades 1-4 low primary, grades 5-7 high primary and grades 8-12 secondary and tertiary levels. Industrial education parallel to this education system included high primary levels of industrial education and apprenticeship training, and secondary industrial education. The 6-7 years polytechnics referred to the form between the previous tertiary industrial educational institutions and the universities. Within the education system certain articulation between the high primary and secondary levels and between the secondary level and polytechnics was available (Huang, 2009, pp.404-405).

The democratic movement opposing the movement of restoration of Confucianism, and supporting the introduction of John Dewey's pragmatism, was instrumental in establishing the Chinese Vocational Education Society in 1917. The term vocational education vocation was introduced for the first time and replaced the previous term industrial education (Chen, 2007, p.12).

The principles of vocational education were expressed as "responsibility for individualization and livelihood, preparing individuals for serving society, and improving both national and international productivity" (Chen, 2007, p.12). Vocational instruction was introduced in the "agricultural, industrial, commercial, housecraft, public service, and professional education" sectors (Chen, 2007, p. 12). In this context, a reformed education system came into being in 1922. This system was responsible for the teaching of different levels including grades 1-4 low primary, and grades 5-6 high primary, grades 7-9 junior, and grades 10-12 senior secondary, and tertiary (3-4 years polytechnics and 4-6 years university) levels (Huang, 2009, p.407). In this context vocational education included high primary and secondary levels. Vocational instruction was broad and basic enough to handle development from high primary to secondary levels and then progressing to polytechnics (Huang, 2009, p. 407).

In 1927 the Nationalist Party established their government in Nanjing China. Education which was steered by the three principles of nationalism, democracy and people's livelihood, that remained in the domain of the Party. In this framework education emphasized values such as popularization, quality and flexibility regarding localities (Mi, 2009, pp. 239-242). The vocational education system gradually consolidated into mainly five elements. These were the junior and senior secondary vocational schools running parallel in accordance with the *Vocational Schools Act of 1932*. Second, the comprehensive integration of vocational subjects was included in the syllabuses of high primary schools under the *Primary Education Act of 1932*, and of secondary general schools which followed under the *Secondary Schools Act of 1932*. Third, the vocational supplementary institutions under the *Vocational Supplementary Schools Standards Act of 1933* changed the system. Fourth, the primary element, applied vocational schools in the prefectures and counties that emerged under the *Enforcement Regulations on Founding Primary Applied Vocational Schools in*

Prefectures and Counties of 1938. Fifth, there were the short-term training classes that fell under the *Provisional Procedures of Short-Term Training Classes of 1935* (Mi, 2009, pp. 243-247). The last three elements served adults.

The history of vocational education in South Africa starting with the early phase has been addressed below.

Historical Factors Influencing the Shape of the Vocational Education System in South Africa

There is a rich literature on pre-colonial South Africa up to the mid-twentieth century in respect of vocational education. Africans had their own vocational training in the informal way, undertaken by parents and elders through activities such as agriculture, weapon-making, home-building, and herding (Hlatshwayo, 2000, pp. 7-28). Training was an informal type of apprenticeship introducing young people to the specific communities' forms of economy, or livelihood. In other words, it was a form of training which "aimed to ensure stability and continuity in society" (Hlatshwayo, 2000, pp. 27-28), It can be seen as helping society to function according to the ways of the community at that time.

In the early colonial period the Dutch occupied and influenced the country in the last half of the seventeenth through the eighteenth century. For the Dutch, maintaining nationalism was dominant. Considering nature and pioneer hardship with faith in God were the foundations of their existence together with the desire to be free and independent (Malherbe, 1977, p. 19). The administrative practices of the school system were organised according to the religious beliefs of community leaders while the government was responsible for the financial and legal matters.

Schools established in 19th century. Gradually society was divided into social categories called 'Europeans' and 'Non-Europeans'. In this framework 'Europeans' grew up to claim a position of legal and political superiority, seeing themselves as part of Christian

elect. From this angle, they identified Christianity with white, in contrast to the 'inferiority' of 'non-Europeans' (Davenport &Saunders, 2000, pp. 33-35). The "non-Europeans" included those sections of the population labelled as 'Black', 'Asian' and 'Coloured' (Elphick & Giliomee, 1980, p. xiii). The Dutch settlers gradually introduced an education system which was governed by the Church running three types of schools. There were schools for slaves that belonged to the Dutch East India Company. Then, there were public and private schools to which both Europeans and their household slaves were admitted. Thirdly there were schools for those who were socially labelled as 'Hottentots' (SAIRR, 1949, p. 349). The main aim of the education of the 'European' children was to produce pioneers rather than to cultivate erudition. This meant that pursuit of knowledge was not of primary importance. Steadfastness and bravery and patriotism were more important than the other matters. In contrast, the 'non-European' children were taught "the Dutch language and rudiments of the Christian religion" to enable them to develop into compliant slaves (Hlatshwayo, 2000, p.29). Thus, vocational education did not have to be part of a formal education curriculum.

Then, there was the British influence. According to Malherbe (1977), the British who always were in opposition to the Dutch, exerted major influence in the Colonial period during the nineteenth century. It would seem that didactic vocational education originated under British influence. The Dutch introduced such a term only much later.

The occupation of the Cape Colony, the emancipation of slaves and the northward trek of the Dutch led to the birth of four Provinces. At this time, each of the provinces developed along "its own lines according to the widely varying vicissitudes to which the different sections of the population were subjected" (Malherbe, 1977, pp. 20-21). This situation resulted in strong British influence, particularly in the Cape and Natal (Kruger, 1986, p. 182). Under British influence, education laid "less stress on acceptance through authority and more on the capacity to respond to challenge, more on using education to build

techniques and approaches to problems that cannot at present be identified" (Rose & Tunmer, 1975, p. 84). Greater emphasis was placed on pragmatic learning than on learning about abstract notions.

Facing the increasing border conflicts, the Governor of the Cape introduced the 'pacification programme' (Hlatshwayo, 2000, p. 31) that lasted until 1910 (Behr, 1984, p. 166). At this time authorities attempted to reduce the conflicts by means of developing the local populace, commonly called 'natives', into "useful servants, consumers of our goods, contributors to our revenue; in short, a source of strength and wealth for this colony" (Rose & Tunmer, 1975, p. 206). Seen from this perspective, Christianity was used to civilize the local populace (Molteno, 1984). An administrative department was established in the Cape government in the second half of the 19th century to subsidize missionary institutions (Hlatshwayo, 2000, p. 32) that trained the local young members, the popular term for the 'Bantu' youth, in such industrial occupations as "interpreters, evangelists, and school masters among their own people" (Rose & Tunmer, 1975,p. 206). They were also trained in agriculture, as well as Western type culture, that were thought of as civilizing habits (Du Toit & Phil, 1963, p. 24). Such programmes were also introduced in Natal at about the same time, but not in Transvaal and the Orange Free State (SAIRR, 1949, pp. 351-354).

Different schools were established in the education system under the *Education Act of 1865*. There were public schools that were designed mainly for the 'white' section of the population who could afford it. Then there were mission schools that were state-aided and open to all races. Finally, there were aborigines' schools that were state-aided (Malherbe, 1977, pp .95-96). The latter referred to those missionary institutions that catered for the young members of the local populace. Those initiatives were aimed in the direction of vocational-orientation (Rose & Tunmer, 1975, p. 351).

Increasing demand for skilled workers. The discovery of diamonds and gold in the second half of the 19th century led to the rise of extended industries which gave birth to an increasing demand for skilled craftsmen and technicians (Kruger, 1986, p. 183). In this context, the term Technical Education emerged and has prevailed in the towns under the control of leadership at provincial level to train apprentices and later also engineers. Technical classes and evening classes evolved from the initial classes which later became trade schools and technical high schools (Kruger, 1986, p. 183).

In the late 19th century, with anti-liberal and anti-imperialist sentiment filling their minds and the fear of suppressing their language and nationality, the Dutch-speaking people introduced Christian National Education (CNE) originating from the Netherlands. The Dutch-speaking part of the population set up private CNE schools. The first of these schools were established in the Transvaal (Ashley, 1989, p.7). Those schools were headed by the Dutch Reformed Church with substantive participation of parents who had control of the schools at local level. Christian teachers taught Calvinism as the dominant philosophy of education (Behr & Macmillan, 1966, p.56).

At the end of the nineteenth century, Industrial Schools were started by the Dutch Reformed Church in the rural areas for destitute and delinquent children to combat 'Poor Whitism'. Boys were taught crafts and the girls, domestic work (Malherbe, 1977, p.164). Private CNE schools were established again after the Anglo-Boer War, but all had merged with the Transvaal state schools by 1910 (Behr & Macmillan, 1966, p. 56).

In 1910 the four colonies merged to establish the Union of South Africa (SAIRR, 1949, p. 27). At the time, the policy makers feared that the vocationally-oriented education for 'Bantu' youth would result in skilling Africans which in turn would threaten the white section of the population (Rose & Tunmer, 1975, p. 208). As a result it became necessary to implement racial segregation in which the social category 'Coloured' was considered as

being superior to Africans (Horrell, 1963). In this regard, the view was that 'Coloureds' should be supporters of the 'White' ('European') population and be educated in the same way as the Europeans. The didactic vocational education that emerged under British influence was supported by the Cape government as a solution to the border conflict. It was used as some part of training 'Bantu' youth in certain industrial occupations (Rose & Tunmer, 1975). Following the establishment of the Union in 1910, vocational education was shifted from training Bantu youth to the white section of the population that mainly addressed the "Poor White" problem (Malherbe, 1977, p. 156). Hereafter, vocational education in South Africa was centralized insofar as it was shifted from the provincial administration to the Union Department of Education. It was then separately and systematically regularized into a multi-track vocational education system (Kruger, 1986; Malherbe, 1977).

Position of VE before 1948. In respect of vocational education and its link to skills, an important Act, the Mines and Works Act of 1911 were enacted in South Africa. The aim was to control the division of labour in which skilled work was regarded as more suitable for the white working class, whereas unskilled work was restricted to non-whites, especially African labourers (Richardson & Van Helten, 1982, pp.81-86). A link between skills and education, especially vocational education started developing.

As the education system's administration became more centralised by the Union government (Hlatshwayo, 2000, p. 35), vocational education and training became the domain of the White (European) population. At this stage the rise of a multi-track vocational education system became a reality with new elements. The centralisation of vocational education shifted from the provincial administration to the Union Department of Education. At the same time, the Prison Department founded reformatory schools in terms of The *Children's Protection Act, No 25 of 1913*. Those schools were taken over by the Union Department of Education in 1917 (Kruger, 1986, p.182) Technical institutions previously

under the provinces were incorporated under the Union Department of Education and now became Technical Colleges (Malherbe, 1977, p. 202). In rural areas where a technical college was not available vocational schools were established by the government under The *Vocational Education and Special Schools Act, No. 29 of 1928*. These schools catered mainly for white students who failed academically, and delinquents and students with mental defects. The schools offered technical, commercial and domestic training (Malherbe, 1977, p. 201). In 1925, the integration of vocationally-oriented subjects in the syllabuses of provincial high schools was introduced. Thus the vocational education system was under a dual governance structure in this early period (Malherbe, 1977, p. 203).

Development of Two Systems after mid-20th Century in South Africa and China

The People's Republic of China was established in 1949 when the Communist Party came to power under leadership of Mao Zedong. In South Africa, 1948 was the year that was the beginning of the political period framed by the apartheid policy, which meant the separation of people on the basis of race (Malherbe, 1977). This was also the beginning of a political system that emphasised racial differences. All aspects of people's social, economic and educational lives were governed by this system (Rose & Tunmer, 1975). The question that still needs to be answered, and where this study is important, has to do with the development and status of vocational education systems.

After the mid-20th century, the vocational education systems in both countries evolved and developed differently within the two contexts. Thus, this study has sought to understand the historical evolution and growth of the two systems in China and South Africa at particular points in time. In China, vocational education was specifically and systematically regularised into a multi-track vocational education system after the establishment of the Nationalist Party government. The

system aimed to emphasise popularization, quality and flexibility in the local communities (Mi, 2009, pp. 239-242). In South Africa the period from 1948 to 1994 was characterized by an apartheid era under the Nationalist Party, in which the racial sections of the population were socially, politically, economically and educationally separated (Terreblanche & Nattrass, 1990).

Given the above, the study has sought to investigate how vocational education was organized in both countries. More specifically, this study's intention has been to gather information about the shape of vocational education in this period. Thus, for both countries, my question focused on the shape of vocational education and whom it targeted during the two time lines in both China and South Africa. The first period was 1948/9-1978, the second period, 1978-1994. This study's overall question has been about the way that vocational education was organised in both countries.

Before addressing my research questions for this study, I wanted to broaden the insight into international trends regarding the influences that these international trends have had on vocational education in developing countries. This has also helped to contextualize my study.

International Influence on the Development of VE Systems in Developing Countries

After the Second World War the influence of the Western world on vocational education systems was significant in the developing countries. The post-World War II period has been identified as a period of interest. It served to gain information about ways in which the vocational education systems in South Africa and China were developing within the context of the international environment. The literature review (in Chapter 2) has provided further detail.

During the post--Second -World War phase the West played an influential role in the way in which independent nations approached vocational education. The important point here

being that vocational education was approached in ways that enabled developing nations to

succeed at "the pursuit of effective nation statehood" (Preston, 1996, p.289). The West

claimed to have made an authoritative intervention, in which the state played a planning role

in the rational socio-economic development in these countries (Preston, 1996, p. 159). Up to

the late 1970s the World Bank made a steadily-expanding investment in the development of

vocational education and training in the developing countries (Middleton & Ziderman, 1997).

In this way, vocational education in the developing countries was influenced by the

international aid agencies.

The World Bank project targeted "a widening range of public pre-employment skill

development institutions and programmes designed to expand the base of skilled workers and

technicians" in the developing countries (Middleton & Ziderman, 1997, p. 7). The World

Bank's approach included a wide range of institutions and vocational schools under the

Ministries of Education and Agriculture and in some cases the Ministries of Labour in

developing countries. In this way, the vocational education regimes in the developing

countries tended to be in the public (rather than the private) domain. The result was the

reinforcement in terms of a differentiation both between general and vocational education and

among sectors in regard to vocational education in these countries (Middleton & Ziderman,

1997).

Global economic trends also played a part. Since the turn of the 1980s, there has been

a tendency in the developing countries to strive for economic liberalization or globalization

(Preston, 1996). As a result of this tendency, vocational education providers were instructed

to reform in different ways. Policy makers in different countries were globally warned that

there would be a convergence to international trends (Green, 1999), although this

convergence did not occur in practice.

In practice the different countries responded to their common problems in different ways in line with their particular (nation state) traditions and vocational education model characteristics (Green, 1999). The common problems included lifelong learning, internationalization of certain awards, decentralization of regulation and governance, evaluation and quality control measures, and the bridging between vocational education and work (Green, 1999).

In the above section, I outlined some of the important international trends in terms of what had been happening in the practice of vocational education. In the section below I briefly outlined how the research on vocational education, was conducted. While this has been extensively outlined in Chapter 2, I provided a brief outline as some background to the study.

Approaches to International Research on Vocational Education after the Second World War

After the Second World War research on vocational education was characterized   by various socio-economic approaches. First, based on a belief that vocational education ensured skills improvement, research addressed manpower forecasting that investigated the sectoral requirements for skills development (Vaizey, 1975). Research focused on the pedagogic attempts to develop the most efficient and effective instruction (Mager & Beach, 1967). Subsequently, research approaches shifted to question and examine critically whether vocational education, especially at the secondary level, was able to improve efficiency or skills development. Next, the research studies suggested ways to treat secondary vocational education within a national education system (Foster, 1977; Grubb, 1985; Psacharopoulos, 1991; Smith, 1987).

Recently research on vocational education has evolved incorporating sociological approaches that have focused on the vocational education systems in different regions or countries on a comparative basis. The research adopted different approaches. The earlier research was principally engaged in convergent and functionalist approaches, known as the skills formation approach. This approach believed that a vocational education system in a country was determined by the national skills in the development system. It assumed that the policy makers attempted to optimize their own country's vocational education system on the basis of continuous comparison to other countries. It tended to call a national vocational education system a model and a particular country identified some countries whose vocational education systems were considered to have similarities to the internal model. In accordance with this view the results of research have been that the national vocational education systems in larger part of the world were classified into several models (see Castro

& Alfthan, 1992; Finegold & Soskice, 1988; Green, 1999). The research approach to vocational education has been extensively outlined in Chapter 2.

At this point, an approach to research of vocational education that appeared to be gaining recognition internationally was introduced. This approach has been called historical institutionalism. The approach has been looking into changes in the vocational education systems in different countries. It considered the origins and changes of the vocational education systems as being embedded in the development of institutions. In this regard, it further asserted the view of values and beliefs that underlined and maintained institutional structures in different countries (Green, 1990). Historical institutionalist studies further emphasized the role of the internal political-economic context that influenced the institutional arrangement, and thus infused a considerable national character into structural tradition (Green, 1990). The approach has relied heavily on comparative study between or among a small number of countries, and identified stretched historical periods which featured at similar times and within similar political-economic contexts between or among the countries (Maurer, 2012).

Given the importance of the historical institutionalist approach in terms of researching vocational education, I have provided a broad overview of this approach in Chapter 2. While I have not drawn on the approach directly, it has guided my thinking on understanding the histories of vocational education in the two countries.

To clarify how I have conducted the comparison of the vocational education development from 1948/9 to 1993/4 in South Africa and China against the international trends more fully, an illustration is presented in Table 1.

Table 1:

International Trends in VE Development to Trends in SA and China, 1948/9-1993/4

Period	International trends	SA	China
1948-1978	Authoritative intervention	Centralized economy, heavy industry centred, import-substitution strategies	Centrally planned economy, heavy industry centred, import-substitution strategies
	VE at secondary level: public domain; Diversified on socio-economic sectors; serving the economy	VE at secondary level: public domain; sectoral diversification; racially separated VE provision; serving both racial separation and the economy	VE at secondary level: public domain; sectoral diversification; VE provision divided among cadres; workers and peasants; Serving the economy
1978-93/4	Economic liberalization	Moving toward free market	A socialist market economy
	VE: The state role through policies to balance market for VE institutions; Private participation in VE	VE: Private participation; Decentralization and racial inclusion in training system; Quality insurance and racially separated VE systems with VE Institutions; Sectoral diversification still remaining	VE: Private participation; Decentralization, quality insurance, bridging across VE and work with whole VE system; VE provision division on managerial personnel level and workers and peasants remaining; Sectoral diversification still remaining

Source (adapted from Bird, 2001; China Statistical Yearbook, 2014; South African Yearbook, 2012)

In the section above I briefly outlined a broad history of vocational education in China and South Africa from 19th through to middle 20th century as a way of providing a backdrop for the study. While this has been the historical backdrop, and since my study has been a

comparative one, it was important to set up the geographical and social profiles of the two countries. This has been outlined in the next section.

China and South Africa: Social Differences

There have been obvious differences between China and South Africa in many respects. The first distinction between the two countries is the size of the country. China covers 9 600 000 km² and has a population of 1.367 billion people of which 54.77% of the population permanently reside in the urban areas (China Statistical Yearbook 2014). The population in China is divided along the lines of 55 ethnic groups (China Population Census Data, 1990).

According to *The China Ethnic Regional Autonomy Law of 1984*, the regions inhabited by ethnic minority groups in compact communities implement regional autonomy. Within the autonomous regions the ethnic minority groups have freedom to use and develop their own languages and writing systems and can maintain or reform their own customs and habits The Chinese language has been used throughout China. However, historically the different regions have had different accents. The pronunciation in the northern areas surrounding and including Beijing has been defined as standard Chinese pronunciation and characters, namely Mandarin. In economic terms, the economy of China has been described as a socialist market economy (Wu & Rong, 2009).

In contrast to the vast Chinese territorial expanse South Africa covers 1 219 602 km² (SA Yearbook 2013/14), and has a population of 52.982+ million (SA Statistics, 2013).The population consists of four socially defined racial groups, according to The *Population Act of 1951* (see Thaver, 2006). The respective categories are: Black South Africans 79.2%, 'White', 'Coloured' and 'Indian', 9%, and Indians/Asians 2.5% (SA Yearbook, 2013/14). The country has been divided into nine provinces, and each has its own legislature, premier and executive council (SA Yearbook, 2013/14). There are eleven official languages. English

being the mother tongue of 9.6% of the population, but has been the most widely used language at official and commercial levels. In economic terms, the apartheid economy has been centrally planned. Democracy was instituted in 1994.

Research Questions

As outlined earlier, the overall aim of this study has been to find out how South Africa and China that are historically divergent countries structured and developed their vocational education systems during the period from 1948/9 to 1993/4. Two core questions which have been addressed in the study formed the basis of the research.

The first question is: How have the histories and shape of vocational education in South Africa and China unfolded in the years between 1948/9 and 1993/4? And how has the development of vocational education been linked to the political and economic administration of these two countries revealing differences and possibly some similarities in the course of history?

The second question linked to matters on a meso-level asks:

What insights have been gained through the study of the history of vocational education in these atypical countries, more specifically about the role of actors in respect of governance as reflected in policies and decisions?

In the following section, the methods that were used to frame the study are outlined.

Research Methodology/Approach

This is a qualitative research study with a historical angle/approach. The latter is used since the aim of the study (outlined above) has been to track the evolution and development of vocational education in the two country contexts. Given that the study has been historically oriented, it has drawn on a variety of primary, secondary and even tertiary level sources in order to understand the phenomenon vocational education. At the same time, the study has sought to identify comparisons in ways in which vocational education systems developed in

each country in the targeted period. Although comparisons can be very difficult, the study has sought to map some of the differences and similarities in the way that the phenomenon evolved over time. I have drawn very generally on the theoretical framework of historical institutionalism in order to understand how the institution of vocational education evolved, referring to the policies associated with its growth in the different countries.

Significance of the Study

There have been numerous studies on vocational education, more specifically in comparative terms across countries in different spheres of education. However, this has been the first comparative study with a focus on the development of vocational education in China and South Africa. This study has sought to fill this gap with the intention of building a bridge across the two parts of the knowledge systems. Hopefully this study will trigger further comparative scholarly research on vocational education in China and South Africa as a way of addressing youth unemployment and other social issues related to the section of the population that each of the vocational education systems has sought to address. I have therefore found it important to first trace the historical trajectory of vocational education for the period that preceded the study so that the historical period has a context. Furthermore, the significance of this study is of interest at an international level seeing that both countries are members of the economic block of countries (Brazil, Russia, India, China and South Africa) defined as emerging economic-market network countries.

Research Scope and Limits

A vocational education system usually includes the institutionally-based vocational education and practical training, both public and private. The institutionally-based vocational education consists of junior and senior secondary and tertiary (post-school) levels, and is provided in either separate vocational education institutions or in comprehensive form.

However, while all parts of a vocational education system appear in this thesis, the focus of this study has been on the public secondary institutionally-based vocational education level.

Furthermore, I would also add that the focus of this study has not been to ascertain whether South African and China's cases have been typical, nor did I want to trace differences exclusively. It also did not attempt to generalize or evaluate theory. The main focus has been to find answers to the complex situation concerning the development of a vocational education system that has been linked to the specific local realities in each country.

Thesis Organization

This thesis has been organized to cover five chapters. The presentation of each chapter has been summarized below.

Chapter one (this chapter) introduced the background landscape for the study and showed how the thesis has been structured. In particular, I provided an exposition of reasons for doing a historical comparison of the vocational education systems in South Africa and China. The period starting in 1948/9 and ending in 1993/4 was chosen as it introduced a new dispensation in South Africa in 1948 and 1949 in China.

Chapter two attempted a literature review. It included the following parts: The first part presented some background information about difficulties concerning naming the new branch developing in education internationally and locally. Second, the systematic facets included the definitions of vocational education and its evolution over time, the origin and development of secondary vocational education and the role and social functions of vocational education within a society. Next, the social status of vocational education versus general education and the structure of a vocational education system have been outlined. Finally, the governance of vocational education, and the international pressure on the development of vocational education in developing countries in the post-Second World War

have been discussed. Thus, the evolution of research on vocational education after the Second World War was reviewed. The third and fourth parts included a review of the meaning of and the evolution from institutional to historical institutional approaches as well as the different levels of analysis, in order to help develop greater understanding of the historical narrative.

Chapter three focused on the methodology which elaborated the design of this study. It explained the study's design in general terms as well as focus on the historical comparative method which has been applied in this research study. Following from this, the explanation of the interpretation framework has been outlined along with the documents collection procedures. Some ethical considerations in regard to collecting and interpreting of data and documents have been taken into account.

Chapter four has provided a detailed, historical and descriptive narrative of the development of vocational education systems located in political, economic and social contexts from 1948/9 to 1993/4 in South Africa and China. As I have stated, the study has sought to understand the origin and growth of vocational education relative to the social events, conducting the description on a decade by decade format/time line.

Chapter 5 proceeded to conduct the comparison across the time-lines of two sub-periods (cycles) identified in Chapter 4, namely between 1948/9-1978 and 1978-1993/4 in the respective countries. The types of governance, the roles of actors on macro, meso- and micro levels have been highlighted. The influence of international instances and policies in the practice and philosophy of vocational education to bring about change over half a century in these two countries have been considered.

Conclusion

In this chapter I presented a brief picture of this study. I emphasized the relevance of the two research questions in support of the significance of the study. I outlined the research process identifying the different routes the two countries followed for a period of half a

century. I introduced various focal points of the research highlighting the development of

vocational education systems before 1948 and between 1948 and 1994 in South Africa, and

between 1949 and 1993 in China.

In Chapter 2 account has been given of some of the relevant research studies on

vocational education internationally as well as in South Africa and China during the targeted

period.

Chapter 2 Literature Review of Vocational Education

My study has focused on investigating the development of vocational education systems in South Africa and China from the mid-20th century through the end of the century. Therefore, this chapter has focused on research by local and international scholars in the field in order to gain greater understanding of the history and development of this new branch in education.

This chapter has been divided into four sections. The first section presented a systematic review of vocational education internationally. Included in this section, is a schematic overview of an interpretation of meanings of the concept in South African and Chinese contexts. The second section provided an outline of the empirical research approaches to vocational education in the post-Second World War period. In the third section some ideas around the framework of institutional theory and historical institutionalism have been outlined. In the fourth section, the focus has been on ways in which scholars have interpreted the analysis of macro, meso and micro-levels to improve understanding of some of the thoughts that qualified the development of vocational education in the two country contexts.

Vocational Education Internationally

In this section, the concept vocational education extended to the international level on the basis of a number of international scholarly references. The broader view offered greater clarity of the global concept. Seven major features of vocational education that informed scholarly views were listed below as follows: The definitions of vocational education and its evolution over time (meanings and definitions), the origin and development of secondary vocational education, the role and social functions of vocational education within a society, the social status of vocational education versus that of general education, the structure of vocational education systems; the governance of vocational education and the international

pressure on the development of vocational education in developing countries in the post-Second World War era. Each of these features has been discussed starting with the aspect of 'meanings and definitions.

n order to understand the term vocational education one has to know how it originated and developed and to what extent it nested with other terms. In a preliminary review of the literature it became clear that the meanings, definitions and terms are complex. In the following section different ways in which vocational education has been dealt with in literature have been outlined. Finding a consensus definition of vocational education still remains a challenge. On the one hand the nature of this kind of education has experienced a form of historical evolution. On the other hand, a multi- dimensioned trend developed in the Vocational Education (VE) field. The contribution to this historical evolution has been regarded as an investment by world agencies such as the World Bank in the diversified vocational programmes in developing countries (Middleton & Ziderman, 1997). As a result, this kind of education has remained both defined and situated in explicit diversification such as industrial education, technical education, commercial schools, agricultural schools, and civic schools.

Apart from the early differentiated names and definitions Maclean and Wilson (2008), identified additional terms that appeared over time to describe this kind of education. Apprentice training, vocational education, industrial arts, technical and vocational education, occupational education, vocational education and training, career and technical education were some of the newer commonly used terms. At the 1999 Second International Congress on Technical and Vocational Education all the different expressions united to become technical and vocational education and training as a comprehensive term to represent this kind of education in the future. Presently variation in terminology has still prevailed and is

likely to remain in geographically habitual usage, such as vocational education and training in Europe, career and technical education in the United States.

Evolution of Meanings and Definitions of VE in South Africa and China

Meanings and definitions of vocational education in South Africa and China developed along their historical trajectories. The aim here has been to gain a comparative view of the evolution of the meanings and definitions of vocational education in these two countries in contrast to terminology used internationally. In the mid-1850s the term 'aborigine schools,' the original vocational term, (Malherbe, 1977, pp. 95-96), appeared to name an agricultural school set up by the Cape missionary institution at the Eastern border of the Cape Colony (Rose & Tunmer, 1975, p. 206). In the 1890s 'agricultural' schools became the term used for schools for destitute and delinquent boys (Malherbe, 1977, p. 159). In 1917 the Union education Department took control of all industrial schools i terms of T*he Children's Protection Act of 1917*. These schools were called 'vocational schools', 'agricultural schools' for boys and 'housecraft schools' for delinquent girls.

The discovery of diamonds and gold in Kimberley and in the Transvaal increased the need for skilled technicians and two new terms, 'technical education' and 'apprentice training' were introduced in the world of trade. Early in the 20th century (1920s) the Union Government approved the opening of the first 'vocational high school' in the country in rural areas. These schools had three sub-tracks, technical, commercial and housecraft (Malherbe, 1977, p. 178). Almost fifty years later, the term 'Training centres' for 'Whites and Non-Whites' appeared as an institute for further education and training (Kruger, 1986).

With the advent of democracy in 1994 various education institutions have been included in the vocational education sphere, among others 'technical colleges' at secondary level. The *Further Education and Training Colleges Amendment Act, No 16 of 2006* restored the name 'further education and training colleges' which have been providing programme-

based vocational and occupational training. In the *Further Education and Training Colleges Amendment Act, No 1 of 2013,* 'college' has been defined as 'a technical and vocational education and training college'. While South Africa is a relatively young country compared to China, a similar trajectory can be traced with regard to names and definitions of vocational education institutions, although the time frame as well as the interpretation of the terms differed.

After the First Opium War (1840-1842) Western styled schools appeared in China and the term 'Western-styled schools' was endorsed as the first definition of vocational education in China (Chen, 2007, p.11). The Sino-Japanese War (1894-1895) gave rise to the first national education system in 1904. Vocational education was included in the system as 'industrial education'. The term 'apprentice' training was used separately. In the fundamental reform of education three sub-tracks, namely agricultural, industrial and commercial training were included in the system (Chen, 2007, p. 11). The term 'vocational education' was first defined in the *Manifesto of Chinese Vocational Education Society in 1917.* In this document the objective was described as follows. The purpose of "vocational education has been to develop individuals' aptitudes, prepare for individuals' livelihood, serve society, and improve productivity for the state as well as the world" (Chen, 2007, p.12). This was the same term as that used in South Africa, but encompassed a much broader context and gave an idea of the esteem that the Chinese citizens had for education.

In *the Decision on Reforming the Educational System of 1951* vocational education was named 'secondary specialized schools' in technical teacher training and medical fields. Soon afterward these schools were shaped into two tracks, 'secondary technical schools' for cadres and 'skilled workers schools' for workers (Dong, Dan & Chen, 2007, p. 269). For a number of years these schools were under a dual governance structure across the economic

sectoral department concerned together with the Department of Education for the former, and the Department of Labour for the latter.

Three further significant amendments were made in the 20th century in China's education systems. In the period referred to as the Great Leap, (1958-1960) two new terms were introduced under *Instructions of Educational Reform of 1958*. 'Vocational schools' now served the urban sectors while 'agricultural schools' served the rural community and 'adult secondary specialized schools' the informal sector (Dong, Dan & Chen, 2007). The next change occurred in 1978 when the customary three terms were converted to four. That happened when the secondary specialized schools were established alongside skilled workers schools, vocational schools and adult secondary specialized schools. Two new terms were introduced. The term 'Vocational classes' was used in the general schools ' while 'comprehensive schools' was the term in schools where vocational courses were integrated into general programmes and 'training centres' (Huang, 2009). Under the new policy the unified aim of secondary vocational education was stated:

> To set up the conceptions of competency-orientation, and to foster high quality labourers and primary-level and intermediate-level specialized personnel who were well-rounded in moral, intellectual, physical and aesthetic developments to meet the needs of modernization, had comprehensive abilities, and worked at the forefront of production, services and management. *Opinions on Redressing the Distribution of Secondary Vocational Educational Institutions, No 3 of 1999.*

Through the brief exposition of the meanings and definitions of vocational education in South Africa and China against an international background it was evident that each country interpreted the terms in line with their own culture, educational needs and traditions. The international background confirmed Green's (1999) assertion that "each country has

responded in practice to common problems in different ways in line with its particular traditions and Education and Training (ET) model characteristics" (Green, 1999, p. 69).

        Vocational education sources of definition. At present, two sources of definition have been in existence. One has been the traditional form which defined vocational education based on its aims to serve the labour market in comparison with general education that served a broader spectrum. Paun, Descy and van Loo (2011, p.6), maintained that while general education prepared for a ladder-type organization, vocational education prepared "individuals for a vocation or a specialized occupation and was directly linked with a nation's productivity and competitiveness" (Paun et al., 2011,p. 6). Further sources have highlighted the multi-dimensional meaning of VE. Power (1999) argued that technical and vocational education did not only enable learners in multiple ways. These learners were also prepared for specific types of employment and re-employment and they had better opportunities to function in modern societies. The 1999 Second International Congress endorsed the multi-dimensional view of VE. The general consensus had been that learners benefitted from general education. But they also acquired skills in technologies and related sciences, as well as learned practical skills and attitudes, and developed understanding and knowledge in various sectors of economic and social life (Maclean & Wilson, 2008).

The Origin and Development of Secondary Vocational Education up to the mid-20th Century in the Western World

        Although the study has focused on the comparison of vocational education history between South Africa and China during the second half of the 20th century, it is necessary to look into the vocational education history (in a general way) prior to the mid-20th century. The early history outlined how VE originated and developed in both countries. To understand the development process it has been important to first acquire insight into the global view,

especially that of the Western world. So, how have scholars approached education and vocational education generally?

Nakosteen (1965) explained that the eastern invasion of the Crusades created the flow of the intellectual and cultural treasures. However, it also affected the flow of eastern material treasures and commercial trade and business methods, as well as secular educational activities, into Western Europe. These transfers caused the rise of towns and guilds, and small churches settled people moving in the towns. The influx of people generated vocational needs in the Western world. The Protestant reformation made primary schools available for all, teaching the three R's (reading, writing and arithmetic) and religion in the vernacular, in order to read and understand the Bible. The Latin grammar schools taught classical grammar and literature with dual purposes of scholarship and preparation for 'civic responsibility and religious leadership' of the upper class (Nakosteen,, 1965, p. 261). Initially two types of education emerged in England in the seventeenth century and rapidly spread to the rest of Western Europe and America (Nakosteen,, 1965, p. 263).

One of the types of education that became popular was referred to as the 'Academies'. These Secondary schools were started privately by non-conformist ministers for non-conformist children. In the Academies a wide range of subjects were taught in addition to Greek and Latin. The other subjects taught to children included the vernacular and other modern languages, as well as geography, history, mathematics, astronomy, economics, ethics and moral philosophy, rhetoric, oratory, navigation, surveying, natural philosophy, the classics, and English literature.

The other education type was schools of industry for the poor. The focus was on vocational education (Badroodien, 2004). Industrial schools were a type of charity school with religious, moral and vocational aims. The three R's and religion besides the vernacular were instructed together with crafts such as "cobbling, tailoring, gardening and simple

agricultural operations for boys, and housework for girls" (Hadow, 1926, p.3; also see Badroodien 2004). Nevertheless, the dominant form of vocational training was apprenticeships in the guild system (Wollschläger & Guggenheim, 2004). One such example was the sixteenth century Elizabethan Statute of Artificers that introduced the standardization of British apprentices training (Spens, 1938, p.50).

The Industrial Revolution that started in the mid-18th century led to the break-down of the crafts-based guilds along with the abolition of apprenticeship. This was replaced by the manufacturing industry that featured mass production in the simplest division of labour and the use of child workers (Cedefop, 2004). Industries, essentially textiles and mining, were linked to unskilled, interchangeable, low-waged child workers without training needs. That lack of training needs contributed to the absence of vocational training (Cedefop, 2004).

Later, a form of vocational education that included industrial schools, evening classes, workplace schools, and municipal schools emerged in leading industrial countries. These institutions were provided by private or philanthropic associations, factories, or trade organizations and instructed industrial skills, but mainly general knowledge and moral matters to the young people (Cedefop, 2004).

Effect of Didactic Vocational Education

Didactic vocational education that had the production of skilled workers as its aim arose in the late nineteenth century (Cedefop, 2004). The contribution and ideas of those proponents have been outlined below, drawing on the work of Cedefop (2004).

First, the Enlightenment from the late 17th century to the late 18th century with its emphasis on humanities and sciences led to the improvement of industries. In turn the growing modern industries created an increasing demand for skilled workers. Second, public attention was drawn to vocational education through public exhibitions in the late 19th century in which scientific and technological advances were presented to Western nations.

Third, theories arose that were inspired by the development of vocational education with systematic descriptions of arts and crafts, and approaches to the use of labour in manufacturing industry. This meant that knowledge was shared about the simplest division of labour to save working time and raise specialization so as to achieve efficiency. Theories were supported in practice as government provided vocational training. Fourth, the Russian system of vocational education in the late 19th century combined theoretical knowledge and practical training as peasants were taught to read and write while being trained in the practical sphere. The purpose of this approach was to develop specialists and technical and production managers at secondary level.

By the beginning of the 20th century, both modern secondary schools and vocational secondary schools were established across Europe. This development was considered to be the contribution of the increasing emphasis on sciences and technology (Benavot, 1983). In addition to the highly selective traditional schools catering for upper class children to retain their high social status these vocational secondary schools existed in the secondary education system across Europe by the end of the 19th century (Benavot, 1983). Secondary schools offered a wide range of subjects preparing middle class children for both civil service positions and higher education entrance. The vocational secondary schools provided distinct vocational courses in distinguished institutions to train lower class youth to become skilled workers.

Status of Secondary Vocational Education in early 20th Century

Up to 1920 secondary vocational education in the Western nations was included in the national education system, but on a separate track parallel to its general peer (Benavot, 1983). Several forms of legislation in both British and American contexts placed vocational education in specific governance spheres (Hyslop-Margison, 2000). One of the reasons for this approach was that such placement was considered widening the franchise by adding an

educated and enlightened working class. This approach strengthened the labour movement requiring equal educational opportunity for all learners. This meant that the individual qualities and aspirations of all learners were recognized. There also was the growing problematic juvenile group who were seen as being academically incapable of succeeding in the academic sphere and destined to follow manual pursuits. This approach to different individual abilities of learners acknowledged the value of all individuals irrespective of intellectual ability. There was also recognition of the need for various skills, which finally won public support (Cohen, 1968).

The placement of vocational education in the national education system which came to an end in the Western world by the 1920s was followed by an entirely separate ethos with regard to general education up to the mid-20th century. For instance, the German mode gained popularity in many Western European countries and America (Gordon, 1980). Within this mode, the administration of vocational education was under pressure by the powerful groups outside the education regime according to Gordon (1980). The vocational education section had to prove once again that they had a legitimate right of independence to offer quality education and training to learners. Since instruction of content and method and choice of venue were predetermined between companies and vocational schools the so-called dual system was put into practice. A set of training programmes that served the structured skill needs of the powerful group outside the education sphere was established. Emerging tests and awards targeted at specific jobs and at particular employers confirming candidates' aptitudes and abilities were set up. During this period,after 1920 up to the mid-20th century the selection of pupils by means of tests for different kinds of secondary schools was implemented in many countries (Cole, 1964). For example, in Britain universities set up matriculation examinations to meet university entry requirements. Subsequently school

education programmes tended to be entry examination-oriented with high failure rates and vocational education filled the niche of catering for academic failures (Smithers, 2002).

The mid-20th century saw the start of the integration of general and vocational elements at secondary level in Western countries by means of a common curriculum in different types of schools. Institutions that adopted the integrated curriculum were known as "omnibus schools" (Cole, 1964. p.143).

Philosophical and Scholarly Thoughts on the Social Role and Function of Vocational Education in Society

Philosophers and scholars' thoughts about the role of vocational education in a society have been important since early times. Their thinking about how vocational education functioned in their society contributed towards greater clarity about the position of vocational education. In the section below a review of literature on the evolution of thought over a period of time (diachronically) has been highlighted. It starts with a brief outline of an early period prior to the European enlightenment in the late 17th Century.

Approach to vocational education prior to the European reawakening. According to Nakosteen (1965, p. 87; p. 102) a significant contribution to the almost complete absence of vocational education in the Western world happened before the European reawakening. It should be considered equal to the Greek philosophic worship of pure liberal education. Plato's attitude towards education placed the preparation for trade and profession on the shoulders of non-free Athenian citizens – the slaves working on farms, in industry and in crafts, or the foreign settlers engaged in business. His term 'guarded education' showed he was not holding professionalism in high esteem.

Approach to vocational education in 17th and 18th centuries. The conservative and radical educational theories adopted in the 17th and 18th centuries represented Locke and Rousseau's philosophies (Nakosteen, 1965). Locke saw man as the inheritor of inborn

capacities which served as the driving force of human activities which in turn were guided by worldly desires or personal habits. Education served the formation of 'good habits' to rationally "make the world meaningful and useful" (Nakosteen,, 1965, p. 92). Locke demarcated curriculum into two groups: one for the lower class children to be trained to master skills, and another to educate the upper class children as gentlemen to be leaders of the masses (Nakosteen, 1965). According to Nakosteen Rousseau's educational theory held that all men are equal in the sense that government should represent people's rights. Rousseau's premise that "an educational programme that catered to all individuals' natural inclinations – "Let the child invent the tools he uses" - would lead to absolute individualism and anarchy" (Nakosteen, 1965 , p. 295). Vocational education should be integrated in the secondary stage of the universal three-laddered education system with the idea of vocational training by choice and learning of a trade.

 Approach to vocational education in early 20th century. In the early 20th century two contradictory philosophic theories emerged that exerted noticeable influence on the role of vocational education in a society. Wirth (1991) considered these theories social versus individual efficiency philosophies, and gave a critical explanation of both.

 Social efficiency framework. According to Wirth (1991) the approach within a social efficiency philosophy framework represented by Snedden, Prosser, Eliot and Fish agreed with the view that heredity and nurture contributed to the inequality of social population physically, mentally and morally. The approach advocated that a 'good society' based on the various characterized proportions of population functioned efficiently in their distinct specializations. According to this view, vocational education had been legitimized as public obligation under technocratic governance in separate vocational schools. This practice was approved to provide specifically specialized and moral contents by pre-vocational differing curricula in commercial, industrial, agricultural and household subjects. The ultimate aim of

this particular practice was to foster those who were alienated from the organization ladder of progress to be more fit members in the society and significantly more valuable for economic progress (Wirth, 1991).

Individual efficiency philosophy. This approach was supported by John Dewey. It concerned the building of a democratic society where each institution strove to liberate its people so that they could realize their full potential in working life. The profits of each institution relied on its general growth rather than only on the pursuit of personal interest (Wirth, 1991). This approach maintained education should direct the creation of persons who would be capable of producing a planning society with the ability to plan adequately for the group. This philosophy advocated the integration of vocational education in general education. Instruction for all students should combine science, technology and economic corporatism with liberal content. The instruction style placed particular emphasis on laboratory research to introduce students to the evolution of the production patterns taught within a complexity of social and historical factors. The aim was to cultivate knowledge and understanding of ways in which the industrial world functioned (Wirth, 1991).

Vocational Education around the mid-20th century. Later, in the 1950s, the functionalist and conflict perspectives emerged. These two conflicting theories outlined below, differed from each other in terms of the role of vocational education.

The technical-functionalist theory: human capital views. The first theory endorsed Functionalist views. In modern society, vocational education was seen as being able to add value to the economy. Thus it was seen as contributing to the required skills which were valuable for the economy and society. This technical-function theory described the relationship between vocational education and work. Collins explained the relationship in terms of two aspects (Collins, 1977, p.119). Firstly, the skill requirements of jobs in an

industrial society constantly increased due to technological change. The proportion of low skilled jobs decreased relative to the increase in the proportion of high skilled jobs. Furthermore, the same jobs were upgraded due to skill requirements. Jobs that may have been categorized as low skilled became more complex with new technological additions and were upgraded to become semi-skilled or even high skill jobs.

Secondly, vocational education functioned within the provision of training both in specific skills and in general capacities necessary for the more highly skilled jobs. In terms of the human capital approach, skills and knowledge increased the capital of labour.

Education was the instrument that brought about all these improvements. Time and effort and eventually money spent on education were, therefore investments in the future (Becker, 1964). Vocational education, by providing skills and knowledge required in the workplace, could enhance the human capital of young people and increase their employment opportunity and finally raise their earnings (Becker, 1975). Vocational education improved productivity, wages and economic growth of both worker and corporate employer or government. This in turn benefitted individuals in their personal capacity (Psacharopoulos, 1987).

Conflict perspectives: Social reproduction theory. The second theory supported conflict perspectives. It is known as social reproduction theory. Social reproduction theory viewed the role of vocational education as a class-based solution. Bowles (1977) argued there was first of all a set of social division of labour within a society. Specific positions required relevant types of skilled performance. The persons filling these positions were selected based on the length and content of their education. Next, persons in charge at school and in society had a perception of the value of vocational education, in particular at secondary level that channelled working class children into their 'parents'-like' positions.

To realize this perception the testing of academic achievement gained in schools was created by the upper class and served the community by means of measuring and classifying students. The results of tests then led to less schooling and jobs-end positions. These young people's self-image was damaged by other people's concepts of quality production or business-related content, values, and efficiency. The attitudes of teachers about the limited number of opportunities that existed for independent creative work added to this problem. These negative aspects accompanied by counselling often resulted in directing graduates away from free choices about their future to jobs in professions. Middleton, Ziderman and Adams, (1993, p.60) asserted that by regulation or the content of university entry examinations, vocational graduates were often partly or fully constrained from pursuing post-school education.

Social Status of Vocational Education versus that of General Education: Society's Views on Vocational Education

In respect of social stratification and inequality, vocational education served and affected specific groups of lower-class and -caste members, racial minorities, women, and those from depressed regions of a country according to Grubb (1985). Vocational education was the only option to stop their education from coming to an end with the 'premise' of providing each person access to a specific higher paying occupation. However, education by nature and custom linked the most valued posts to the best schooled groups. Therefore vocational programmes would not give the participants access to the best occupations. In order to equalize job opportunity schools would have to shift a number of places in higher education from upper-class to lower-class students. This shift required increasing schooling for lower-class learners. It meant that the level at which lower-class students were merged with upper-class groups was not linked to the best occupations any longer. The result led upper-class groups to increase their schooling career or move to a higher level to maintain

and enhance ranking on the educational ladder. The eventual outcome meant raised educational costs as a type of education inflation. These increased expenses acted as barriers to schooling of lower-class attendants. Finally, there was a view that it could result in less productive workers among vocational graduates with negative feelings of frustration towards society. Grubb (1985) concluded that secondary school vocational education programmes were unlikely to bring about either the possibility of an increase in earnings or necessarily longer schooling.

Components and Complexity of VE System: Organization and Structure

Vocational education has been seen as a relatively complex system as it accommodated learners from various sources with appropriate programmes. The following section presents a review of the literature on what particular contents constituted vocational education.

First, in terms of programmes linked to receivers, i.e., students, vocational education was split into two levels, namely initial and continuing vocational education. Initial vocational education according to Power (1999) provided a sound foundation for future training and retraining. This meant that a solid foundation about terms and origin had been laid. Secondly certain definitions of terms were clarified to avoid any confusion, for example, the difference between training and education was made clear. Training focused on perfecting skills and practice while education included study of theory and practice. Continuing education was defined as programmes about being both on-the-job and educational institution-based for vocational graduates in their lifelong learning. According to Cedefop (2008) initial vocational education was formal and taught in education and training systems during an individual's career as student prior to initial entry to working life.

Continuing vocational education embraced all training activities after the initial entry and featured in either formal or non-formal or informal learning settings. Still apart from the

incidental learning a formal continuing programme embodied specific purpose and arrangement of objectives, duration and funding. The final step was certification. Although a non-formal continuing programme also had specific purpose and arrangement the eventual outcome was without final certification. Informal continuing programmes had neither arrangements nor certification in spite of serving some purpose.

Second, in terms of levels, vocational education was divided into two sectors. These were secondary and post-secondary (or post-school) levels. As far as the former was concerned some countries only had senior or upper secondary vocational education, and some included junior or lower levels as well (Grubb, 1985).

For the post-school level, Grubb (1985) further classified VE into two bands. The first was the level between secondary and college or university education, namely post-secondary non-tertiary or advanced vocational education. This type of training was provided in institutions such as technical colleges, polytechnics and university institutes of technology. The second referred to the tertiary level on-offer in those facilities located in traditional universities. Courses were offered in separate faculties in the fields of business, education, social work, and many other semi professions such as nursing, library science, and pharmacy. Candidates who obtained these tertiary qualifications could aspire to filling senior research positions at managerial level. Similarities and differences in their approach to vocational education practice in South Africa and China have been outlined in Chapters 4 and 5.

Governance of vocational education. Since this study has focused on the development of vocational education, using very broadly, an historical institutionalist perspective, it is important to gain insight into literature on governance of vocational education.

Pierre and Peters (2005) defined a framework of vocational education governance as a field in which different actors, processes and outcomes played distinctive roles in the

vocational education training (VET) system. They identified three main agents involved in the framework at different levels. First, were those involving government officials, whether they were employed at public or local level. The second group was those who functioned at community level where clients were employers, individuals, or even communities. Finally, there were those who provided training at training institutions, or were assessors of quality and the certificating bodies at official level for government or as non-government entitled certificating bodies.

Pierre and Peters (2005) further indicated a general governance model with five processes. These ranged from selection of goals through making decisions, activating resources, implementing new proposals, and eventually arriving at the point where feedback was given on all findings. Those in charge of VE governance identified the ideal outcomes of governance in which four classic qualities came into play. These outcomes included the ability to make meaning and being able to take all relevant aspects into consideration. They argued that leaders should also be flexible in order to be open to a change of circumstances. Finally, the argument has been that they must be able to take responsibility for decision making and implementation of procedures (Pierre and Peters, 2005).

The vocational education system has justifiably been regarded as being complex since vocational education has been involved at two diverse levels. At one level those in charge of governance were dealing with the working community. As vocational education governance leaders they were also involved with staff and the general public as clients. These included students' parents and students as well as government officials. At another level the task of vocational education governance has been "to establish and maintain the vocational education training system (VET) in particular ways" (Oliver, 2010, p.264). That meant those in vocational education governance positions were in charge of the formal learning processes at training institutions and schools as well as the governance of informal and incidental

vocational education in the community. As a result its policy system was often 'fragmented' according to Oliver (2010, p.264).

European VE Models in mid-20th Century

Historically, there were three types of vocational education governance models represented in Europe by the mid- 20th century, described by Wollschläger and Guggenheim (2004). First, there was the British liberal market model. The state played a dominant role and decisions were made among representatives of labour, managers of enterprises and leaders of vocational education. Education and training venues could be vocational institutions or enterprises depending on learner needs. Content delivery, content design and finance were managed in response to and on individuals' or employers' demand. There was no monitoring or common accreditation. Vocational education learners had a great deal of educational freedom. This model has had significant influence on the vocational format linked to the dominant ideologies of Liberalism and Puritanism.

The German corporate model was the second type. Decisions were made by craft trades. Chambers were set up under the state based on relevant professions in the fields of commerce and trade. The model has been known as the dual system. Curricula were jointly developed by entrepreneurs, unions and the state and instructed as a formal education component in vocational schools. Part time training was also offered in firms. The training funding was shared by employers in accordance with the taxation policy and trainees under contract. School education was financed by the state. Qualifications entitled holders to enter either specific occupations or pursue higher education. This model, the governance leaders argued was anchored in the unique apprenticeship tradition of Germany. With the advent of industrialization, the apprenticeship system was abolished in the first half of the 19th century due to the shut-down of guilds. However the apprenticeship system was re-established at the end of the same century. This attested to the growing demand for skilled workers, the

increasingly strong labour movement, and the attempts of government to indoctrinate young people with government's conservative political beliefs. A widespread belief held by the traditionalists circulated among workers that apprentices in craft trades felt safe to enter in such a familiar world of life and work (Wollschläger & Guggenheim, 2004).

The French state-regulated model was the last of the three European models of the mid-20th century. The state took responsibility for the vocational education and curriculum development. Content was principally composed of general theoretical knowledge rather than industrial practices. The vocational programme was offered in vocational schools. The state financed vocational education for a certain number of attendants per year by means of taxing enterprises. Graduates held state certificates and those with top achievements gained access to higher education. The leaders of the French state model based their argument in favour of the project on the historical appeal of the project which was a result of the Enlightenment stressing the humanities and sciences in the 18th century.

The outcome of this belief was the conviction that well-planned childhood education was important for society and the individual. After the absence of training for a long time following the break-up of the guild system at the end of the 18th century training was eventually resumed. Training in modern times was considered a contribution to industrialization that reached the peak only by the end of the 19th century. Finally, leaders maintained that inculcating Republican ideals during compulsory education rather than the ideals of Catholicism was a better choice for all concerned. A positive outcome of the project was that idle school leavers were taken off the streets and they got used to the idea of work. Ultimately there was an increasing demand for skilled workers which led to better public secondary schooling. The foremost aim of the model was to educate highly qualified, specialist workers but also to train workers equipping them with useful manual skills (Wollschläger & Guggenheim, 2004).

Oliver (2010) discussed vocational education governance models in terms of the extent of complexity. The complex decision-making processes meant that decision-making power was "shared between the state and social partners representing employers and employees" (Oliver, 2010, p. 264). The role that the state played in different countries differed in complexity. The more complex a decision-making process seemed to be, the more coherent and inclusive - but at the same time more inflexible it became.

Wade (1992) described a weak role of the state as one that manifested in underinvestment in human capital and market failures happening at all components of the skills formation system. Examples of failure included inadequate vocational education and training of providers.

In contrast, Brown, Green and Lauder (2001) pointed out the central role of the state. They classified it as two paradigms. The first was based on the neo-classical assumption that the state considered labour markets as homogenous. They regulated the supply of and demand for skills into convergence of the balance between these opposing forces. The second was an integrated institutional approach that the state provided to effective institutions to prevent market failure which meant underinvestment in skills.

Nijhof, Heikkinen and Nieuwenhuis (2002) pointed out that the complexity of the state and social partners always changed. The changing complex of social systems needed reliable and consistent political actions at all levels of the systems. They also emphasized the need for constant interaction and debates inside a group, but also between different interest groups because of the ongoing changes in vocational education. Third, they reminded readers that the VET setup had been instituted by governments. However, they stressed that employers and employees and vocational education providers had deep roots in social, cultural and economic patterns. Fourth, vocational education institutions were associated with laws on education and labour.

However, VE institutions were also connected with public-private arrangements. They had to manage training funds, steer collective labour agreements and provide pathways to becoming skilled. In addition, vocational teaching and administrative staff should have adequate qualifications and draw proper wages, have occupational identity and maintain training traditions. Fifth, changing the vocational education system demanded compatibility between technical- rational arguments and the institutional setup. It was directed at all levels involved by policy, intermediary structures, vocational education providers, companies and professionals interacting in the changing process.

Sixth, those involved with the changes of vocational education were concerned with balancing aspects such as initial vocational education versus lifelong learning, traditional occupations versus flexible qualifications, school based learning versus qualification through work experience, social demands versus economic markets, and employment versus entrepreneurship. Policy makers and other stakeholders should try to formulate ways in which the balance could be maintained, although in each case the institutional setup of vocational education tended to be at stake.

Finally, the changing vocational education systems could depend on the specific problem definition, the specific configuration of institutional and organizational actors and their stakes, but policy strategies and targets of systems changed. Judging by the probable obstacles in the way of achieving change it was clear that the changing complex social systems needed reliable and consistent political actions at all levels of the systems all the time. Else the worthwhile efforts at effecting change could be rendered void.

Vocational education governance has been influenced by leaders at national and international levels. In the following paragraphs an attempt has been made to consider and evaluate the input of influential people at international level.

International Pressure by the First World on Developing Countries in the Post-Second World War Period

As explained above the study has been identifying (broadly within a historical institutionalist approach), the relevant vocational education policies and procedures within the period of interest for this research study. International pressure has therefore been considered one of the significant factors influencing national policy formation, particularly in developing countries. Thus, I would like to signal the kinds of macro theories that have framed or informed the policies on vocational education in different countries.

Modernization theory. After the independence of the Third World, the focus of the influence of the First world shifted to development in general. The overarching idea has been to find a way to eradicate antiquated ideas and replace them with more acceptable new thinking. Modernization theory has been most influential in the 1950s and 1960s (Preston, 1996). Its goal was "the pursuit of effective nation statehood which the experts imputed to the replacement elites of the new nation states of the Third World" (Preston, 1996, p.289). The theory characterized social development as linear, developing towards a form of equilibrium, to occur through 'authoritative intervention' (Preston, 1996, p.159). Next, the theory designed the process where the under-developed states moved from traditional towards modern societies. The industrial society was seen as the goal driven by "the demanding logic of industrialism" (Preston, 1996, p.172). The importance of the movement was attributed to "the range of technically detailed aspects of managing sophisticated economies" (Preston, 1996, p.178). Besides these intellectual-ideological expressions, modernization also included practical activities by the key players. These players included members of the World Bank, the state-regimes in the Third World with their linkages, the First World with their Official Development Aid Offices and the International Monetary Fund (Preston, 1996, p.15).

Some extensive ideas on modernization theory that were related to education, including a focus on vocational education have been raised in the literature (Kubow & Fossum, 2007). In this respect, some modernization theorists claimed that deficit capital was the particular attribution to underdevelopment. The proponents of the idea built 'a theoretical rationale for economic investment and aid in respect of the problem of social change and the modernization model which directly connected a list of modernizing institutions - modern values, modern behaviour, modern society and economic development'. Inkeles and Smith, (1974), (as cited in Kubow & Fossum, 2007, pp. 37- 39), argued since schools were part of these social institutions, education had a valid role in society to seek to modernize VE. In turn it could educate individuals in habits and practices of being enlightened as part of the modernization process. The impact of the modernization theory framework produced a steadily expanding investment of the World Bank in the development of vocational education and training in developing countries during the 1960s and 1970s (Middleton & Ziderman, 1997). The investment supported "a widening range of public pre-employment skill development institutions and programmes designed to expand the base of skilled workers and technicians in developing countries" (Middleton & Ziderman, 1997, p.7).

The World Bank support included the development of secondary vocational schools under the Ministries of Education, and agriculture and training centres under the Ministries of Labour. Their aim was to develop young people into skilled workers in "the industrial, commercial and agricultural sectors" (Middleton & Ziderman, 1997, p.7). The support also centred on post-secondary vocational education for technicians, and diversified secondary schools that integrated vocational content into general curricula (Middleton & Ziderman, 1997). There were also colleges that aimed to produce vocational instructors (Middleton & Ziderman, 1997). Finally, the support also involved training capacity in public agencies

dealing with civil works and construction, transportation and agriculture (Middleton & Ziderman, 1997).

Apart from the contribution to educational provision of vocational education systems in developing countries, the Bank investment focused on skills training in public sectors (Middleton & Ziderman, 1997 p, 7). As the vocational education regimes tended to be in the public domain there was reinforcement in differentiation both between vocational and general education and among the various sectors. Moreover, graduates at all levels and in all types of vocational education and training programmes were expected to be in agreement with the needs of a modern economy (Middleton & Ziderman, 1997, p.7). Quantitatively, the Bank "used manpower requirements forecasting techniques which essentially translated projected growth rates in different sectors of the economy into quantitative estimates of the number of trained persons required in different occupations" to achieve their goals (Middleton & Ziderman, 1997, p.7). Relevance meant reducing youth unemployment by teaching them employable skills and reducing "pressure for access to higher education by diverting youth into vocational programmes that did not allow access to tertiary education" (Middleton & Ziderman, 1997, p.8). Thus, the investment also contributed to the distribution of education opportunities both geographically and socially.

Neo-liberal theory. One of the trends emerging currently has been a desire to be economically independent. The tendency of people in Third World countries has been for decades to aspire towards economic liberalization. This meant an emerging awareness of worldwide marketization or globalization and neo-liberal ideology (Preston, 1996, p. 253). According to the proponents of the new-liberty theory, globalization embraced developmental ideas on four fronts. Economically it benefitted countries. As a free market has been distributing knowledge and resources throughout the world chances were that the financial position of people improved. On the social front it improved people's perception of

themselves. The liberal individualistic social systems helped individuals to act responsibly as they perceived themselves as human beings with moral worth. The third front where this neo-liberal theory impacted on people's lives has been in the political sphere. Since liberal politics addressed and solved problems in a balanced manner greater political freedom followed. On the knowledge front, people also benefitted from the greater involvement with new knowledge. They were better informed within the neo-liberal approach to gaining knowledge. They had more positive knowledge about their situation since the liberal system's philosophy has been grounded in positive scientific knowledge. Taking the idealistic philosophy of the neo-liberal theory into consideration it was evident that the new-liberal theory with its emphasis on global marketization had great effect on 'the major institutions of capitalist development efforts' since 1980 (Preston, 1996, p.259).

Within the above-mentioned framework, the International Monetary Fund and the World Bank have been mentors to the developing countries according to Preston, (1996, pp.259-260). He noted that the World Bank centred the market economy, advocating the removal of economic and social controls. The World Bank recommended that trade unions and certain subsidies should be curbed. Greater scope should be allowed in employment regulations. Both institutions advocated less freedom in government spending and planning and total abolition of rules on tariff sets (Green, 1999, pp.259-260).

The influence of neo-liberalism on vocational education has also been evident in the literature of Brown, (2001). He argued for employers playing a key role in vocational education. In this regard, he asserted that the role of the state should be to encourage the private sector to invest in training. Brown argued from a human capital approach angle. In this manner he noted that the 'supply' side (i.e. schools, colleges, among others) should be training individuals in the relevant (vocational) skill:

[...] vocational training should be driven by employers because they are best placed to make judgments about the demand for specific kinds of skills; and the role of the welfare state should be limited to encourage individual enterprise and incentives for people to invest in their human capital and to find employment ... questions of skill formation are limited to 'supply side' policies that place schools, colleges, universities, and training organizations at the frontline in the battle for economic competitiveness. (Brown, 2001, p. 11)

In respect of the extent to responses of individual national education and training systems Green, (1999, p.69) stressed that there was no evidence for policy convergence in 'structures and processes'. Three European mid-20th Century vocational education governance models referred to by Wollschläger and Guggenheim (2004) provided adequate evidence to substantiate Green's assertion that there had been no policy convergence in 'structures and processes' of individual colleges in these European countries. The college in Britain, the British liberal market model was an example of dominant ideologies of Liberalism and Puritanism. There was no monitoring and students enjoyed a great deal of educational freedom. The content delivery, content design and finance were managed in response to and on individuals' or employers' demand. The second college, a German dual corporate model was an almost complete counter type. The curriculum was jointly developed by entrepreneurs, unions and the state. A formal education component was taught. The content was based on general theory rather than industrial practices. The third example was the French state regulated model. The state took responsibility for teaching and curriculum development.

In this regard, it was noted that "each country has responded in practice to common problems in different ways in line with its particular traditions and education and training model characteristics", (Green, 1999, p.69). The common problems included lifelong

learning, internationalization of certain awards, decentralization in regulation and governance, evaluation and quality control measures, as well as the bridging between education and work.

In the section below an outline of certain empirical studies and approaches in the period after the Second World War reflects the continued search to find answers to questions concerning this complex phenomenon, vocational education.

Research on Vocational Education in the Post-Second World War Period Internationally

The study covered the years spanning the second half of the 20th century and focused on the development of vocational education systems in South Africa and in China, Consequently it has been important to identify the relevant research studies that were conducted in the field during that period. In the post-Second World War period research evolved from the early feature of an economic approach and focus on vocational education to the current feature of a comprehensive approach with a system orientation and emphasis on international comparison. In the section below, examples of the types of research that were conducted are delineated. The purpose of charting these studies is to show the empirical route researchers followed in the study of the evolution of vocational education.

The early Approach: an Economic (human capital) Perspective

This approach tended to study the extent to which vocational education functioned to promote the improvement of skills, which addressed manpower forecasting and pedagogic efforts. An example of this approach has been briefly referred to below.

Earlier efficiency arguments. Immediately after the Second World War, studies focused on the development of skilled graduates in the belief that a skilled workforce was one of the most vital factors of the modern economy. Some of these studies addressed the

constant refinement of techniques of manpower forecasting in which "a sectoral distribution of the economy was projected ahead" (Vaizey, 1975, p .48). The level of appropriate skills needed for each level was calculated. Then, the requirements for skills needed to meet those demands were calculated based on what the projection revealed. The economic forecasting aimed at predicting skills requirements for educational planning. Forecasting expected requirements became an ongoing trend in certain parts of the developed and developing countries (Vaizey, 1975, p. 46).

Another group pursuing the same broad objectives as those researchers refining the techniques for manpower forecasting, made pedagogic attempts to develop the most efficient and effective instruction, such as shown in the work of Mager and Beach (1967). They developed a model that took account of the different stages in the process of education and training instruction which helped both the skilled craftsman who taught his craft and the vocational instructor who needed to improve the current course or prepare a new one. In this model the procedure did not have the purpose of transmitting theory and philosophy. The model was developed "in the research laboratory and tested in the classroom". Their goal was to produce graduates with effective practical skills to perform adequately on the job. The model positioned vocational educators in the core role having autonomy in terms of the 'planning', 'organizing', 'leading' and 'controlling' the instruction (Mager & Beach, 1967, pp. vi-ix).

This approach helped providers to plan courses that incorporated a great deal of practical knowledge in the design of the lesson. This strategy made theoretical content more accessible to students and broadened their theoretical and practical understanding of the trade. The material was also more interesting for learners. The course content was designed in such a way that students without any practical experience could become familiar with the

practice from the beginning of the course. The effectiveness arguments about skills tended to prevail.

Later arguments in relation to skills effectiveness. The research approaches shifted to claims that secondary vocational education in particular was unable to improve efficiency or skills mastery. Examples included in the literature have been outlined. In respect of the manpower perspective, the argument has been that this approach, also referred to as framework was dependent upon the idea that schools should prepare students for the labour market and that occupation-specific training required occupational forecasting or/predictions (Grubb, 1985, pp. 537-538). This meant that theory should always be interspersed with references to practice. In that way theory and practice could merge. Examples from real life would enliven theoretical knowledge. However, it was difficult to be successful in the forecasting unless there was a data base that was well-informed and effectively managed by counsellors. This procedure was constantly becoming more important given the rapid change of skills that learners faced. People in governance positions were aware that countries could not afford two to three years in planning exposure to field experience. Grubb further argued that there was a lack of relevance of vocational education at several levels. The shortcoming in the training could be addressed by increasing practice levels i.e., the labour demand that could be controlled in a country (Grubb, 1985, pp. 537-538).

First, there were difficulties in considering local variations for programme design and transition from school to work. Problems were often caused by uninformed counsellors with little or no experience in the field. This problem could be addressed by means of in-service training courses. Grubb (1985) indicated the progression from secondary vocational to post-secondary education was utilized as an alternative academic route which resulted in weakening the relevance to the labour market. Grubb (1985, p.538) finally argued that the work experience programmes or internships that constituted part of vocational education

delivery more likely resulted in the enjoyment of "socialization" rather than training. The quality of course content could not be critiqued as weak if the teaching style was lacking in quality time management and motivation to achieve excellence in the field. This obstacle could be addressed through motivated tasks or projects that were designed purposefully with definite learning outcomes in mind.

Inherent in the claim of the lack of relevance in vocational education was the argument that children's aspirations for vocational education and their occupations afterward were decided by external factors rather than by the schools (Foster, 1977). Learners had their own realistic perceptions of future opportunities. On the other hand "no amount of formal technical, vocational or agricultural instruction alone was going to check the movement from the rural areas, reduce the volume of unemployment, or indeed necessarily have any effect on the rate of economic development" (Foster 1977, p. 364). The situations that affected individuals were far-reaching and subtle. Smith (1987), contended that it was impossible for secondary vocational schooling to prepare students with job-related skills since the institutional teaching as an activity could rather be called professional than be accepted as a craft. Thus, it could only create skills that were effective in classrooms.

Middleton, Ziderman and van Adams (1993) commented on vocational education outputs. They maintained that there was little distinction between the earnings of graduates of general and vocational schools. In other words, the two types of schooling bought the same benefits. However the costs of vocational schooling were much higher than those of general courses due to the complexity of the former (Middleton, Ziderman & Adams, 1993, p.50). The VE curriculum was composed of general theoretical knowledge, practical knowledge and workshop experiences. Therefore, on the cost-benefit evaluation, vocational schooling was not a worthwhile undertaking if there were no good prospects for graduates.

Social status of vocational education. With regard to social acceptance of vocational education, Psacharopoulos (1991) argued that there was a lack of attraction to both pupils and their parents, and of competent teachers in this education type. As a result of some bias attached to vocational education and because of the high cost of vocational education it could be difficult to draw persons with the capacity of being skilled and re-skilled (i.e. learners) to improve their ability due to rapid changes in the field of technology.

Grubb (1985, p.538) claimed the alleviation, in respect of cost reduction had already taken place in many developed countries. Vocational training as a training course was placed outside the schools, or placed at post-school level. In those countries programmes were funded and apprenticeships subsidized by government or private enterprise. Such an arrangement was a better match between the two sides of demand for and supply of skills. Psacharapoulos (1991) agreed it would be advisable to take specialized vocational education out of the school system and place it at post-school level or in the private sector to provide training in apprenticeships.
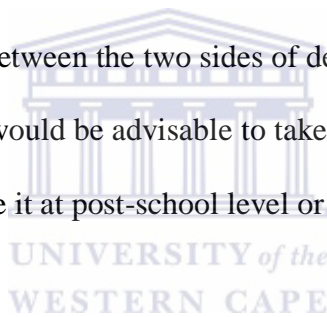
The Late Approach: A Comprehensive Approach

During **t**he next two decades, a comprehensive approach developed to gain understanding how advanced countries approached their skills' development facility. This approach to research on vocational education investigated the characteristics that defined those countries' systems. Research studies tended to focus comparatively on the reasons why the systems varied. Three typical inquiry approaches in this period have been outlined below.

Skills formation systems approach. The skills formation approach adopted the belief that the vocational education system in a country was determined by the national skills development system. This approach proposed that policy makers attempt an optimization of their own country's vocational education system on the basis of continuous comparison with other countries. Therefore, this approach denoted convergent and functionalist features

characterized by a tendency to call national vocational education systems models. Research

identified some countries where those countries' vocational education systems were

considered similar to those of the local country. In the literature of the period the national

vocational education systems in the larger part of the world have been classified as different

models.

Castro and Alfthan (1992) pointed out five models of vocational education systems

that existed throughout the world. The first model, developed in France has been called the

'French system'. Pupils older than 13-years were tracked in parallel paths in vocational and

academic schools. Though there was no exclusion for secondary vocational graduates to

enter into higher education, it was difficult to realize the move in practice. The secondary

vocational schools were divided into two types, namely, technical and vocational schools.

Although they were at the same level, the former offered more general courses preparing

students for supervisory roles in factories or for high end skilled occupations. In contrast, the

latter instructed through more specialized courses aimed at the preparation of machinists,

turners and welders, among others. This model was followed by many developing countries

and Eastern European countries.

The second model (Castro & Alfthan, 1992), was the 'American system', which

featured comprehensive high schools in which all similar-aged students were learning in the

same space until the end of the secondary band. In this model, the variety of vocational

subjects was integrated in the academic curriculum. Though there was no physical separation,

there were still differentiated paths taken by students to higher education and directly to the

labour market. This model was promoted or financed in developing countries by international

aid agencies.

The third model was a dual system employed in Germany, Austria and Switzerland

(Castro & Alfthan, 1992). This model provided education and training in different trades to

learners as apprentices in a variety of occupations. After 10-year general schooling pupils were divided into academic and vocational groups. The former prepared pupils for higher education studies, while with the latter pupils started to focus on a job in a specific area of their choice. They worked in the enterprise for 3-4 days and studied theoretical subjects in a training centre on the other days of the week. At the end of 2-3 years, learners were certified on a test completing their apprenticeship. Afterwards they could remain in the same enterprise or move to another one. In Germany, additional provision of 2-3 years schooling was offered for the move from apprenticeship to higher education, although very few students took this route.

The fourth model (Castro & Alfthan, 1992) was the enterprise-based training centres existing in most Latin American countries. In this model learners followed a different pattern. After students completed basic education, they were divided into two education groups. One group took a secondary academic course while the second group took the higher education course. Students who did not take either route attended full-time training courses as a supervised internship at the centres. In these systems, the Ministry of Labour had oversight and employers had to pay a skills levy of approximately one percent.

The fifth model, (Castro & Alfthan, 1992), referred to as the Japanese system was developed in the country. It offered vocational instruction in parallel vocational schools, integration of vocational subjects in general syllabuses, and independent vocational tracks in general schools. Yet, these programmes only basically provided a wide range of solutions. In contrast to other countries the hallmark of the Japanese system was the vocational training offered by large corporations. Training courses immediately included courses that served specific, moral and other 'versatile' needs to serve learners throughout their lives. Small and medium sized enterprises did not have such advantages but had to be dependent on school-based vocational delivery.

Finegold and Soskice (1988) analysed skills formation from the perspective of the national economic organization and performance together with the operation of national vocational education systems in some countries in the West. They claimed two models as high-skills and two as low-skills equilibriums. The former were associated with high-skills equilibrium under specific conditions in one of three possible situations. First, the major section of the economic sector in a society should perform high earning, high quality strategies that added high value. If it was a 'flexible-system' in process of developing or in pursuit of new products and services it was also approved. The third possibility to be rated as a high-skill quality country was if production was subject to rapid change and the traditional management structures were replaced by dynamic growth and teamwork as skilled workers were needed. Such circumstances led to a longer vocational education system that offered greater choices. It could be followed by enterprise-based training as the case was in the US, Japan, Germany, Austria, Switzerland, and France. In contrast, the low-skills equilibrium referred to a country in which the majority of enterprises in a society were organised by managers and workers who were not as highly skilled and produced low-quality goods and services. The result of such a situation was limited provision of public vocational education as well as less pressure on enterprises to offer training. According to the authors the British case could serve as an example.

The International Labour Organisation (1998) and Green (1999) only published in the late 20th century. However, in both instances their models were in operation in many countries during the targeted period of this study. The effect of the approach to vocational education in European and Asian countries during the eighties and nineties had a direct or indirect effect on the approach to VE in South Africa (via UK and America) and China (via Asian countries, e.g., Taiwan, Korea, Japan) during the same period.

The International Labour Organisation (1998, p.70) looked to the role of the State as mediator between the employers and the vocational education institutions. This referred to the demand and supply sides of skills. The role of the state was regarded as decisive to skills formation in a society. Thus, a similarity across countries indicated that the role of the state was contributing to a particular model of the vocational education system. Four models were developed. First, the 'cooperative system' in Austria, Germany, Switzerland and many countries in Latin America mainly featured on the basis of close cooperation among the State, employers' organizations and trade unions (International Labour Organization, 1998).

Second, the 'enterprise-based system' in Japan was due to the character of 'the absence of stock market pressure,' leading to 'long-termism'. It meant life-time employment, low labour turnover, and a wage system in terms of 'seniority' and 'enterprise-based trade unions'. It was a stable, well-paying and organized system (International Labour Organization, 1998, p. 70).

The third model was the 'voluntarist system' of UK and the USA. Government was only slightly involved with training and employers had little pressure to offer training (International Labour Organization, 1998).

The fourth model was the 'state-driven model' including two sub-systems. The two categories were the following: One was the 'demand-led' sub-system in the Republic of Korea, Taiwan, Singapore and China. The characteristics of this sub-system were that the state played a leading role in matching the demand for and supply of skills and operated in 'an open and competitive economic environment'. The other was the 'supply-led' sub-system prevalent in many developing countries in Africa and Asia where their economies were experiencing transition. Its main features showed that government was the principal supporter of training for the formal sector in training institutions, and employers had little or no pressure to train (International Labour Organisation, 1998).The role of the State was

important in different ways. It was the mediator between employers and the vocational

education institutions. It determined the supply and demand of skills. It determined the

funding of skills in a society as it contributed to a particular vocational education model

(International Labour Organization, 1998, p.70).

Green (1999) developed five models. He took account of the economy and the role of

the state among vocational education systems, labour markets and enterprises in different

countries. Green confined inquiry of similarity and difference to the geographic level to

understand some of the common features among countries. His five models were relevant for

Western Europe and East Asia.

The first model, the Japanese model has been referred to as 'developmentalist' It was

a state model and was regarded as representative of cases in South Korea, Taiwan and

Singapore (Green, 1999). The similarities among these countries were as follows. They were

industrialized at a later stage. With their economy based on export-orientation, they

developed high rates of investment and productivity. Next, they were characterized as

developmentalist states in neo-classical economic terms. The state was directly involved in

the economy through central state bureaucracies. However, both employers and unions had

some measure of independence and autonomous power to plan the economy for long-term

interests including the design of markets. And they all had a Confucian loyalty tradition. This

was reflected in the belief that education was first intended as a collective process of state

formation, after which it became essential for individual development and personal growth.

This practice could be established through inculcating social attitudes and personal skills. All

groups, both citizenry and labour would then become cohesive, orderly and cooperative.

Skills formation and citizen formation would develop together and the instruction of

specific technical skills was the second most important event in life. This practice would

represent trust and organizational cohesion and long-term growth and prevention of a hostile

take-over. Since these countries had large companies, a strong apprentice system was viewed as a sound solution to social partnership. With little institutional autonomy, and with regional governance, the tripartite division of state-run secondary schools was done through academic achievement. The modern dual system of vocational education combined educational institution-based courses and company-based training. There was still a degree of labour mobility, thus close articulation existed between training, standards-based qualifications and work.

The model was replicated in Austria where skills and knowledge were acquired on the job. These led to similar features of the national vocational education system being centralized. Development of group cohesion and conformism was emphasized. A specific form of articulation between formal school systems and labour markets developed. These included uniform institutional structures of public school systems, such as prescribed curricula, uniform textbooks and ethical cultivation.

In contrast, there were differences in the features of the enterprises in different countries linked to their roles in training provision. Japan and South Korea had large enterprises which provided enterprise-based training. In this model, the high school band was dominated by the general track, while the school-based vocational education offered very general courses. In addition, standards-based qualifications were not important as criteria for graduates' appointment at large firms.

The majority of Taiwan firms were small and they were not able to offer training. In this model, the government expanded vocational education more to high school level than to the general peer group. The majority of firms in Singapore were foreign-owned. Where enterprise-based training was unavailable, the government channelled the larger part of middle school leavers into skills training programmes in vocational educational institutions in combination with adult skills training for older employees.

The German model was second (Green, 1999). Germany had traditions of an ethnically diverse culture such as Erhardian "social market" doctrines and Catholicism that led to strong social partnerships. Company boards included the representatives of the financial system and workers. In addition to strong involvement of large sectoral unions, it generated a spirit of co-operation and compromise. Emphasis was on long-term investment in Switzerland and in the Netherlands due to the similarity of these features across these countries.

The third model was known as the French model (Green, 1999). Under the influence of the republican ideal, France paid more attention to the state-centred notions of political membership. They assimilated the ethnic cultures into homogeneous institutional structures and administrative systems**.** In addition to its encyclopaedic knowledge tradition, the French school system had been under strong central control, in which comprehensive compulsory schooling was followed by two-streamed upper secondary education. Education aimed at the cultivation of national values that conformed to unified social customs and did not deviate from the accepted fixed ways. French firms were generally identified as small. No provision was made for training. The labour market mainly carried out agreements between unions and employers within sectors. Qualifications played an important role in job recruitment. Promotion and pay levels were also subject to the right qualifications. Thus, the school-based, upper secondary level vocational education was under pressure to provide quality training in both tracks - occupational training as well as general education. State validated certificates were externally assessed.

The fourth model has been known as the Swedish model. Although it was developed in Sweden it was also adopted by the other Nordic states (Green, 1999). Equal education for all maintaining democratic social practice was the norm in those countries. In this model, vocational education was provided in comprehensive high schools. There were also

apprenticeships that were provided under guidance of schools. Apprenticeships played an important role in the preparation for trade. At the same time, liberal adult education existed for unemployed and redeployed adults.

The fifth model was the liberal ideal used in England and Wales. It allowed the state to play a free role in education (Green, 1999). Since the late 1980s, centralized control over curricula and qualifications emerged. School-based education was the dominant tradition in both occupational and internal structures. The upper secondary system still featured. However, differentiated, specialized, competence-based courses with core skills became more popular. Vocational curricula became more limited with a greater focus on vocational education than on general courses.

These different approaches to schooling, and in particular, advantages and disadvantages of specific approaches to vocational education were carefully assessed over the past three to four decades. Intensive debates on the approaches to skills formation occurred during which different perspectives were highlighted. Ashton and Green (1996) argued that:

There persists a substantial diversity in both skills formation and more generally economic systems. The diversity in skills demand has its origins not just in technological diversity but in the wider political economic differences across nations. It is too simple to assume that all countries are converging to a common modern technology in which ever increasing and broader skills are needed from modern national workforces. (Ashton & Green, 1996, p. 28)

From the above it is evident that a variety of studies have been conducted to generate various types of systems. Drawing on these studies they denoted that much diversity in skills was required to operate successfully in different countries. Proponents maintained that the skill formation diversity was not limited to factors such as technology, but had to do with the differences between nations and economic and social development of nations (Ashton &

Green, 1996). They noted too that not all countries were moving towards adopting the same modern technology which then depended on the same type of skills. Following on the aspect of skills formation Finegold (1991, p.58) asserted the distance between abstract models and actual practices. Proof of this assertion had been noticeable in the different outcomes and interpretations of the same model directed at various countries with different situations. The state 'developmentalist' model (Green, 1999) which was regarded as representative of cases in South Korea, Taiwan and Singapore has served as an example.

Convergence among different national vocational education systems or facets of the systems was the trend of globalization (Green, 1999). He argued that although "political and cultural globalization is on much weaker ground", convergence could emerge when borrowing policy happened, when "supra-national authorities" sought to cooperate in "particular areas of national educational practice", and when national systems responded to shared forces and problems" (Green, 1999, p.6). Convergent analysis could be conducted in two parts - when the policy discourse and objectives in a number of countries became closer to one another over time so that they presented the same characteristics as well as when actual structures and processes and outcomes resembled one another (Green, 1999, p. 56). Finegold (1991, p.8) who did not agree with this approach stated his view as follows: "The abstract models become so far removed from reality that it is difficult to apply them to particular cases". Research on vocational education has also considered the processes from a historical institutionalist angle.

Historical institutionalist approach. This approach looked into changes in vocational education systems. When researchers following this approach considered institutions the belief was that the origins and changes of vocational education systems were embedded in the development of institutions. It was assumed that values and beliefs underscored and maintained institutional structures in countries. Historical institutionalist

studies emphasized the role of the internal political-economic context (national features/character) that functioned in the institutional arrangements.

Green (1990, p.76), noted that the changes of skills requirements, social division of labour, either urbanization or 'popularisation' proved in no direct and immediate relation to be of benefit to the development of education. The "reductionist theories" faced difficulties to fully explain "uneven educational development in different countries", Green (1990, p.76). That was the reason for Archer (1989) to shift the inquiry from one that was 'socially determined, to the interaction of different groups and the internal institutional development'. In trying to find answers, the source of the problem was tracked to the beginnings of educational changes at the level of institutions and politics. Nevertheless, Archer's main contribution focused on the social interaction between institutions and organizations (or social actors), that is, at meso-level. Green thus extended institutional inquiry up to the macro-level which has been concerned with state formation (Green, 1990, p.77).

One of the further steps taken in this type of research was to combine the meso- and macro-level analysis. Institutional configurations in combination with historical inquiry were seen as being complementary. According to Pierson and Skocpol, (2002, p.14), that was pursuing historical institutionalism However, there were negative issues connected to this approach. Rose (1991) argued that by embedding the typology in the specifics of history there was a danger that "one ran the risk of false particularism and finished up with a large number of types". However, Finegold (1991) put it that he would run the risk of failure as he wanted to see the result in one particular case. He argued: "When taken to its extreme is that it treats each case as unique with particular cultural, historical and sociological characteristics, which therefore makes it very difficult to learn from international comparisons" (Finegold, 1991, p.59).

Alternative Theoretical Approaches to Skills Formation Systems and Historical Institutionalism

This arrangement refers to the appearance of the two approaches in order to gain an advanced understanding of the development of vocational education systems across different countries.

Until now, the only available work in this area in the vocational education sphere was the work by Maurer (2012) that conducted a historical comparison of vocational education systems in Sri Lanka and Bangladesh. Arguments on skills formation systems on changes in vocational education systems, in particular in many developing countries were derived from the work of Ashton, Sung and Turbin (2000), outlined by Maurer (2012), set out below.

 First, after the Second World War, many developing countries established 'state-led centralized systems of economic development', and invested in public vocational education systems to serve 'import-substituting industries'. Second, in the following economic liberalization era, such import-substituting industries and state-funded vocational education systems declined. A 'disjuncture' arose in skills formation, with the result that the growth of mainly foreign-owned industries that were export-oriented converted to a private training sector that did not cater for locals. Those industries focused mainly on the middle and upper management of foreign-owned companies. Public vocational education sectors only functioned to correct 'market failures' in order to ensure that the unemployed and those living in poverty in rural areas were provided with training (Maurer, 2012). The author further asserted that this approach implied a functionalist tradition. Maurer argued that any reform of public VE training in developing countries would need to be seen as a political reaction to market failures (Maurer, 2012).

To analyse the alternative theoretical approaches, Maurer (2012) first tested if skills formation systems were able to explain the development of vocational education in these two

countries and found a negative answer. Next, he conducted inquiries into the two cases (Sri

Lanka and Bangladesh), on a historical institutionalist approach. The author thus understood

that the development of vocational education systems was the result of the structural

elaboration of political-economic systems in Sri Lanka and Bangladesh. Furthermore Maurer

(2012) concluded that a historical institutionalist perspective pinpointed mechanisms that

may have played a crucial role in the development of vocational education systems in

countries other than in Sri Lanka and Bangladesh. It has been used as follows.

Historical Institutionalist Approach to Vocational Education

First, according to the review above, in contrast to the previous economic concern

which focused on the efficiency and effectiveness of vocational education, the current

research approaches to vocational education had a common characteristic that focused on the

system of vocational education in a specific country. The assumption was that vocational

education was capable of bringing benefits to both individuals and society. Yet, there has

been a shift in considering the character of what the vocational education systems were like

in specific countries in history. Researchers have been curious to find out what similarities

existed in respect of the understanding of variation across countries. They wanted to know

why a specific vocational education system existed within a specific country and how the

vocational education system changed within the country's context over a period of time.

Second, from the aspect of comparative methodology, the conventional comparative

methods have been characterized by means of using a term as 'simply' and 'broadly' to

indicate a comparative perspective (Amenta, 2010, p.352). A well-known representation has

been the perspective devised by Mill (1806, p .1873). When using Mill's comparative

perspective, the selection of cases must be concerned with a condition that tried to conform as

much as possible to the ideal situation (Llobera, 1998, pp. 78-79). The countries for

comparison were either similar in all aspects except those under study or dissimilar in all

aspects except those under study. However, such methods faded. Instead, sophisticated, historical social comparative methods emerged to be addressed by key actors. Amenta stated it was associated with historical institutionalism (Amenta, 2010, p.352). In Archer's view (1989) this approach was rooted in history. Consequently it would be better to support the understanding of the causal mechanisms of historically different nations generating the different development phases of vocational education systems (Archer, 1989, p.255). Since my study has been underpinned by the principles of historical institutionalism, this school of thought has been addressed.

Institutional Theory and Historical Institutionalism

In the next section historical institutionalism has been scrutinised. The scrutiny was based on a relatively broad representation in which the definition of institutions, the evolution of institutionalism and the general aspects of a historical institutionalist approach have been included.

What are institutions. Institutions experienced a radical evolution ranging from old- to new-formats with regard to principal concepts and inquiry levels. Steinmo, (2008, p.151) asserted that the inquiry about institutions could be taken as far back as the time when Plato began to understand "the importance of political institutions for structuring political behaviour".

Considering the changes that occurred in the process of evolution, Goffman (1961) called this term 'the total institutions' and mapped it as an environment influencing a few groups, namely 'boarding schools, monasteries, army training camps and deep water naval vessels' in society, by means of shaping the individuals' behaviour into common subjection to the institutional statements (Goffman, 1961, cited in Wallis, 1996, p.417) With the intensification of distinction between the structures (the organic parts of the sate as an organism) and processes (the activities of these structures) of a society, this term was

expanded to 'social institutions'. The set of social institutions was seen as one of the structures of a society through processes in which "essential social activities are organized and social needs are met" based on "approved procedures and forms for the articulation of relationship and interests" (Wallis, 1996, p.417) Two important factors were introduced into the debate. The first was that institutions themselves were in a process of 'formation, negotiation and decline' (Wallis, 1996, p.17). Second, the preference of individuals for a relatively predictable and permanent environment led to the fact that "they may grow attached to a particular innovation and seek to perpetuate it, repeating the same pattern in an increasingly routine manner (Wallis, 1996, p.17). The latter referred to the idea that social habits were valued and changed little over time.

To illustrate the complexity of the term institution scholars gave their preferred explanations of 'institutions', for example, North (1990), contended that:

Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social, or economic. Conceptually, what must be clearly differentiated are the rules from the players. The purpose of the rules is to define the way the game is played. But the objective of the team within that set of rules is to win the game… Modelling the strategies and skills of the team as it develops is a separate process from modelling the creation, evolution, and consequences of the rules. (North (1990, pp.3-5)

From the above it is evident that the concept 'institutions' refers to rules and regulations (such as policies and Acts) that shape human interaction within a society or a structure (or a policy field) of a society. The institutions consist of rules and these have patterns and procedures that have to be followed. While the above told us about the concept of institutions from the perspective of human interaction almost like a game and institutions

regulating the strategies in order to 'play the game', it is important to note some further aspects with regard to the concept.

The rules (of an institution) have to be seen as guidelines on how to play the game, but the important aspect has been the objective of the game which has been to win the game by the players who used strategies and skills within the scope of the rules to win. Thus, institutions are entities that operate at a higher-order above the individual level and regulate the interests and political participation of actors "without requiring repeated collective mobilization or authoritative intervention to achieve these regularities" (Jepperson, 1991, p.145). Furthermore, it is important to note as well that the study of institutions has been approached from different disciplinary vantage points, for example, from sociological and political science angles (Amenta and Ramsey, 2010).

Moreover, at times the concept 'institutions' has been used interchangeably with the concept 'organisation'. In light of this, Mantzavinos (201, p.400) defined institutions in particular to eliminate the confusion between institutions and organizations. According to Mantzavinos the latter were about corporate actors who were only bound by some rules. He noted that organisations could be viewed as adhering to or following, or being constrained by the rules of the institutions. Thus, institutions were structures at meta-level.

In the literature on institutions, more especially that of institutional theory, the analyses have also been along the lines of 'old' and 'new' institutionalism (Peters, 2000; Scott, 2001). There have been some differences between the two streams (Mantzavinos, 2011). The 'old-institutional' approach operated in a framework of functional analysis, drawing on causal relations between the parts of society, interpreting the parts separately but in relation to the overall orderly functioning of society (Mantzavinos, 2011, p.399). On the other hand, the 'new institutionalism' studies functioned within a more holistic approach,

employing a multi-theoretical framework in order to understand the evolution and emergence

of certain practices. It also took account of changes over time (Mantzavinos, 2011, p.399).

According to Mantzavinos (2011) the emergence and change of institutions in the new

institutionalist view could be explained as follows. Institutions were divided into two parts,

namely informal rules including conventions, moral rules and social norms. Formal rules

(institutions) included laws and regulations. The informal and formal components were

spontaneous and deliberate (Mantzavinos, 2011, p.402). Changes have been common in

human social interaction and over time people adapted to change. These adaptations included

emotional aspects, knowledge, both scientific and practical as well as the social rules and

institutions (Mantzavinos, 2011). In contrast, the deliberate formation of formal institutions

could be expressed as follows, "the state as an organism creates law, either by constructing

by the conscious decision of its organs new legal rules, or by providing – by means of

suitable adaptation existing informal rules with sanctions" (Mantzavinos, 2011, p. 405).

This process has been identified as political in which the decisive factor has been

about the allocation of resources, which in essence refers to the socio-political and economic

ones. In this regard, the pattern of the ownership of the resources shaped the "behaviour of

the players in the political game" (Mantzavinos, 2011, p. 405). More specifically, this has

been done in a way that presupposed 'the structure of the problems'. From this point, "the

degree of their availability to the players determined the extent of their bargaining power and

thus how much they could influence the political process which in turn generated the formal

institutions" (Mantzavinos, 2011, p.405).

There have been critiques of the new institutionalism approach by Pierson and

Skocpol (2002, which gave rise to the approach called historical institutionalism. I address

this concept below.

Historical Institutionalism. Historical institutionalism has been regarded as one of the derivatives of the new institutionalism, and was developed in political science during the 1960s and 1970s (Hall, 1996, p.937). Steinmo (2008, p.150) noted that this perspective started becoming prevalent in the early 1990s. Through its attention to real world empirical questions, it was concerned with ways in which institutions structured and shaped political behaviour and outcome over time and in this sense it has been historical.

Hall (1996, pp.937-941) provided us with a qualitative explanation of the historical institutional approach. First, in respect of the formation of institutions this approach accepted the notion that contesting for scarce resources among political parts centred politics. It further reasoned that 'the institutional organization of the polity and economy' structured contestation and unequal distribution of resources. Furthermore, this approach viewed 'the polity as an overall system of interesting parts'.

Second, it is also important to understand the effects of institutions. Although any institutional inquiry would ask how institutions influenced individual behaviour, historical institutionalism unfolded a broader picture. In this sense account has been taken of the way in which institutional influences extended from political to social processes. In a particular structure or policy field of a society, institutions regulated relations among its actors to accommodate social processes. Institutions also assigned and distributed power among different groups in an uneven way. Institutions further structured "the kinds of social interests most likely to be represented in the policy process" (Hall, 1996, p.941).

Third, historical institutionalism further took account of institutional development and its influencing factors. It denied the assertion that the same operative forces would generate the same results everywhere, but upheld the belief that the effect of such forces would be mediated by the contextual features of a given situation inherited from the past. Thus, institutions showed "relatively persistent features of historical landscape and one of the

central factors pushed historical development along a set of 'paths, also past lines of policy conditioning subsequent policy Hall, (1996). Such ways have been explained by the concept of 'path-dependence', to be outlined later. Finally, historical institutionalism also looked into other factors in relation to the development of institutions, mainly, socio-economic development (Hall, 1996, pp. 941-942). In respect of the focus of historical institutionalism, Hall (1996, p. 38) pointed out that this approach investigated at macro level:

> …how social and political institutions in different countries, of the sort associated with labour and capital, could structure interactions so as to generate distinctive national trajectories. Much of this work consists of cross-national comparatives of public policy, typically emphasizing the impact of national political institutions structuring relations among legislators, organized interests, the electorate and the judiciary. (Hall, 1996, p. 938)

> Pierson and Skocpol (2002, p. 12), contended that it required both macro- and meso-level institutional configurations complementing each other to structure interactions. They pointed out that more work had to focus on the meso-level which explored policy developments or changes in a particular policy field.

The core of the analysis of historical institutional approach has been to break a long period of time which embraced "a flow of historical events" into slices of continuity in an individual country. The intermittent temporal connected points (critical junctures) have been those moments when institutional origin occurred or/and then changes took place. In other words, each of the connected points was a "branching point from which historical development moves onto a new path" (Hall, 1996, p.942).

One such a critical juncture happened in 1948 in South Africa and in 1949 in China. Two momentous events took place and put each country on a new 'path' (the beginning of the Apartheid era and the start of the communist regime). Conditional to the creation of each

of the critical junctures has been to find out the conjunction of historical events. Next the participants had to explore the causal relationships among them contributing to historical and then institutional changes. Finally they had to elucidate the causality by both a 'theoretical account' and evidence to support the rationale for this theorized linkage (Pierson & Skocpol, 2002, p.14). Subsequently, the analysis moved towards the interactions which played out among institutions or between institutions and organizations in the social processes, referred to as 'period effects', which also rested on a theorized perspective (Pierson & Skocpol, 2002, p.14).

       Three aspects of a historical institutionalist approach. In terms of the review of a historical institutionalist approach, three pinpoints have emerged. These were, respectively, critical junctures, actor coalitions, and path-dependence, all of which have been self-reinforcing.

       The notion of critical junctures refers to the "formative moments and arguments" which are seen as the temporal connected points of the historical continuity within a society (Pierson & Skocpol, 2002, p. 9). A critical juncture leads to a particular period in which there is an institutionalization of specific political arrangements (Pierson & Skocpol, 2002, p.6).

       Pierson and Skocpol (2002) also noted that in a political system the "outcomes at a 'critical juncture' trigger feedback mechanisms by actors in the political system that reinforce the recurrence of a particular pattern into the future" (Pierson & Skocpol, 2002, p .6). They stated that a phenomenon "political inertia" or path-dependence or "self-reinforcing processes" caused change. Pierson and Skopcol (2002) further considered the feedback mechanisms as being self-reinforcing. It became increasingly difficult to change course after one has followed a course for a considerable period of time. Political alternatives could even be lost forever. The moments after a critical juncture were therefore critical as established patterns of political mobilization, or even established ways of citizens' thinking about the

world could convert to a self-generating situation. Actors relied on previous influences and influenced other people in return without changing any critical events or processes (Pierson & Skopcol, 2002, pp. 6-7).

Pierson and Skocpol (2002) then asserted the path-dependent effects on every time's institutional change at every critical juncture:

Institutions are not easily scrapped when conditions change… new initiatives are introduced to address contemporary demands, but they add to, rather than replace pre-existing institutional forms. Alternatively, old institutions may persist but be turned to different uses by newly ascendant groups…In both cases the original choices are likely to figure heavily in the current functioning of the institution. Thus institutions will rarely look like optimal solutions to present collective action problems. (Pierson & Skocpol, 2002, p.14)

Furthermore, not only the processes of institutional formation are affected by path-dependence, but also the influence of institutions that once formed would exert an effect over social processes in the subsequent phase. That is, the period between two close critical junctures or moments when institutional formation or change took place, also met path-dependent effects. Pierson and Skocpol (2002, p.14), noted that "the long-term effects of institutional choices should be seen as the *by-products* of social processes rather than realization of actors' goals". Such effects have been seen to stem from "interactions among institutions or between institutions and organizations" (Pierson & Skocpol, 2002, p.12). The causes should not only be "plausible accounts of individual motivation and behaviour", but also see that "the patterns of resources and relationships in which individuals find themselves have powerful channelling and delimiting effects" (Pierson & Skocpol, 2002 , p. 14). During a particular period, the interaction of the preferences of politics and policy-making not only

generated "irreversibility" but also removed "certain options from the subsequent menu of political possibilities" (Pierson & Skocpol, 2002, p.7).

The Mechanisms that Institutions Draw on in Order to Structure and Shape Political Behaviour

Hall (1996, pp. 937-941), described the process in respect of the mechanisms that institutions drew on, in order to structure and shape political behaviour and outcomes as follows. First, institutions determined the 'contesting rules' of unequal distributive outcomes of scarce resources among political parties. Thus, once institutions have formed, distinctive national political outcomes were developed by means of institutionally organized polity and economy. The polity was a system of interacting political parties. Then, those institutions extended their influence from the macro level to social processes so that in each particular structure or policy field or sector of a society, institutions created interactions among their actors. These interactions were created by regulating relations and assigning power unevenly among the actors, determining among them who had access to a policy-making process and what degrees of access they had respectively.

Next, the mechanisms of institutional influences on policy formation in a particular policy field were reviewed. According to Robinson (1996) governance was a direct power wielding process that controlled and directed individuals' activities. Governance was best described as the political management process which embraced the normative basis of political authority. It also determined both the style in which public affairs were conducted, and the management of public resources. In terms of the governance of a particular policy field, institutions formulated the policies.

In the governance process, actors involved in policy-making include political actors (the State and the other political parties) and societal actors. The political actors (involved in the institutions) played a vital role in intervening in activities and powers of societal actors.

Thus, the State underwrote institutions, helped form governance of this policy field, and retained "the right of legal ratification, the right to authoritative decision where societal actors do not come to a conclusion, and the right to intervene by legislative or executive action" (Mayntz, 2003, p.515). However, Mayntz (2003) implied that the relative influential abilities of the political actors, in particular the State, in regard to the societal actors were dependent upon the national political economic system and its evolution, and in turn impacted on the orientation of policies.

Role of actors in strategy formation. In respect of the interactions among actors leading to policy formation in a particular policy field, the institutional context identified who the actors were, and defined the membership of the actor group. The context also determined resources which the actions of actors required, the purpose they had to serve, and the values they had to consider (Scharpf, 1997, p.39). Each individual actor's action or negotiation for recognition of its value is called a strategy (Scharpf, 1997). Policy formation has been the result of the balance all actors' strategies have reached.

. Thus policy has been described as "actor constellation" which articulated the actors, their strategy opinions, the outcomes based on the strategies, and the preferences of the actors over these outcomes (Scharpf, 1997, pp. 44-45). Thus, unfolding policy could be a clue to inquire into the actors and the governance of a particular policy field of a society during the period when the policy was in effect. The unfolding policy could also inquire into the change in the policy field that the policy brought about during the same period (Scharpf, 1997).

Historical Institutionalist Approach and the Development of the Vocational Education System

Because the vocational education sector has been a particular policy field, the assumptions of institutional influences over the development of a vocational education

system could be understood through three levels. The first critical juncture could lead to the origination of institutional structure of the political economic system. It has universally been seen to coincide with the moment of state formation. Second, the institutional structure could influence the interactions among actors in the policy-making process and this could be linked to the origination of the governance of the vocational education system. The interactions could contribute to policy formation. The actors could articulate the text of the policies. This could be the third level. Here, a balance could occur among the preferences (values), strategy opinions, and outcomes of the strategies of these actors.

In the process there have also been different cycles. These policies could lead to the origination of the vocational education system in a particular context.. This has been called the first cycle. The critical juncture could be the turning point when substantial change emerged in the political economic system, which universally meant the start of the economic liberalization era. This substantial change could lead to change in institutions, then to changes in interactions among actors in the policy-making process that were reflected in the governance of the vocational education system. These changes could result in the replacement of policies. The replacement policies in turn could bring about the development of a vocational education system. This has been seen as the second cycle.

Furthermore, the institutional structure in the second cycle could be influenced by the previous one. In turn, the reform of a vocational education system in the second cycle could be influenced by the reform which happened in the earlier cycle. This phenomenon could be reproduced by actors in the vocational education sector. This has been referred to as a self-reinforcing pattern.

In this study, an attempt has been made to investigate how through the unfolding of these policies, researchers could be able to trace back what actors constituted in the first and second actor coalitions of the vocational education system in the specific country contexts.

This was done in order to determine the change of actor coalitions and governance, and understand the development of the vocational education system and the self-reinforcing pattern.

In addition my research has sought to show how I understood the growth of vocational education at the different levels. These have been referred to as the macro, the meso and the micro-levels. An attempt was made to outline how, at the macro-level, vocational education systems have been tied to the formation of states at different points. In other words an attempt was made to learn what the critical junctures have been. Next, there is the meso-level, where the role of actors has been outlined; and the micro-level, where the influence of   various forces on policy construction could be shown.

Macro-level: critical juncture, state formation. The period of state formation has been seen as the time following the end of the Second World War in the Third world. It has also been accepted as the point of initial institutional formation of a modern society (Green, 1990). State formation has been referred to as "the historical process by which the modern state has been constructed" (Green, 1990, p.77). The process included

> Not only the construction of the political and administrative apparatus of government and all government controlled agencies which constituted the public realm but also the formation of ideologies and collective beliefs which legitimated state power and underpinned concepts of nationhood and national character. (Green, 1990, p.79)

For education, mass schooling (educational expansion) and public education systems arose to serve "a variety of social needs" and serve "the nation as a whole", or rather, the 'national interest' as conceived by the dominant classes in society" (Green, 1990, p.79). Public education was configured by "prescribed curricula and legislation on school attendance" to provide "trained cadres for the government bureaucracy and the military" (Green, 1990, p.79). Green (1990) stated "skills were needed for the fledgling state

manufacturing projects", also to develop "political loyalty amongst the people", as well as "a cohesive national culture" (Green, 1990, p.79).

Macro level: influence of neo-liberal forces. Around the turn of the 1980s, neo-liberal theory started having an important influence on economic liberalization in the Third World countries, with its four doctrines referred to below (Preston, 1996, p.259-260). First, for marketization, the removal of controls on the private sector, the privatization of the state assets and the liberalization of the foreign investment regulations were required. Second, to eliminate market-inhibitory social institutions and practices, the trade unions and professions, as well as various subsidies and the employment regulations had to be prevented. Third, government intervention was required to reduce its efforts, including the restrictions of government spending, regulative and planning activities, and tariff regime. Fourth, the above government programmes of liberalization needed to combine their efforts with programmes of political repression.

Under the global pressure, however, different countries had their different responses. Gotham (2005, pp.792-793) argued that "global-level forces were transforming social relations and influencing the activities and operations of states" in two views. First, a 'hyperglobalist' view considered that globalization was omnipresent and would cause "the erosion or disempowering of the state". Second, a "statist" view, held by people who believed that the state still held significant "institutions and national policy in organizing global economic flows and constituting the global economy". This group thought although globalization could contribute to "a new geographic extension of state or a transformation of state capacities', it neither created "a novel socio-economic condition"- nor disrupted - "state sovereignty"' (Gotham, 2005, pp.792-793). Thus, within the state, there were different views among citizenry. Some were promoting state policy. Others feared being harmed by current

policy and were in favour of disengaging from globalization. Moreover, there were different extents to which different countries responded to the trends of neo-liberalism at macro-level.

It was the moment of economic liberalization when a substantial shift occurred from the previous centralized economy towards some degree of deregulation and privatization or marketization. In turn, this led to changes in institutions within a Third World country. Therefore, the economic liberalization was chosen as the second critical juncture.

Meso-level: Institutional influences - governance of education. The second level (the meso-level) addressed institutional influences over the governance of vocational education. The structural interaction theory was introduced to understand the development of the governance of vocational education.

According to the review above once institutions formed, first, their influence extended into a particular policy field of a society. Second, the context of a set of institutions determined roles of actors and their interactions in the policy process. Under institutions, the governance of this field and the pattern of political actors influenced societal actors' form. Third, the interactions among these actors led to the formation of policies. Finally, the relative influential capabilities of political actors and societal actors were determined by the socio-political economic system on one hand which determined the orientation of policies on the other. Because of the existence of such mechanisms of institutional influence over the education field, this study employed structural interaction theory to understand education practice at the time under review.

Meso-level: Role of actors in terms of the governance of VE. In order to establish stable governance of the education sector following state formation, an educational governance body gradually formed (Archer, 1979). Three types of actors emerged in the policy-making process, namely internal and external interest groups and the government. As Archer (1979) indicated, the internal interest group referred to the professionals working in

the education system. The external interest group included those outside the education system

calling for educational services which were more specialized or community-oriented. The

government's role was set to embrace the state as well as local authority bodies and parties in

diverse institutional sectors with distinct 'operations' and 'service requirements' (Archer,

1979). The governance body had to establish and support educational aims. It had to feature

as a unity consisting of 'sectional and factional interests' (Archer, 1979).

According to the review above, those three types of actors represented different

sectors in the community. Each group had some exclusive responsibilities. The government

representatives were primarily political actors, but with some societal roles. All three groups

had equal status, but with specific roles. The professional (internal) and external interest

groups seemed to be both political and societal actors in equal measure. In the vocational

education sector the professional interest group could refer to training providers, assessors

and certificating bodies, and the external interest group to clients such as employers,

individuals and communities. Institutions influenced the interactions among the three types of

actors, by means of articulating structural relations in a society. Specifically, based on "the

distribution of educational services and control", institutions shaped "the action-contexts in

which people find themselves" (Archer, 1979, p.245).

Regarding the interactions among the actors in a policy-making process, Archer

(1979) described them as three types of strategies. First, the term "internal initiation" referred

to the process in which the professional interest group exchanged educational services (a

resource) with the government for increase in its autonomy, and with the external interest

group for other kinds of resources (Archer, 1979). Second, the term "external transaction"

referred to the process during which the external interest group exchanged financial or

material resources with the internal interest group for more relevant educational services

(Archer, 1979). The third was called "political manipulation" which referred to the role the

state was playing in the policy process. On one hand, as political actors, the state always

played a major role in "the process of structural elaboration in education." They were

responsible for "the regulation of resources flowing to public education attempting to

manipulate the political centre. The state would often replace past policies as a means of

manipulating resources in order to implement change" (Archer, 1979, p. 43), while the

sectoral parties exerted "normal influence over the shaping of public educational policy"

(Archer, 1979, p.242). On the other hand, with regard to the internal and external interest

groups (societal actors), the state influenced negotiation between government and the

profession by affecting the amount and type of internal initiation. The state also determined

the nature of external transactions, partly "because it helps to define which groups engage in

such negotiations" (Archer, 1979, p.243).

The relative influential capabilities between the state, the sectoral parties, the local

authority bodies and the societal actors were changing. Archer stated that the "extent to

which the state performs this regulatory role determines the importance of the political

structure and interaction in producing educational change" (Archer (1979, p. 245). In this

regard, the notion of extent referred to the centralized or decentralized systems.

In a centralized system, Archer (1985, p. 54) argued "it is possible to concentrate

almost exclusively on interaction which culminates in the passing of legislation, decrees, or

instruction". Educational interest groups, both internal and external, had little alternative but

to accept these measures as it was decreed by law.

In a decentralized system, education featured more 'specialization and differentiation'

activities as part of their curricula (Archer, 1979, p.246). For political actors, the policy-

making process more extensively embraced sectoral parties and local authority bodies

(Archer, 1985, p.54). In reality, the profession could be actively involved to help in particular

situations such as frame legislation and mould practice by "representation on advisory

committees or independently initiate changes which were then submitted as 'evidence' to support their case in political bargaining. These actors could "refuse to implement central policies or subject them to considerable modification at the local level" (Archer, 1979, p.249). Transactions between the professional and external interest groups were also active in pursuit of more specialized education to be more relevant to communities (Archer, 1979, p. 249). The external interest groups were given greater institutional independence so that they could directly negotiate with various organizations for their training and other educational services. At the same time, many institutional elites gained educational fulfilment from this process and made "whole strings of colleges, courses, and qualifications attributable to such transactions" (Archer, 1989, p.59).

The centralized system stemmed from a process of 'nationalization' in which private education experienced displacement. In contrast, market competition contributed to the decentralized system in which education then faced 'theoretical embarrassment' and took on an advisory role (Archer, 1989, p. 258).

Micro-level: Institutional effects: how policy led to change in vocational education system. The micro-level stressed policy values. In this way it attempted to understand the change in a vocational education system led by the policy that was formed. In respect of the way in which policy led to change in an education system, policy was the result of the strategies or values that actors used to reach a balance. Thus policy was seen as actor constellation, and these balanced values led to educational change. Kogan (1975) stated that policy change or development and actor analysis to a great extent tended to be the outcome of analysis of values.

According to Kogan (1975), policies were the realisation of statements of value. In other words the statements of value were the prescriptive intention of the policy. In this way, the policy was the official allocation or designation of values that the state wished to advance.

Values, in turn were divided into two types, namely basic and secondary. The basic types included terms such as 'equality' and 'equity' among others. The secondary types included those terms that were used to defend the basic values. A set of values embedded in a single education policy or a group of policies were grouped in educational, social, economic and institutional categories. However it was found that these categories overlapped.

Educational values implied two dimensions, namely internal and social (Kogan, 1975). The internal values were laid upon by the liberal education approach. These values contained features such as the production of educated people with knowledge and skills, the freedom of teachers, student-centred teaching and learning, among others. In the liberal approach a central prescribed curriculum was to be avoided. In addition, educational values also gave place to socialization to allow the possibility that the aims of education were to produce personal autonomy and high social mobility (Kogan, 1975).

Social values covered a broad range of aspects (Kogan, 1975). On the basis of the whole basic values set, social values stressed educational provision for "those in most need" as the aim of education, which tended to be egalitarian. Teachers' autonomy and the imposition of a central prescribed curriculum were in direct opposition to the basic aim. However, the values of personal autonomy and high social mobility as well as of productivity improvement were included.

Economic values put emphasis on increasing the productivity of the society and defending it against the effects of poor economic performance (Kogan, 1975). The curriculum needed to be narrowly 'adopting the vocation in combination with skills training. However, an opposite voice stated that the working population should learn "how to learn and adapt itself to changing economic and social demands and, at the same time, prepare itself for the good life" (Kogan, 1975, p.64).

Institutional values gave prominence to a part of basic values to include first, such values as "equity", "a sense of community and family", "defending society", "increasing national resources" and "interpersonal relationship" (Kogan, 1975, p. 65). Second on the list came the defence of key interest groups or actors in the ways that regulated the ambiguous objective of participation of external actors. These included communities, employers, parents, individuals and the explicit objective of the processes supporting professional expertise for internal actors. Unlike the first three types of values which directly required the output of the education system, institutional values did not have such direct linkage to desired output but mainly encouraged the activity of the key interest groups (Kogan, 1975, p.65). Institutional values included two aspects of effects. First, 'community values' addressed the development of a connection of education with its clientele (external actors) in the community (Kogan, 1975, p.65). Second, 'professional values' maintained the educational processes of producing individual autonomy as the base of the teacher's professional expertise (Kogan, 1975, p.66). These statements maintained the power structure of "teachers, local educational administrators, inspectors, organizers and teacher educators who held the power" from the external actors (Kogan, 1975, p. 66). Thus, institutional values were seen as 'antipathetic' to liberal assumptions, and in conflict with the notion of educational provision for those in most need in terms of social values (Kogan, 1975, p.66).

Kogan (1975) further noted that "the main policy movements related to major changes in ideology and values" (Kogan, 1975, p.38). Changes in policy values were the products of the interactions among political, professional and external interest groups (Kogan, 1975, p.26); and "educational policies and the values underlying them interacted with the moods and fashions of their period" (Kogan, 1975, p.26).

Changes in education policies manifested continuity or reinforcing and discontinuity created by actors (Kogan, 1975). If the professional or internal actors were strong, and social

values tended to address personal autonomy and social mobility, at the same time economic values emphasized the development of a working population with learning and adaptive abilities. Change in educational values and policies would display reinforcing relatively easily. Egalitarianism was advanced when economic and social issues were debated hotly by external actors and social groups. If political actors and intellectuals exerted strong influence, change in educational values and policies was discontinuous. And each of these changes was caused by respective mechanisms. (Kogan, 1975, pp.55-57)

Conclusion

This chapter has presented a review of international and local literature on vocational education. The international background and ideas of scholars from different country contexts regarding the phenomenon vocational education contributed to greater understanding of the topic. Similarly, the literature review indicated how the meanings and definition of vocational education in the South African and Chinese contexts evolved. Finally, the chapter provided an outline of the ways in which research into vocational education has been approached in the post-Second World War period. The chapter concluded with two sets of ideas / guidelines that have helped me to understand how vocational education has evolved and grown, more specifically in terms of the external and internal forces shaping it.

In Chapter 3 the focus is on the research methodology.

.

Chapter 3   Research Methodology

As indicated in the former chapters, this study has sought to discover how two historically different nations, South Africa and China, generated varying vocational education systems during the period from 1948/9 to the mid-1990s.

Four strategies were used to approach the study design and techniques. First, I introduce the study in terms of a broad case study-type. Second, I show that the study adopted a historical stance insofar as vocational education development is investigated over a period of time. Third, I present a historical comparison of the systems in these two countries over a period of five decades. In order to do this, I have drawn on primary, secondary and tertiary sources of information to understand how the phenomenon vocational education came about, historically. Fourth, I show how I used documents as the main instrument (technique) to understand the case of vocational education as it evolved across two country contexts. These documents, the historical sources, are used comparatively, drawing on sources from both countries.

The section that deals with the design of the study begins with a brief sketch of the characteristics of the case study and a historical comparative method, both of which are applied in this study. This chapter also highlights the instruments that were used to conduct the study. The documentary sources are clearly defined. In the final part of this section ethical considerations are discussed.

Research Aims

As mentioned in Chapter 1, the aims of this study are to trace the development of the vocational education histories of China and South Africa over a period of half a century. This was between 1948 and 1994 in South Africa and from 1949 to 1993 in China. The purpose of the study has been to understand and trace the relation between the internal and external

socio-economic, and educational factors and determine how these impacted on the development of vocational education in both countries.

Design of the Study

The case study. This research used the design of a case study to help clarify the phenomenon of vocational education. Briefly stated, a case study could be seen as the process of learning about the case as well as the outcome of the attempt (Stake, 1994). It has to be seen as an in-depth study of a phenomenon, in this instance vocational education in order to arrive at a better, more in-depth understanding of the particular case.

Hammersley (2004, p.92), explained that a case could be about an individual, an organization, a group of individuals or organizations, an event, or beyond these, a whole national society or geographical region. He further explained that a case study could be the study of more than one case studied in an in-depth way, and then the researcher could draw conclusions about the features drawn from the cases (Hammersley, 2004, p.93). In other words, through a case study, one can understand what is going on in a particular case for its own sake. According to Hammersley (2004), doing research by means of a case study method could result in a description or an explanation of the situation and also provide theory evaluation.

According to Stake (1994), there are three types of case study. These have been referred to as intrinsic, instrumental or collective. An intrinsic case study would be undertaken because the researcher wants a better understanding of a particular case since it is of special interest to the researcher. An instrumental case study could be undertaken when a particular case is examined to provide an interest in something extraneous, that is, as a tool to help understand and advance an issue of external interest to the case. On the other hand, a collective case study is chosen when a number of cases were studied jointly in order to

inquire into a general phenomenon. In other words, collective cases could be similar or dissimilar but were chosen because they could advance the researcher's understanding of a larger collection of cases (Stake, 1994). In this study, I used the 'intrinsic' case study approach, because of my interest in trying to understand the phenomenon vocational education, 'for its sake', but also to discover how vocational education systems differed across the two country contexts.

Some of the salient characteristics of a case study include the following matters. Stake (1994) reiterated that a case study did not have to make any claims about the generalizability of the findings. What use readers made of the findings was essential in conjunction with the fact that the findings fed into processes of 'naturalistic generalization' (Stake in Gomm, Hammersley and Foster, 2000). By doing an in-depth study of one or two cases over time, it is possible to understand causal processes in the actual world. Taking account of events in particular cases is essential if researchers are to understand the outcomes of events (Becker in Gomm, Hammersley and Foster, 2000).

I therefore sought to investigate the phenomenon vocational education in the two country contexts through a case study approach. I approached the case in very broad strokes, so as to probe in an in-depth way, how vocational education unfolded historically in these two countries. The case was probed in historical and comparative terms.

Using a case-type approach helped to contain and keep some boundaries on the phenomenon. In other words, the use of a case-type approach helped me to understand the situation and separate it from other levels of education in either country. As I outlined in Chapter 1, I selected the case contexts of China and South Africa on the basis of my professional biography, having had experience in the practice of vocational education in China. But more specifically, the selection of the target countries was driven by the similarities and differences in the political administration in the two countries during the

period under review. I was also interested in discovering ways in which these two systems

were developing within a period of almost fifty years. During this period both countries were

experiencing similar, but also vastly different forms of political administration. My question

then was how the latter influenced and shaped the forms that vocational education took in

these countries.

Historical Comparison

This study also drew on comparative-historical research approaches (Ragin, 2014).

The benefit of using comparative-historical techniques has been that it enabled the researcher

to find out about, for example, one setting, and then pose questions about the phenomenon

(vocational education) in two country settings. Since these countries were very different from

each other I was curious to find out what, if any, were the differences and similarities in the

ways that vocational education evolved in each country.

Using the comparative technique, I first described the phenomenon vocational

education and then did the descriptive comparison across two very different geographical and

political country contexts by means of meticulous comparison between general and

vocational education systems in South Africa and China (Ragin, 2014). I used the

comparative method to pose and answer questions about processes and the outcomes in

relation to vocational education and training in both countries (Ragin, 2014).

Lange (2012) illustrated that comparative-historical methods combined comparative

and 'within-case' methods. 'Within-case' methods pursued insight into the causal relations of

a particular phenomenon. 'Within-case' methods took the place of the 'historical' in

comparative-historical description since they were temporal and described processes over

time. Comparative-historical methods explored how causal processes of cases were similar

and different, and have been interested in the impact on context and causal mechanisms. The

countries that have been studied have had different, but to a certain extent also similar

histories and identities. As Ragin (2014), explained the goal was to interpret significant

historical outcomes based on similar sets of data which were cross-societal in terms of the

comparative method.

Llobera (1998, p.74) contended that historical and comparative methods relied on

primary data about the features of the cross-societal phenomena to be explained, and among

various techniques and terms of the qualitative method. Once again, this study conducted

causal narratives based mainly on literature and related documents in terms of the broad

contexts of the political- economic, cultural and educational events shaping the spectrum of

vocational education development, during 1948-1994 in South Africa and 1949-1993 in

China.

Data Technique: Documents

Documents as historical sources. The second strategy which I used in approaching

the study, finding the information for this study, has been by means of studying documents.

Since the research is based on understanding events over a period of time, I used documents

as historical sources. These documents were both primary and secondary sources. The

primary documents were mainly the policy texts that were used at the historical moment

(Tuchman, 1994. All texts were from the period that formed the focus of this study. I

collected the policy texts on vocational education that steered the vocational education

systems in each country, and did an analysis framework in order to create my own

understanding of the vocational education developments in both countries.

The secondary documents were the journal articles and books written on the topic by

historians and social scientists (Tuchman, 1994). Tuchman (1994), referred to this approach

as the small essential details – in a direct approach to historiography. Then, there were also tertiary sources, whereby information from elsewhere was sourced and packaged.

Since I was able to gather a great deal of factual information on vocational education in South Africa, I also drew on tertiary sources in addition to the scholarly texts on this case. These tertiary sources helped me to understand some of the information about vocational education in South Africa at an informal level. It has only been after reading and understanding these documents that I was able to read through the broader literature. Consequently the tertiary sources were read in conjunction with the scholarly literature on the topic. I have been using the tertiary sources to help me gather data in each country's context on political economic, cultural and educational events over the period of half a century.

Given that this study focused on the state that officially formulates and approves the policies, the primary source has been policy documents. I also noticed, while reading through the literature supporting a historical institutionalist approach, that much emphasis was put on the use of policy documents. The latter were used to understand historical orientations and political inquiry. Thus the study analyzed documents/policies that pertained to vocational education between 1948/9 and 1994 in both countries.

Documents: Using policies. Brewer (2003) defined documents as follows:

> Official published documentary sources are commonplace sources for historical research concentrating upon the state. They include such things as documents of governments and state departments, legislative texts, constitutions, treaties, official records of parliamentary debates, court judgements and reports of governmental enquiries and commissions. Brewer (2003, p.140)

Brewer (2003, p.140) further claimed three types of sources that could supplement these official documents. The first has been called "unpublished and/or unofficial documentary sources". These records included different documents such as minutes and

memos stored in archives, and the memoirs, diaries, correspondence and autobiographies related to individuals associated with government institutions. The second type was "quantitative documentary sources". This group included all kinds of statistical and fiscal records. The third type dealt with "reporting and recording sources". Here different types of historical annals, newspaper articles and periodical literature were included.

Harman (1984) defined policy as the specific specification of courses of meaningful action that was the result of dealing with a recognized problem or matter of concern, and was directed towards accomplishing some intended or desired set of goals. He also referred to policy as the stand developed in response to a problem and directed towards issuing a particular ruling. In this study there have been forms and policies containing information that constituted ways in which the directives of ministers were expressed in white papers. These rulings were then authorized through legislation or a directive issued by the minister or a senior official. According to Kogan (1975), policies are the operational statements of values, and a set of values are embedded in a single education policy or a group of policies.

I applied a qualitative document-based analysis to understand the causal relations between the events, leading to the development of a vocational education system in each country. I was interested in understanding how the two historically different countries generated their different vocational education systems. Following this route helped me to describe and explain the development of these systems, more particularly, to identify the comparative points between the two countries.

Documents/policies collection procedures. I carried out the collection procedures in three phases. I mainly gained access to secondary and tertiary documents through library research in both countries. In SA and China I searched for different sources of information from the Libraries in the provinces where I have been living. In SA I did my research at the University

of the Western Cape, where I have been registered as a   post-graduate student. In China, the research was done at the Inner Mongolia Business & Trade Vocational College where I held a permanent position. When I made regular visits to my hometown I visited the library to find useful information. I could also access information on-line about both countries through electronic data-bases.

Next, I proceeded to investigate other means of accessing policy documents dealing with the period. Arrangements were set in place in advance to gain access to parliament in South Africa where I had to receive official clearance in order to access the documents. My supervisor directed me to the senior-executive Director of the UWC Library who introduced me to the librarian at the library of the Parliament of South Africa. The aim and purpose of the study was communicated to the senior Librarian who in turn directed me to the relevant places where the primary documents are stored. I spent time finding and reading through the relevant policies housed in the Parliament library archive. Once I studied the documents, they were copied for my purpose. In this way I collected the listed policy documents for the study.

As regards the case of China, I brought the listed documents from China. I accessed the documents in China from various sources. Some of them were collected from the Education Department in the Inner Mongolia Province, China. I personally went to negotiate access and then collected the documents at the Department of Education. The remaining documents were obtained from the official websites of the Ministry of Education of China, the Ministry of Human Resources and Social Security of China and the China Education and Research Network. Once I collected the relevant documents, I needed to establish the validity of the documents. I then started to classify them in terms of document titles, dates, content and authorship of policy documents. I then established how they related to vocational education in the different country contexts. As outlined in Chapter 1, in terms of my aims, I

had to select relevant sections in the documents as these pertained to the different stages of development over half a century.

At each stage, the focus of the narrative was on the relevant data together with specific policy initiatives. In the following section, I summarize the relevant policy initiatives, working within a period of decades. In Table 2 the frameworks of the development of policy initiatives with regard to vocational education in both China and South Africa are set out.

Table 2

:*Events, the Framework of Relevant Policy Initiatives Linked to VE, Diachronically*

Stages	China	Stages	South Africa
1949-1958 [1949-1952] [1953-1957]	People's Republic initiated the building of a new democratic society (Socialist transformation Drawing lessons from Soviet). 2 socio-political-economic frameworks	1948-1958	Apartheid-Afrikaner nationalism and 'total territorial segregation' 3 socio-political-economic frameworks
	1 framework for education 2 frameworks for VE		2 frameworks for education 2 frameworks for VE
1958-1966 [1958-1961] [1961-1966]	Great leap forward Great Leap Forward and redress 1 socio-political-economic framework	1958-1966	Separate development' 3 socio-political-economic frameworks
	2 frameworks for education 4 frameworks for VE		3 frameworks for education 3 frameworks for VE
1966-1978 [1966-1976]	Cultural Revolution	1966-1978	Pragmatic apartheid
	1 framework for education		3 frameworks for education 2 frameworks for VE
1978-1993	Opening & Reform	1978-1989	'Total strategy', a free market
	4 socio-political-economic frameworks 2frameworks for education 6 frameworks for VE		3 socio-political-economic frameworks 4 frameworks for education 4 frameworks for VE
		1989-1994	'Five-year action plan' towards a 'new South Africa'

			1 framework for education 1 framework for VE

From the above it is evident that the documents that contained the framework for vocational education for each of the periods differed from period to period. The frameworks differed according to number as well as type. From the above table it can be seen that the frameworks are linked to the different political and social contexts. This will be discussed in the following chapters.

For each of the cycles, the study set up a specific framework, more specifically it applied particular instruments which will be explained in the following section. I have shown how the content analysis of the documents as well as the comparative analysis enlightened the argument. The rationale for this method has been that this study explored how the development of the institutional structure of a political- economic system influenced actors in the policy-making process and in turn influenced the development of the vocational education system in both countries.

Document/policy analysis procedures. I carried out the analysis procedures in a specific sequence. Major aspects are recognised. First I dealtwith all aspects in relation to objectives of vocational education in both periods between 1948-1978 and 1978-1994 in South Africa and between 1949-1978 and 1978-1993 in China. Then I list the objectives in each of the cycles. That is followed by a discussion of the objectives of VE in the respective cycles in both countries. Next, I list the differences between the countries. I followed this up by identifying changes in objectives during the first and second periods in both countries.

The following major procedures were followed in order to identify key actors in the respective cycles. I focused on their main contribution and then described their roles in both cycles in South Africa as well as in China. After having identified and described the key actors in both cycles I followed up this procedure by classifying the actors into either

legitimized or non-legitimized groups. The third major task was a meticulous assessment of the impact of the most important actors, highlighting possible role changes and repositioning of the key actors and the impact of changes on VE in both cycles in South Africa as well as in China.

Interpretation Framework

As outlined in Chapter 2, the study dealt with the phenomenon vocational education as it functioned as a particular structure or policy field in society. I noted that as a structure or policy field, it operated above the level of individuals (although it was shaped by the actors). When viewed from this angle, it was clear that there has been much debate on the topic referred to as Institutional Theory. One stream of thought supported the idea of historical institutionalism, which took into account both the internal and external factors that contribute toward changes in a system or structure. This approach emphasized the role that the internal political-economic context played in terms of shaping the vocational education as a structure. I also commented in Chapter 2 that a historical institutionalist approach breaks up a long stretch of time into a sequence of historical events. Since a historical institutionalist approach looks into the historical conjunction events, Chapter 4 presented a detailed historical and descriptive narrative in phases of approximately one decade each. Each phase focused on the development of vocational education systems in both countries within a political-economic and educational context from 1948 through to 1994.

These events acted on the system, which then influenced the system to move on a 'new path', or the 'path' shaped the direction of the system ((Hall, 1996, p.942), There have been three relevant aspects to consider very briefly regarding a historical institutionalism approach. These were critical junctures, actor coalitions, and path-dependence or self-reinforcing patterns, all of which were interrelated (Pierson & Skocpol, 2002).

This set of guidelines have been used to probe the period of about half a century in two country contexts to understand the ways in which vocational education developed. In the section below I explain how the time frames have been divided.

Historical time frames. The study attempted to capture the vocational education events and moments of the historical period from 1948/9 up to the mid-1990s in a systematic way. This study focused on public vocational education at the secondary level (grade 7 -9/12) in both countries. As part of the comparative technique that sought to pose questions and possibly find answers to the development strategies in the vocational education sphere across two country contexts, I divided the sections referring to the development of VE in both countries into decades. Some difficulty arose when breaking up these time frames into decades as they did not always fit into the country's historical events (or junctures). However, the four to five decades' time line was kept as it helped to clarify the analysis.

Each of the cycles was further divided into periods during which different leaders or different political administrations under a leader were dominant. This study's interest was to identify relationships between the respective administrations and the growth of vocational education. The question was whether different leaders or administrations steered the VE system governance towards different macro-policies. These policies created a different environment which accommodated vocational education changes.

To facilitate understanding of the historical and descriptive narrative in Chapter 4 the chapter has been divided into four parts. The first and second parts focused on the development of vocational education systems in South Africa from 1948 to 1978 and in China from1949 to 1978 respectively. The third and fourth parts tracked the development of vocational education systems in South Africa and China during the 1978-1994 and 1978-1993 periods.

Chapter 5 begins with a very brief history of vocational education in South Africa as well as China in the period before 1948/9. I need to inform the reader why this approach has been used. The early history has been included to promote understanding of the development of general and vocational education in the targeted countries highlighting the effect of culture on the evolution of vocational education and training in both South Africa and China.

Following the above, the five time frames of approximately a decade each have been condensed into two broad time-lines from 1948 to1978 and 1978 through to the mid-1990s. According to the historical narrative in the previous chapter, the years 1948/9 and 1978 have been identified as the beginning of respectively state formation and economic liberation in both countries. This study identified the years1948/9 and 1978 as critical junctures in both countries. The concepts state formation and economic liberation are described in detail in Chapters 4 and 5 to validate these assumptions.

Limitations of the Study

While the overall narrative in Chapter 4 will address vocational education development on all levels, namely, junior, senior secondary and tertiary; however, the focus of this study has been upon the senior secondary levels also leading to post-school vocational education levels (grade 7/9 to 12 and beyond) in both countries. Therefore the approach to vocational education is on Technical Colleges in South Africa and Skilled Workers Schools in China. This level is the main emphasis in this study. It is important to take this fact into consideration for a positive approach to the comparison between countries and the scrutiny of documents in Chapter 5.

Language aspect. This study conducted a historical comparison between the different formats. See **Appendix G**. However, according to the review above, a policy is universally accepted as the operational statement of values towards a set of goals, in which the values and strategies of actors have reached a balance. As explained above, the policy-based

analysis in this study has focused on the role of actors through identifying values which have been embedded in the policies. For this reason, I was silent on the policy analysis process. l did not criticize but only attempted to discover what the policies revealed about actors contributing to effect change in vocational education systems in their respective countries.

Since my first language is Mandarin, I have been acutely aware of my interpretation of the documents that are in English. As mentioned above, when reading through the English official documents I have been aware of the fact that I was interpreting them in terms of the ideas and thoughts based on the interpretation in my first language Mandarin. I, therefore constantly had to seek my supervisor's help in regard to translation and advice on how to express my personal thoughts more clearly. This process has been lengthy, but I am confident that I have acquired the necessary skills to interpret those official documents satisfactorily.

Ethical considerations. It is generally accepted that researchers must proceed with academic rigour and with honesty and dignity. Denscombe (2002) emphasized that social researchers should show respect to all participants. In this respect, he maintained that "the acceptability of social research depended increasingly on the willingness of social researchers to accord respect to their subjects and to treat them with consideration" Denscombe (2002, p.125),

I am aware that this usually applies to using interview techniques. However, since my study has been based mainly on documentary research I believed that the ethical aspect reverted to the way I dealt with the documents. I have studied and analysed the documents in terms of each country context with a great amount of respect for each of the contexts. Each country has its own set of values and principles and therefore when I started this study I have worked throughout with critical respect for the unique qualities of each country. All ethical consideration of general motives has been taken into account when I accessed the documents

from the relevant sites. The process I used for accessing the documents has been outlined earlier.

Conclusion

In this chapter I set up the design for the study, I have indicated that I mainly used three parts of the research design. The first has been a case study. The second has been a study of documents that had a bearing on the development of VE systems in South Africa and China during the period under review. The third part of the design, the comparison between the differences at macro, meso and micro levels has been dealt with in Chapter 5. In the chapter a final comparison between the strategies followed in the development of VE systems in SA and China, has been given. Also, an evaluation of the development in the vocational education systems in both countries has been presented in two time slots 1948/9 – 1978 and 1978 – 1993/4.

In this chapter I also showed how I collected the information for this research. It was document-based research therefore I have drawn on some primary, secondary and tertiary sources of information. Tertiary documents were unofficial sources, unlike primary and secondary documents which were official Policies and Acts. Tertiary documents have been useful as they contained information about the culture and history of South Africa. These documents helped me to develop an understanding of the social and cultural life in the country at the period covered by the formal study. I very briefly outlined the approach that underpinned my study, namely historical institutionalism, which has been used in a very broad way.

In the next chapter (Chapter 4) I outline the historical narrative of vocational education in South Africa and China. In the chapter the periods under review will be dealt with in five time slots. Each set of identified events and policy moments are spread over approximately one decade.

Chapter 4 Historical Narratives on Vocational Education in South Africa and China

This chapter proceeds to causally narrate the detailed vocational education history located in the political-economic and educational contexts in the period 1948-1994 in South Africa and 1949-1993 in China. It includes the trajectories of vocational education systems in both countries with the focus on the public vocational education system at the secondary level.

To facilitate understanding of the historic narrative, this chapter is organized in two parts. Part one maps the development of vocational education, first in South Africa and then in China between 1948/1949 and 1978. Part two explores the development of vocational education from 1978 to 1993/4 in South Africa and China .In each cycle progress of the development of VE is outlined in the different decades.

The History of Vocational Education Systems in South Africa from 1948 to 1994 and China between 1949 and 1993

The narrative has been organized thematically, drawing on the elements of historical institutionalism, outlined earlier within a framework of the historical time periods as outlined in Table 2. First, it describes the political-economic frameworks that have been part of the environment highlighting the development and growth of vocational education. Second, it considers the educational events, and shows how vocational education fitted into the national education systems. Third, it outlines and explains the specific development of vocational education through the course of the two cycles.

Development of the Vocational Education System in South Africa from 1948 to 1978

The election victory of the National Party in 1948 led to the beginning of an apartheid era. The State Presidents in the apartheid era all implemented the apartheid policies (see Welsh, 2009). The macro policy of this framework has been characterized by the efforts to

achieve total territorial segregation. It included, first, the social division of races under The

Population Registration Act, No. 30 of 1950 that classified all members of South African

society in four population categories, namely 'White', 'Coloured', 'Indian' and 'African'

(SAIRR, 1955, pp.1-2). This was followed by the residential separation via the *Group Areas*

Act, No.41 of 1950 that had as its aim separating the population groups (SAIRR, 1955, pp.1-

2; p. 33); also see Welsh, (2009).

Socio-political-economic framework: racial separation, centralization and

decentralization of vocational education from 1948 to 1958. During this period,

employment prospects were also racially divided. There were measures of skilled job

reservation and influx control in the urban areas for Africans. The development of the three-

tiered system of local government towards self-government took effect in terms of The *Bantu*

Authorities Act, No. 68 of 1951 as well as the diversification of the economy for Africans in

what was termed the 'Reserves'(SAIRR, 1955, pp. 57-59).

Political participation in the country was also divided. While there has been no

political participation for Indians, there was a measure of representation for the Coloured

community as they were being placed on a separate voters' roll under The *Separate*

Representation of Voters Act, No. 46 of 1951. Central Government was offering them

opportunities of employment in posts serving their own racial group to achieve separation

between Coloureds and Africans in the urban areas (SAIRR, 1955, pp.1- 47).

At the same time, there was expansion of the bureaucracy and parastatal sectors to

secure Afrikaner employment and the establishment of various welfare programmes for the

category termed 'poor white' (Terreblanche & Nattrass, 1990).

Educational framework: racial separation. The macro policy of separation led to a

notion that "each race group will eventually take full responsibility for the development of all

services affecting that group", and "education must be an integral part of the whole development of a race" (Behr & Macmillan, 1966, p.16).

For the first time since its origin in the 19th century Christian Nationalist Education had been developed as an official framework with the publication of the pamphlet in 1948. It became the official ideological position of Afrikaner Nationalists on education. This was important insofar as it impacted on education generally. It had two essential points according to Ashley (1989, p.7-9). The first was that all education should be based on the Christian gospel and the second was that "mankind is divided into nations and education should reflect these national differences" (Ashley, 1989, p.7).

The pamphlet led to a "Memorandum on the Need for a Union Education Policy and for the Ending of the Divided Control of Secondary Education" (Behr & Macmillan, 1966, p. 57). Thus, people's discussion of issues in most of the various Commissions focused on centralization of education and the extent of it (Rose & Tunmer, 1975 p.35). The reasons for centralisation were described in the Christian National Education policy published by the National Party in 1948, which argued that education policies were to seek to infuse white domination, ethnic differences and tribal nationalism (SAIRR, 1959, p.11). The major issue on education reform addressed its current governance in terms of oversight around the education systems for the different population groups (Rose & Tunmer, 1975, p.35).

In the existing education governance perspective, according to Behr and Macmillan (1966, pp.15-16), the Union government through the Union Department of Education controlled higher education. This included technical colleges of a secondary type, teacher training, and vocational schools (trade, industrial, housecraft) providing special education at both primary and secondary levels. Second, the provinces controlled the rest of education. This included education for Whites and education for the Coloured, Asiatic and Bantu in the way that "English-speaking, Afrikaans-speaking, Coloured, Asiatic and Bantu children attend

separate schools but under the same inspectors of schools in any particular geographical area" (Rose & Tunmer, 1975, p.20). There were vocational subjects in the secondary schools which meant that vocational education remained under a dual governance structure. Behr and Macmillan (1966) argued that by then, education of all groups was viewed as a whole and education of a single group was not seen as "part of the economic, social and political development of that group" (Behr & Macmillan, 1966, p.16).

In the Report published in 1948, the De Villiers Commission on Technical and Vocational Education recommended a fully co-ordinated national education policy and administration and a National Council of Education to be established. The Council should consist of representatives of the Union Education Department, the heads of provincial education departments, professional groups from universities, technical colleges and schools, and representatives from industry, commerce and labour. The Council had to function in the determination of a general education policy for the Union, and other related matters such as co-ordination, training, certification, teacher affairs, inspection of education activities, scrutiny of Parliamentary legislation on education, research and statistical reports (Rose & Tunmer, 1975, pp.41-46).

The *Bantu Education Act, No. 47 of 1953* was enacted and transferred African education from the provincial administration to the separate Central Government Department. The latter has been called the Department of Bantu Development in which the Department of Bantu Education was included. It marked a starting point for education governance to be demarcated racially from 1954 onwards (Rose & Tunmer, 1975, p.50).

Development of the vocational education system: racial separation. The issues for reforming vocational education were asserted by the 1948 Report of the De Villiers Commission on Technical and Vocational Education. Government response critiqued the recommendations as follows. First, in respect of the provision of vocational education, it was

too early for pupils to receive vocational education leading to a low-level academic foundation. Moreover, the training was too narrow. Second, in respect of the dual administration of the vocational education system, the disorganization of existing high school education was neither general nor vocational, but was seen to be academically plus vocationally biased education. Besides there was overlapping and duplicating provision and anomalous competition between the national and provincial departments of education. Third, it was proposed that the high school education should make rational distribution of pupils on the basis of individual aspiration and aptitude into different types of more or less vocationally biased education. However, the existing provincial level could not provide the right education for each of their pupils in terms of the existing curricula (Rose & Tunmer, 1975, pp.38-39). The Report recommended a redress of the existing relationship between general and vocational education, and also that all vocational education should be controlled by the central government (Rose & Tunmer, 1975, pp.45-46).

The problems existing in the apprenticeships were also pointed out by the 1948 Report of De Villiers Commission on Apprentice Training. First, a far too long period of existing apprenticeship (5 years) led to the fact that many apprentices dropped out without gaining any certificate. And second, there was a lack of concern with the academic qualification of an apprentice at entry level (Malherbe, 1977, pp.183-184). This confirmed the need to reduce the length of the apprenticeship period in which more apprentice training was provided with an expectation of more education and less training (Kruger, 1986, p.191).

Vocational education system and apprenticeship Acts. The *Vocational Education Act, No. 70 of 1955* clarified the definition of vocational education as well as the distinction between pure vocational and vocationally-oriented education. It stipulated that vocational provision in the provincial high schools should remain unchanged. Schooling in vocational schools (for special education) under the Department of Education, Arts and Science was

now free. In addition, technical colleges were taken over as full government institutions under the Department of Education, Arts and Science with limitation of college councils' autonomy to the advisory level (Malherbe, 1977, pp.207-209).The *Apprenticeship Amendment Act, No. 28 of 1951* amended the *Apprenticeship Act, No. 37 of 1944* The attendance of apprentices training in evening classes for a five-year period of apprenticeship regulated in the principal Act was replaced with one afternoon per week plus the evening classes in the Amended Act (Malherbe, 1977, p.183).

The problem of dual administration of vocational education at the secondary level remained unresolved. Overlapping between the provision of vocational education by the provincial high schools and the central government-controlled technical colleges and vocational schools continued. In the rural areas the *Black Building Workers Act of 1951* granted opportunity for Africans to become skilled building workers to serve their own communities during the massive building programme of black housing (Bird, 2001).

Continuation of Racial Segregation: Centralization and Separation of Vocational Education from 1958 to 1966.

This period started with South African affairs. Examples have been the Departments of Coloured Affairs and Indian Affairs which were created in 1958 and 1961. Later, some political space has been opened to Coloureds and Indians by limited participation under *The Coloured Persons Representative Council Act, No. 49 of 1964* and *The South African Indian Council Act, No. 31 of 1968* (SAIRR, 1969, pp.134- 144). In the economic field, while job reservation was provided for the Coloured in the fields traditionally theirs (SAIRR, 1962, p.135), a measure was started in 1960 that was to decentralize industries in border areas with an attempt to stem the flow of rural Africans (SAIRR, 1962, p.109).

Educational framework: continuation of centralization and racial separation.

According to a declaration in 1959, legislation was approved to create "a uniform educational

policy throughout South Africa" (Rose & Tunmer, 1975, p.60). Therefore, during this time, efforts of educational reform were still made in order to continue centralization. In 1961 the Union Education Advisory Council published a mapped out Union Education Advisory Council Bill under the Minister of Education, Arts and Science, represented by four members from the four provinces and recommended by the four Administrators. The chairman and vice-chairman and others were appointed by the Minister. The Council was to advise the Minister regarding policy on white education. Specific questions could be raised by the Minister or an Administrator (Rose and Tunmer, 1975, pp. 60-61).

According to Rose and Tunmer (1975), there were two general steps of change in the educational structure during this period. First, the *National Advisory Education Council Act, No 86 of 1962* was enacted. The Act provided for the establishment of the National Advisory Education Council represented by four members from the four provinces recommended by the four Administrators; one member from the Department of Education, Arts and Science; and others appointed by the Minister. The Minister then selected five members from the Council – one as chairman, two as vice-chairmen, and two as ordinary members – to form an executive committee to do the administrative work of the Council. The Council had to advise the Minister regarding policy-making on white education and advise the Minister or any other Minister or any Administrator through the Minister regarding any matter affecting education, which excluded the direct way by parliament or a provincial council. Second, the provincial government powers on education were reduced by means of transferring non-white education from the provinces to the separate Central Government Departments of Coloured Affairs and Indian Affairs respectively in terms of The *Coloured Persons Education Act, No. 47 of 1963* and *Indians Education Act, No. 61 of 1965*. This was recommended in addition to the transfer of African education in terms of The *Bantu Education Act, No. 47 of 1953* (as mentioned

above). Thus, policy-making on education for the country as a whole fell into the hands of the Nationalist Party (Rose & Tunmer, 1975, pp.62-64).

In terms of Behr and Macmillan (1966, p.19), the governance perspective of education as a whole had become such that higher education, vocational education and special education were controlled by the Department of Education, Arts and Science. Bantu education, Coloured education and Asiatic education fell respectively and separately under the central Departments of Bantu Development, Coloured Affairs and Indian Affairs which each had its own department of education. White education (primary and general secondary levels) remained provincial but under the advisory functions of the National Advisory Education Council. In particular, as far as the vocational provision in the white general secondary education was concerned, the Council paid attention to school syllabuses, the expansion of technical training and the study of manpower needs in South Africa which had been conducted by the Manpower Research and Planning Committee under control of the National Bureau of Educational and Social Research (Behr & Macmillan, 1966, p.19). Behr and Macmillan (1966, p.19) pointed out that the development of education throughout the country was therefore based upon ethnic groups.

Development of a Vocational Education System

During this period, the phenomenon of vocational education reflected the values and practices of the broader society. As outlined above, there were legal separation and separate development among the different population groupings in The *Population Registration Act of 1950/51*. This framework was transferred to the vocational education system as outlined in the following Acts.

The 'White' population following the vocational route was under the *Vocational Education Amendment Act, No. 20 of 1961*. It should be noted that this Act amended The *Vocational Education Act, No. 70 of 1955*, in which technical colleges changed from state-

aided to full government institutions. In this way, all the state-subsidized continuation classes became full-fledged government institutions (SAIRR, 1962, p.249) **Appendix B**.

A continuation class, according to The *Vocational Education Act, No 70 of 1955, s. 1(iv) 8 and 9* stipulated that any person or institution, other than a vocational school, who conducted a "class to provide any course of instruction and training" for those past compulsory school attendance and higher education, and receive grants-in-aid from the state, under recognition of the Minister ran a continuation class. That meant that there was a type of vocational-oriented education provider which primarily was non-public and accommodated those people who had been left out of both the compulsory and higher education tracks. It acted as the complementary branch to the mainstreams. At this point, the Act empowered a provider to receive grants-in-aid from the State and name it a continuation class.

The Apprenticeship Amendment Act, No 28 of 1951, *The Apprenticeship Amendment Act, No 29 of 1959* and *The Apprenticeship Amendment Act No 46 of 1963* extended apprentice training at a technical college to respectively one whole day per week in addition to the evening class, and ten weeks at a time release system (Malherbe, 1977, pp.183-184). That meant that the apprentice training included two parts of the content. As an apprentice, he had to work in an enterprise some time during the day, and also had to acquire theoretical knowledge in a technical college in another time slot. These Acts, adopted in succession extended the time of the theoretical knowledge learning section in a technical college.

Vocational schools and classes of the population not classified as White, that included African, Coloured and Indian categories i.e., non-white were transferred to the administration of the respective governance affairs. *Proclamation R 91 of 24 March 1961* placed those vocational institutions for 'Africans' and 'Coloureds' under the Departments of Bantu Education and Coloured Affairs (SAIRR, 1962, pp.250-252). The M. L. Sultan Technical College for Indians was transferred from The Union Education Department to Indian Affairs

in 1963 (Malherbe, 1977, p.190). These vocational institutions were administered in terms of respectively The *Bantu Education Act, No. 47 of 1953*, The *Coloured Persons Education Act, No. 47 of 1963*, and The *Indians Education Act, No. 61 of 1965* (SAIRR, 1984, p.502; SAIRR, 1985, p.690). Accordingly, the problem of dual administration of the vocational education system had now been dealt with at such a level that the provision of vocational education in the provincial high schools was under the advisory functions of The National Advisory Education Council, and the rest of vocational education (technical colleges, vocational schools, continuation classes, and the like) were controlled by the central government through The Department of Education, Arts and Science. Thus, a dual administration still existed. Second, education as a whole and vocational education in particular has started developing along race-based lines (Badroodien, 2004).

Beginning of Racial inclusion and Decentralization of Vocational Education: 1966-1978

Political-economic event: start of racial inclusion. From 1966 onwards, the framework of the National policy followed during that period what has been referred to as 'pragmatic apartheid' (Terreblanche & Nattrass, 1990). Externally, an out-going policy was adopted to create what has been termed a 'White front' across African states (SAIRR, 1968, p.1). Internally, while continuing separate development, a new point was emerging that united English- and Afrikaans-speaking people, and thus delegation ensued within the government (SAIRR, 1968, pp.1-2). Internally, in the early years of this period, apartheid was intensified socially by The *Population Registration Amendment Act, No. 64 of 1967*, The *Physical Planning and Utilization of Resources Act, No. 88 of 1967* and The *National Education Policy Act, No. 39 of 1967*. In the economic field the metropolitan areas retained and extended the industries of mechanization and automation which demanded a better educated, highly skilled and more flexible labour force and substitutes for labourers. On the other hand, the increasing growth of industries including commodity production and extended

industries in the homelands and border areas focused on managing influx control of rural

Africans (SAIRR, 1966, pp. 1-2); (Terreblanche & Nattrass, 1990).

The year 1975 introduced the reduction of certain race discriminatory measures in the

urban areas, attributed to the external Marxist forces, internal African rebellions, as well as

economic recession (SAIRR, 1977, pp.1-5). The policy appealed to the 'Coloured' and

'Indian' communities by mainly widening their representation. And Africans were given an

opportunity to narrow the wage gap, relax the job reservation in certain fields, permit African

industrial committees, extend training for Africans in the urban areas, and remove restrictions

on the business activities of African urban traders (SAIRR, 1976, pp. 3-4)

The educational concern addressed the implications of central control of policy and

details of individuals' private interests. Provinces stimulated educational development

through their involvement in educational administration (Rose & Tunmer, 1975, p.64). That

meant that the existing education system was under the central controlling policy. During this

period education was required to consider the relevant needs of both the individuals and the

provinces by means of involving both groups in the educational administration.

The problem with regard to the existing perspective of educational administration was

perceived by The Wentzel Commission in its Report published in 1963 as separate

educational administrations for the separate groups, each administration itself being

centralized. The Report advocated "the decentralization of the control of education to

relatively smaller local authorities" It further recommended the creation of an inter-provincial

Conference to advise the Minister of Education, Arts and Science and bridge private and

public institutions so that education would be relevant to employment (Rose & Tunmer,

1975, pp.64-72). That would result in greater interest in education at a local level. This meant

that the existing central educational administration was advised to be delegated to the local

level.

Finally The *National Education Policy Act, No. 39 of 1967* empowered the Minister

of National Education to establish a National Advisory Education Council. It included not

more than two members from each province and a committee of the heads of provincial

education departments. Next, the right to inspect schools was moved from the Council to the

Minister who could determine the degree of implementation of national policy. Third, a

national education policy was outlined to encompass a very wide and very vague domain

(Rose & Tunmer, 1975, p.73). Education in schools, stated in this Act, should be provided "in

accordance with the ability and aptitude of and interest shown by the pupils and the needs of

the country" (SAIRR, 1968, pp.61-263). Thus, in comparison to The *National Education Act*

No 86 of 1962 this Act evoked less public response. It allowed more space for provincial

input in the Council, and gave various types of secondary education more power to be

relinquished to the provinces which had been tied down by central government since 1910

(Rose & Tunmer, 1975, p.73).
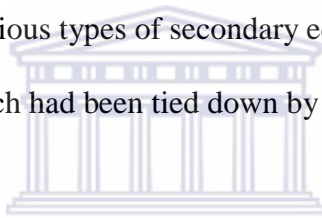
Development of Vocational Education System: Decentralization, Start of Racial

Inclusion of Vocational Education

During this period, reform took place in all the respective race sectors of vocational

education under the passed Acts as follows. The problem in respect of vocational education

as far as Whites were concerned in the early 1960s was revealed in the Report of the

Schumann Commission which was submitted in 1964. The Schumann Report addressed the

disadvantages of dual control over vocational education. The Report then recommended:

first, that all types of secondary education up to Standard Ten (Grade Twelve) including

general, vocationally-oriented and vocational streams should be the function of provincial

education departments. Second, training should be "basic enough" for both individual and

economic development in the future. In contrast, specifically specialized training should be

provided in the industries in co-operation with technical colleges. And third, technical

colleges should channel their full-time pre-Grade Twelve- students to other education outlets and focus on advanced technical education (Malherbe, 1977, pp.326- 329).

The *Educational Services Act, No. 41 of 1967* placed the vocational schools (technical, commercial and domestic science) that had previously been under the Department of Education, Arts and Science under the provinces. The *Act* made a declaration that the Department would in future control education for whites at all education institutions from university level to continuation classes (SAIRR, 1968, pp.264-265).

In terms of the *Advanced Technical Education Act, No. 40 of 1967*, a number of technical colleges in the metropolitan areas became Colleges for Advanced Technical Education which provided full- and part-time post-secondary education and training for technicians and technologists as well as teacher training for vocational schools. These institutions were state-aided and semi-autonomous institutions administered by the Department of Education, Arts and Science through their councils (Malherbe, 1977, pp.332-334). The *Advanced Technical Education Amendment Act, No. 43 of 1979* expanded the horizon of the Colleges for Advanced Technical Education through naming them Technikons. The scope of the teaching programmes was broadened through the clarification of all their practices (Kruger, 1986, p.93).

The 1971 White Paper stated that, first, non-white groups should be in their own areas serving their own people and developing in small stages into more advanced stages in their work. Second, it proposed that Africans should mainly work in their homelands, with limited opportunity and subject to strict conditions in border areas. Third, African apprentices were offered training in these border areas, apart from their homelands (SAIRR, 1972, pp. 209-211).

The social category 'Indians' were governed by The *Indians Advanced Technical Education Act, No. 12 of 1968* that empowered the State President to establish a college for

advanced technical education for Indians in any place. The administration of such colleges was subject to the approval of the Minister of Indian Affairs and under this Act replaced *The Indian Education Act, No. 61 of 1965* that still debarred colleges in effect from offering advanced technical courses. In terms of this new Act each of these colleges was required to have a principal, a council and a board of studies, and was allowed to provide teacher training, full- and part-time secondary vocational education, and advanced technical courses. In terms of this Act, the M. L. Sultan Technical College achieved status as a college (SAIRR, 1969, pp. 249-250).

The Bantu Employees' In-Service Training Act, No. 86 of 1976 provided training for Africans in the border areas and permitted them to work in white industries through the establishment of public centres and private centres under certain conditions. However, such training was subject to the Department of Bantu Education approval (SAIRR, 1977, pp.359-360).

The problem of dual administration of the vocational education system was addressed in the following ways. First, the vocational schools were moved to function under the provincial administration so that the secondary school education became responsible for pure vocational, vocationally-oriented and academic education. Second, post-secondary vocational education emerged legally in 1967 and fell under the jurisdiction of the Colleges for Advanced Technical Education. Some of the existing technical colleges merged with these Colleges for Advanced Technical Education. They were state-aided, semi-autonomous and controlled by the Department of Education, Arts and Science through their councils. Thus, the Department controlled Colleges for Advanced Technical Education (post-secondary), technical colleges (secondary) offering apprentice training, and continuation classes.

Racial separation in VE from 1948 to 1978 in SA. In this period, vocational education in South Africa experienced racial separation. From 1948 to 1966, vocational

education was characterized by racially separated provision, and vocational education for each race was centralized. Vocational education for "Whites" took the domain which included four elements at secondary level, including the technical colleges, vocational schools, continuation classes, as well as vocational provision in the provincial high schools. While the last element was subject to the National Advisory Committee, the other three were full government institutions under the Education Department. In the period between 1966 and 1978, vocational schools and vocational provision in the provincial high schools all fell under the provinces. The reason for this move was to differentiate the provincial secondary education from post-school education in order to meet the pupils' own choices. A further development happened during this period. Both public and private training centres for Africans emerged in the border areas.

The Development of a Vocational Education System in China between 1949 and 1978

  Centralization of Vocational Education between 1949 and 1958. When the People's Republic of China was established in 1949 the Communist Party came to power under the leadership of Mao Zedong. After the new democratic society which was established between 1949 and 1952 under the Common Programme of 1949 the first Five-Year Plan (1953-1957) was introduced. The transformation of the socialist society recommended in the Constitution of 1954 followed. Soviet experts helped to design many projects as part of the economic construction (Wu & Rong, 2009, pp.15-22).

  A single centralized economy: the political-economic element. The Soviet theory socialist industrialization whose chief aim was to prioritize the development of heavy industry was expressed in the economic policy. A single planned, state-owned economy funded the development of basic industrialization in the urban areas in line with economic strategies of import substitution. In the agricultural sector collectivized cooperatives of peasant households became the norm (Wu & Rong, 2009, pp.22-50). The Ordinance, *The*

Household Registry Ordinance of the People's Republic of China of 1958 divided the population into agricultural and non-agricultural populations. In this framework a two-tiered system of urban and rural economies was formed.

The People's Republic of China's first educational element: centralization in 1951. A new education system arose under *The Common Programme of 1949* and *The Decision on Reforming Education System of 1951*. A reformation of the first new education system followed under Soviet Union influence (Dong, Dan & Chen, 2007).

The Chinese People's Political Consultative Conference, 1949 Article 41, Chapter 5, stated that culture and education in the People's Republic of China were new-democratic. That meant education was national, scientific and for benefit of the masses. *The Chinese People's Political Consultative Conference of 1949, Article 47, Chapter 5,* stated the national education policy aimed to gradually put compulsory education into practice step by step in a planned way. Further improvements would include strengthening secondary and tertiary education, attaching importance to technical education and enhancing educational expertise for workers and cadres.

In terms of the *Decision on Reforming Education System of 1951*, tertiary education consisted of 4-5 years university and polytechnics training, and 2-3 years specialized tertiary institution training. There were post-secondary vocational education providers. At pre-tertiary level there were two streams that had the same status. The first stream included two sub-streams: 5-year primary, 3-year junior and 3-year senior secondary academic school training, and secondary specialized schools in technical, teacher training, medical, and other academic fields. The second stream also included two sub-streams: 2-3 years primary and 3-4 years secondary worker-peasant short-course schools, and 2-3 years primary and 3-4 years junior and 3-4 years senior secondary spare-time schools. The aims of education were to serve the country's construction, and were open to workers and peasants. The system would improve

the knowledge of worker-peasant cadres, and give priority to labouring people and their children (Dong, Dan & Chen, 2007, pp.267-269; p.288)

Soviet experts' influence on educational reform between 1952 and 1956. Under the influence of the Soviet experts the phase of authoritative learning from the Soviet Union led to the educational reform during 1952-1956. The aim of education shifted to serve economic development. The educational institutions were re-structured. Education implemented nationally unified syllabuses, and centralized enrolment and job placement. Higher education specialties were developed according to the economic sectors, and the goal of higher education was to produce experts and engineers (Dong, Dan & Chen, 2007, pp .283-287).

For reform at higher level, the higher educational institutions were divided into three groups with the same status as that of a comprehensive university. Each had science and humanities faculties, polytechnics. Several applied science faculties, and specialized colleges. Each one also had a single faculty (Pepper, 1996 p, 175). The specialized tertiary institutions, post-secondary vocational education providers in the previous education system now moved to the group of secondary specialized schools, and their governance was transferred from the Ministry of Education to the Ministry of Higher Education. A dual command structure existed in which the other central government departments were also granted direct administrative control over those schools which trained in specialties related to their work (Pepper, 1996, p.203). Thus, the post-secondary vocational education had disappeared.

For reform at secondary level in the academic stream, college preparation was seen as the new task of senior secondary academic schools and the selection of key-point schools for quality education (Pepper, 1996, pp.201-203). In the worker-peasant education stream, the demise of the worker- peasant short-course schools occurred. In the secondary specialized education category regularization took place with the shift from the previous indistinct length

of levels straddling junior and senior levels to firm senior secondary level and reducing the number of such schools. In addition to this shift, as shown in the previous section the inclusion of specialized tertiary institutions and the upgrading of governance took place. The aim was to standardize and preserve the intermediate status of technical training.

Development of the vocational education system: start of a new vocational education system with two elements in 1952. Both the establishment of a new vocational education system under the *1951 Decision,* as shown above and the subsequent reform based on this system under the Soviet influence happened in this period. The first new vocational education system in new China, as shown above, consisted of junior and senior secondary (specialized schools) and post-secondary specialized tertiary institution levels. Subsequently, influenced by the Soviet model, these three levels of vocational education institutions merged into a firm senior secondary level, namely secondary specialized schools. They were placed under the Ministry of Higher Education.

In the Soviet model secondary vocational education included secondary specialized schools for technical personnel and skilled workers schools for skilled workers. The term 'vocational education' was avoided. Since this model was the result of the view that vocational education was a capitalist term China's vocational education system was eventually developed at a single secondary level. The secondary specialized schools and later skilled workers schools for urban areas also avoided the term vocational education, according to Dong, Dan and Chen (2007, p.269).

Before the regularization under Soviet influence from 1953to 1957, specific regulations regarding secondary specialized schools developed. These schools were, interchangeable with secondary technical schools, which followed the *Decision on Reforming Education System of 1951*. These were the *Instructions of Reorganizing and Developing Secondary Technical Education of 1952* and the *Provisional Ordinance of Secondary*

Technical Schools of 1952 (Wang & Zhang, 2008, pp.144-145). The later skilled workers schools were regularized under the *Provisional Ordinance of Skilled Workers Schools (Draft) of 1954* (Wang & Zhang, 2008, pp.144-145). In the section below the implications of these regulations have been dealt with..

In terms of *Instructions of Reorganizing and Developing Secondary Technical Education of 1952 (*State Council, 1952*)*, the secondary technical schools aimed to cultivate primary and secondary technical cadres, include junior and senior secondary technical schools. These schools were also allowed to offer part-time classes and classes in crash courses. These schools were established and categorized in terms of the economic sectors, for instance, railway technical schools, electric technical schools, mining technical schools, and agricultural technical schools. The governance of such schools took place in co-operation with national and local education departments and the competent departments of economic sectors. General policies including an enrolment plan were approved by the Ministry of Education after consultation with the sectoral competent departments concerned. The local education departments were responsible for supervision under the general policies. The sectoral competent departments concerned acted in executive management in matters of staffing, funding which stemmed from their construction funds and enrolment and graduate allocation. Graduates were allocated within their affiliated sectors.

*Provisional Ordinance of Skilled Workers Schools (Draft) of 1954, (*Department of Labour, 1954*),* provided for the establishment of skilled workers schools in each of the economic sectors. The aim was to cultivate skilled workers for each economic sector under the state plan which had been approved by the Department of Labour after consultation with the economic sectoral competent department concerned. Skilled workers schools in each sector were managed by the sectoral competent department under the Department of Labour. The minimum entrance requirement was the completion of primary schooling, through a 2-

year programme. The final examination was arranged by an examination committee of the

skilled workers school. The local labour office, the economic sector concerned and the

factory in the sector where the graduates were going to be located were represented.

Certification was handled by the economic sector. Graduates were allocated in the affiliated

sector.

While the secondary technical schools provided technical training to learners, only the

practical training of learners at the skilled workers schools led to a qualification of Technical

Skilled Worker Grade 4 or 5. The qualification became valid through engaging 50-60% of the

whole 2-year programme and taking place within its own economic sector, in accordance

with the *Instructions of Reorganizing and Developing Secondary Technical Education of*

1952 and *Provisional Ordinance of Skilled Workers Schools (Draft) of 1954.*

Decentralization of Vocational Education in China from 1958 to 1966

The disadvantages revealed during the previous socialist transformation in China and

from the Soviet economic structure (1956) led China to seek to develop a Chinese-styled

economy in this period. Thus, the Second Five-Year Plan (1958-1962) was enacted. And a

movement, known as the Great Leap Forward, was incorporated between 1958 and 1960.

Under these circumstances the power of economic management started being delegated from

the previous top-to-bottom to top-to-province patterns in 1958.

Political-economic element: decentralization of economy in 1958. The centrally

planned system was based on the provincial economic systems. Consequently, this delegation

led to a certain degree of decentralization of education to the provinces (Wu & Rong, 2009,

p.69). On the other hand, the economic policy showed the effect of the single centrally

planned state-owned economy. The effect was seen in the extended priority given to the

heavy industrial sector, and the immediate pursuit of economic growth (Wu & Rong, 2009,

pp.69-73). This enhanced emphasis on industrialization led to the demand for a large-scale increase in the number of skilled workers and technical personnel or cadres.

Educational element: decentralization in 1958. Education also sought to dispense knowledge based on the Soviet model. The educational reform took place in 1958 and indicated the service needed to address China's existing needs of production and construction. The *Instructions of Educational Reform of 1958 (Central Committee of the Communist Party, State Council, 1958)* consisted of eight instructions. The first stated that the principles of education were to serve proletarian politics and were to be linked to productive labour. Second, the aim of education was to cultivate labourers who possessed socialist consciousness and knowledge. A third instruction stated all primary and secondary schools and the majority of higher educational institutions, secondary specialized schools and skilled workers schools had to be decentralized to the provinces. Some of the latter were to be decentralized directly from the central economic sectoral Departments to their factories and mines, enterprises and farms. The Ministry of Education was responsible for general affairs to ensure a national unified education plan. The fourth condition determined that each of the provinces should be allowed to develop an integrated education system with a self-determined curriculum except the common part developed by the Ministry of Education. Self-determined qualifications were in demand as the national qualifications no longer ensured self-determined job placement of graduates (Wu & Rong, 2009, p.69).

A fifth instruction determined that the education system should include qualifications run by the state versus those run by factories and mines, enterprises and agricultural cooperatives. That also applied to general versus vocational education and full-time versus part work and part study at part-time educational institutions. The sixth, recommended that everybody should be encouraged to improve his or her skills in the best possible ways to meet existing needs. On the basis of the network of schools, the full-time formal schools, the large-

scale development of part work and part study schools and part-time general and technical schools were seen as the appropriate way to meet the needs of rapid expansion of education and improvement of skills in industrial and agricultural production. The seventh instruction stated that educational institutions should be encouraged to found and run factories and farms, and vice versa. Finally, the Instructions urged all educational institutions to have productive labour as an integral part of their curricula. Due to the abandonment of the Soviet educational model, the use of the term vocational education was introduced in this policy.

Development of vocational education system: the rise of new elements between 1958 and 1966. In this period, four changes were apparent in the vocational education system. Under the *Instructions of Educational Reform of 1958* (shown above) decentralization of the secondary specialized schools and skilled workers schools took place. In addition two new elements were introduced in the vocational education system. Next, vocational education progressed in the rural areas. Finally, redress followed to a certain extent from 1961 to 1965. The details of these changes have been shown below.

In terms of *Instructions of Educational Reform of 1958,* as shown above, the vocational education system developed as follows. The first change involved the governance of the vocational education system. The majority of the secondary specialized schools were shifted to the provinces, while the minority still remained under the Ministry of Higher Education in combination with the central sectoral Departments. The skilled workers schools were passed to the factories and mines, enterprises, and agricultural cooperatives which belonged to the central economic sectoral Departments. These decentralized secondary specialized schools and skilled workers schools all fell under the Ministry of Education. The Ministry was responsible for general affairs such as designing a central plan and developing the common part of the curriculum. Each of the provinces developed its own vocational education system with a self-determined curriculum except the common part, examination,

qualifications, and job placement. Second, diversified provision of vocational education schools serving urban areas and agricultural schools serving rural areas was developed, including full-time, part work and part study, and part-time programmes. Third, two new elements appeared in the vocational education system. One of the new elements involved the establishment of vocational schools with part work and part study programmes. These schools were classified as vocational. The minimum entrance requirement was the completion of a junior secondary school programme. As for their establishment, there were a number of possibilities. Some of these schools were transformed from junior secondary schools. Some contained the integral part of senior secondary school programmes. Others were founded and run by the factories and mines, enterprises and agricultural cooperatives. And some of these vocational schools were started by the State while the rest were founded and run by the military. The aim of these schools was to foster labour and technical force reservation for both urban and rural areas (Huang, 2009, p.412).

The other new element that was introduced involved adult workers, peasants and cadres. They could now become part of the work force. Secondary specialized schools were opened in the rural areas with both full-time and part-time programmes at junior and senior secondary levels (Huang, 2009, p.413). The majority of secondary specialized schools fell under the provinces (Wang & Zhang, 2008, pp.147-148). For the decentralization of the secondary specialized schools, the *Opinions on Decentralization of Higher Educational Institutions and Secondary Technical Schools of 1958* issued the ruling that some of the higher educational institutions and secondary specialized schools could be decentralized to the provincial administration. This procedure would enable graduates from those schools to fit in better with the socialist construction and development of the work force. However, there were important conditions that would exclude the incumbents from becoming members of the major group. Such groups included minority universities, polytechnics and secondary

specialized schools which were still administered by the Ministry of Higher Education, or any other central government Departments (Wang & Zhang, 2008, pp.147-148). This project was of short duration as the vocational system was redressed to a slight degree in the subsequent period of 1961 -1965. The 1962 National Educational Work Conference pointed out that those secondary specialized schools which had been set up since 1958 under poor conditions were not located conveniently and there was a measure of overlap. All these schools should be cut down and merged (Dong, Dan & Chen, 2007, p.309).

Under the *Measures of Developing Materials in Science and Engineering, Agriculture, and Medicine at Higher Educational Institutions and Secondary Specialized Schools, of 1961*, national textbooks were developed for the secondary specialized schools. The Ministry of Education, various government Departments concerned, publishing agencies, and educationists were involved with the development of these textbooks (Dong, Dan & Chen, 2007, p.323).

The *General Rules of Skilled Workers Schools of 1961 (*Department of Labour*, 1961)* determined the following for the skilled workers schools: Skilled workers schools' major purpose was to cultivate skilled workers with socialist consciousness, intermediate skills and secondary general knowledge. These schools had to implement part work and part study programmes (meaning that each of them was arranged comprising one half of general theoretical knowledge instruction and the other half, practice). The minimum entrance requirement was the completion of junior secondary schooling (against the previous requirement of completion of primary education). These schools should have factories for their practice and production plans so that they were able to pay their own expenses. The *General Rules* also moved the governance of these schools from the previous Department of Labour to the Ministry of Education. The educational aspect was guided by the Ministry of

Education, and the rest should be administered by the competent Department of the sector concerned, while implementing the State plan on enrolment.

Vocational education developed in rural areas under the *Instructions of Educational Reform of 1958*. Agricultural schools were founded and run by agricultural cooperatives or farms. Their aim was to foster labour reservation. There was no planned enrolment or job placement for attendance. In regard to the practical aspect of these schools there was a direct connection between vocational institutionally-based instruction and actual productive practice in the form of half work and half study, part-time study and day-time work and full-time study including some practice. However, only graduates from the skilled workers schools finally gained a certification of Technical Grade 4 or 5, in terms of the *General Rules of Skilled Workers Schools Act of 1961*.

Decline of Vocational Education from 1966 to 1978

To summarize, in the period before 1966 vocational education in China experienced the rise of a new vocational education system. From 1949 to 1958, there were two elements in the system. One was the secondary specialized schools for cadres under dual governance across the sectoral Department concerned and the Education Ministry. The other was the skilled workers schools, also subject to dual governance across the sectoral Department concerned and the Labour Department. In the period between 1958 and 1966, the majority of these two types of vocational education institutions were decentralized to the local level. Also, two new elements emerged. They were vocational schools for labour force reservation in the urban areas and catering for peasants in the rural areas, and adult secondary specialized schools for respectively adult cadres, workers and peasants. Between 1966 and 1978 vocational education declined.

The Cultural Revolution took place between 1966 and 1976 during which many experts were involved in developing new projects. In the economic field it was the second

turn of delegation of power which included the authority over enterprise and the

simplification of the taxation and labour wage system (Wu & Rong, 2009, pp.90-92). This

delegation was associated with the deeper decentralization of education.

      Educational situation: decentralization and decline of the VE system. Education

reform took place during the Cultural Revolution, during which education was characterized

by the breaking of boundaries across sectors and the alignment of teaching and learning with

society. Every student developed into an expert in one field while possessing all-round

knowledge and ability (Dong, Dan & Chen, 2007, pp.359-367). Obviously, there was no

explicit boundary between academic and vocational education. In addition, Vocational

education declined in this period as VE was seen as a capitalist matter. The majority of

vocational education institutions closed down, while the remaining ones were transformed

into general schools (Huang, 2009, p.413).

The Development of a Vocational Education System in South Africa from 1978 to 1994

      This section continues the account of the development of a vocational education

system in South Africa in two successive historical periods: from 1978 to 1989 and 1989

to1994. The narrative for each period includes three elements namely the Political-economic

element, the Educational element and the Development of a vocational education system.

A Free Market, Continuation of Decentralization of Vocational Education between 1978 and 1989

      With a new administration at the start of this period (1978-1984) the political

framework led to a policy called total strategy. It included the external policy attempting to

make the states of Southern Africa, which had previously been independent, dependent upon

South Africa through both military and economic measures. The internal policy emphasized a

combined military and socio-economic assault on what has been perceived as a common

enemy namely that of Marxism (SAIRR, 1980, pp.1-7). In this new policy, the categories

Coloured and Indian were incorporated in Parliament by means of a new tri-cameral parliament under the 1983 Constitution (Bird, 2001; SAIRR, 1984, pp.72-73).

Urban Africans remained under African community councils, while rural homelands were consolidated. Four independent homelands emerged and the rest remained self-governing (SAIRR, 1983, p.366). The strategy for Africans has been to create and co-opt a small group of African urban middle class and independent African politicians in the homelands. The former was implemented by influx control and by conditionally allowing African union development and job reservation removal. Apprenticeships possibility now existed for Africans (SAIRR, 1980. pp.1-3; pp.274-275; pp. 391-396). Efforts to remove restrictions on equal access to the economy were mainly reflected in the following Acts: The *Labour Relations Amendment Act, No. 57 of 1981*, The *Wage Amendment Act, No. 48 of 1981,* The *Wage Amendment Act No. 58 of 1981*, and The *Manpower Training Act, No. 56 of 1981* (see Bird, 2001, SAIRR, 1982, pp.115-117; pp. 130-132; pp.202-204).

In the economy, moreover, a free market system was adopted with growing emphasis on the private sector (SAIRR, 1980, p.2). In the urban areas, multinationals brought foreign investment and advanced technology and machinery. The convergence of military and business interests appeared. The same was seen in the public sector, but more in the form of loans rather than an influx of cash and investment (SAIRR 1983, p.21).

Political-economic element: the liberalization of economy. Outside the urban areas the decentralization of industries continued. Yet, in comparison to the previous form of mainly aiming to stem the inflow of Africans, a limited number of growth points in border areas and various concessions from the government were apparent. In 1982 reforms took place in the following ways: There was an expansion of both points from adjacent to urban areas also to local and external homelands. The aim was to decrease over-concentration in urban areas and to counterbalance the existing metropoles. Private participation was the main

purpose and an effort was made to limit government's role to service delivery and encourage the maintenance of a sound climate for private operation and local development (SAIRR, 1983, pp. 91-92). Furthermore a new regional economic development approach, The Corporation for Economic Development, was introduced within the Southern African states. This project was dominated by the SA government through financial and technical assistance by means of seconded personnel. All the homelands were included in this effort (SAIRR, 1980, pp.1-3; SAIRR, 1982, pp.310-316).

Educational element: racial separation in the 1980s. The Human Sciences Research Council appointed a commission under chairmanship of Professor de Lange of the Rand Afrikaans University. Some of its members did not support the Christian National position. The de Lange Commission was assigned to investigate "the provision of education which would guarantee equal quality for the entire population" (Ashley, 1989, p.14). In 1981 it suggested a single education ministry for the entire population to achieve equality. This suggestion was rejected (Ashley, 1989, p.20).

However, educational reforms started occurring. According to the 1983 Constitution, education was defined as own and general affairs at all levels and governed by fifteen departments. Secondary level schooling included schools with differentiated education, teacher training colleges and technical colleges. For White, Coloured and Indian groups' education was managed by their own affairs and administered by their own departments of education and culture under the Department of National Education (DNE) for general affairs. Education for Africans was subject to the general policy and administered by eleven departments under the DNE, in which education for urban Africans was subject to the Department of Education and Training (DET) and education for those in the homelands to the ten departments of education located in the ten homelands. Tertiary institutions, including

Technikons and universities, while accountable to the appropriate Minister of education, had autonomy to manage their own affairs (SAIRR, 1986, pp.651-654).

The White Paper on the Provision of Education in the Republic of South Africa of 1983 and the *National Policy for General Education Affairs Act, No. 76 of 1984* established and added various functions to the DNE. These included new responsibilities in general financing, personnel and programme matters, other co-operative supporting services, and an inter-state agreement with the ten homelands on education. The Minister of the DNE had to determine general policy (SAIRR, 1986, pp.651-654).

Development of the vocational education system: racially separated vocational education systems, decentralization and privatization of vocational education in the early 1980s. There was a major problem in the training aspect spelled out in the Report of the Riekert Commission in 1979. It was the very low level of education of the existing labour force that was functioning ineffectively in the economy. The Report defined the necessary literacy level of an employee. It recommended the passing of a single Act on training for all employees irrespective of race and instituting a single department – the Department of Labour. The Report also advised that the *Bantu Employees' In-Service Training Act, No 86 of 1976* should be included in the proposed single comprehensive Act (SAIRR, 1980, p.527).

The Report of the Riekert Commission recommended that indentured apprenticeships should be granted to Africans as national service whether or not they were serving at their trade during the compulsory national training period. The Report further recommended that apprentice training for Africans should take place in public centres in terms of *The Bantu Employees' In-Service Training Act, No 86 of 1976* (SAIRR, 1980, p.278).

The government rejected the proposal of a single Act for training of all races and refused to sacrifice flexibility by restricting the training of African apprentices to the public centres. In response to this proposal, the 1979 White Paper recommended that in terms of The

Bantu Employees' In-Service Training Act, No 86 of 1976 the training of Africans be moved to the Department of Labour. At the same time The *In-Service Training Act, No. 95 of 1979* emerged to provide training for White, Coloured and Indian employees as a parallel paper (SAIRR, 1980, p.278; pp.527-528).

In 1981, *The Manpower Training Act, No. 56 of 1981* made provision for important new resolutions. For the first time all the previous racially-based training Acts were combined in a single non-racial Act. Africans were allowed to be indentured as apprentices (Bird, 2001). The Act further included training for all racial apprentices and non-apprentices excluding students, conducted under a National Training Board advising the Minister of Manpower. A Registrar of Manpower Training appointed by the Minister was in charge of the registration of contracts of apprenticeship of both group and private training centres and the granting of training concessions. Regulations on apprenticeship training remained much the same as provisioned in The *Apprenticeship Act, No. 37 of 1944* (SAIRR, 1982:130-131).

The vocational education institutions: racial separation, decentralization in the early 80s. The de Lange Commission on Education   of 1981 was formed in the light of the free market ideology. This Report recommended that education should be under a single non-racial authority. Academic and vocational differentiation should be more stressed. Pupils should receive vocationally-oriented instruction in the junior secondary schooling phase and then take the already chosen route at senior secondary level. The cost of vocational education should be reduced so that the vocational education system could have more pupils. And lastly, private vocational education was encouraged (Kraak, 1992, p.55).

The recommendation, a single non-racial authority over education in the recommendations of the De Lange Report was rejected by the government (SAIRR, 1984, p.423). In turn, a racially based separate perspective of vocational education institutions was strengthened in terms of the 1983 Constitution as reviewed above. First, vocational education

institutions were separated on racial grounds as own affairs. Second, the vocational education

institutions of each group were divided into tertiary (Technikons) and secondary levels (such

as technical colleges, vocational schools, continuation classes, vocational provision by

provincial high schools). Third, both secondary and tertiary vocational education institutions

of White, Coloured and Indian groups were controlled respectively by their own departments

of education and culture while the Technikons had autonomy to a certain degree. Each of the

departments made decisions for its own vocational education under its own House. Fourth,

the vocational education institutions of the African group were divided into urban institutions

administered by the Department of Education and Training and the institutions in the ten

homelands which each had its own department of education administering its own

institutions. But all eleven departments of education functioned under the umbrella of the

Department of National Education as part of General Affairs. Fifth, the Department of

National Education was empowered to arrange general affairs including co-ordination across

the departments of education by establishing statutory bodies with decision-making abilities

for African departments of education.

Statutory bodies of vocational education established for General Affairs included the

following councils and committees: The *Universities and Technikons Advisory Council Act,*

No. 99 of 1983 established a University and Technikon Advisory Council advising the

Minister regarding general university and Technikon matters (SAIRR, 1984, p.424). The

Advanced Technical Education Amendment Act, No. 84 of 1983 provided for the

establishment of a Committee of Technikon Principals (CTP) representing White, Coloured

and Indian Technikons, gave greater autonomy to the councils of Technikons, and set up a

quota system for White Technikons to admit African students (SAIRR, 1984, p.459). There

was no African seat on the CTP until 1986 (SAIRR, 1986, p.363).

The *South African Certification Council Act, No. 85 of 1986*   **Appendix D** and the *Certification for Technikon Education Act, No. 88 of 1986* established the South African Certification Council for schools and technical colleges. The purpose of the Certification Council for Technical Qualifications for Technikons was to unify the standards of education and examinations which previously had been issued by different departments of education and other examination bodies (SAIRR, 1987, p.363).

Policies regarding racially-based own vocational education systems. The *Technical Colleges Act, No. 104 of 1981* stipulated that all technical colleges for Whites, previously full government institutions, became autonomous state-aided technical colleges over the next three years. And second, all declared technical institutes should become technical colleges (SAIRR, 1984, p.459) **Appendix C**. In terms of The *Technical Colleges Amendment Act, No. 44 of 1989 (House of Assembly)* the following recommendations were approved: A transfer of the administration from the previous Minister of National Education to the Minister of Education and Culture (White own affairs), the linkage to certain general laws, setting up a Committee of Technical College Principals as a pure advisory body, and the registration of White private technical colleges (SAIRR, 1990, p.852). The *Technikons (National Education) Amendment Act, No. 33 of 1988 (House of Assembly)*, amending the *Advanced Technical Education Act, No. 40 of 1967*, transferred the administration of certain provisions of the principal Act from the previous Minister of National Education to the Minister of Education and Culture (White own affairs) New regulations on examinations and certification were added (SAIRR, 1989, p.285).

For Africans t*he Technikons (Education and Training) Act, No. 27 of 1981* made provision for the establishment of Technikons for Africans and approved establishing a Co-ordinating Council for Technical Education, with representation of various industries on the Council to advise the Minister of Education and Training (SAIRR, 1982, p.372). The

Technikons (Education and Training) Amendment Act, No. 77 of 1984 granted greater autonomy to the Councils of African Technikons in matters of course and admission of students of other races (SAIRR, 1985, p.687).

Since the establishment of the Department of Education and Training (DET) for urban Africans in 1978, an increasing gap in regard to vocational education provision, particularly at secondary level emerged between urban areas and homelands. First, DET took over all the post-primary schools in urban areas in which vocational education and training formed part of the curriculum. DET also incorporated sections of these schools. These schools were then known as technical secondary education, technical training centres, advanced technical training, trade training (boys), vocational training (girls) as well as ad hoc industrial schools. Apart from the above, DET incorporated National Technical syllabuses in all trade courses (SAIRR, 1979, p.409). DET spent more on vocational education for urban Africans than on VE in the homelands during 1978/79 (SAIRR, 1980, pp.485-486) and 1989/90 (SAIRR, 1990, pp. 784-785).

Further additions to training institutions included the establishment of a Technikon and technical colleges. The Peninsula Technikon, which originally focused on the Coloured community was established in the Cape in terms of The *Peninsula Technikon Act, No. 52 of 1982* for the provision of post-secondary technical education (Bird, 2001; SAIRR, 1983, p.502). The *Indian Education Amendment Act of 1985 (House of Delegates),* an amendment to the *Indian Education Act, No. 61 of 1965* legalised the establishment of technical colleges, and provided the establishment of technical college councils (Bird, 2001; SAIRR, 1986, p.395).

Transition Process: Removal of Quota System in Vocational Education, 1989 to 1994

Political-economic element: continuation of economic liberalization between 1989 and 1994. From 1989 onwards, there were early plans for establishing a different

political framework in order to bring all South Africans on an equal front before the law. Citizens now tried to move towards participation in decision-making at all levels of government affecting individuals' interest, without dominating or being dominated.

This was based on the principle of "self-determination regarding own affairs, with joint decision-making on general affairs" (SAIRR, 1989, p. xxv). Africans were brought into Parliament, and the ANC raised a debate about nationalisation (SAIRR, 1990, p. xxxv). Some of the major apartheid laws that were repealed included The *Group Areas Act of 1966, The Black Land Act of 1913, The Development Trust and Land Act of 1936, The Population Registration Act of 1950*, and *The Reservation of Separate Amenities Act of 1953* (SAIRR, 1990, p. xxxiii; SAIRR, 1992, p. xxx).

Economic reform was introduced through the new Regional Industrial Development Programme (RIDP) in May 1991. The policy replaced the old RIDP (shown above) which was focused on decentralization. It featured 'de-politicization.' With the dismantling of apartheid productivity improved, exports were promoted, and rationalization with performance-related incentives featured to encourage business propositions (SAIRR, 1992, pp.442-443). The economic objectives, reflected in the document published by the Economic Advisory Council in March 1991, included reduction of inflation rate to sustain external trade improving the living standards of the poorest as a result. Further benefits included reduction of the government share of GDP expenditure, applying proceeds from privatization to support basic social services, and tariff protection to encourage exports (SAIRR, 1992, p.444).

In the Proposed Plan of Action of the National Party, published in September 1989 the following improvements were promised: first, fiscal discipline would be managed with care. Tax relief and deregulation of economic activity were planned to promote free enterprise. In the democratic country there would be greater co-operation between the state

and the private sector, and privatization as a major source of expenditure on development was a wealth building enterprise (SAIRR, 1992, p.444).

Educational element: continuation of racial separation between 1989 and 1994.

During this period, the education reform aimed to remove the apartheid perspective of education and the fragmented allocation of educational resources. In the new dispensation Government hoped to change the provision of education in terms of the economic and manpower needs (SAIRR, 1993, pp.576-577). Government published a series of documents including Investigation into a National Training Strategy for South Africa (National Training Board and HSRC, January 1991), Education Renewal Strategy (ERS), and two discussion documents (ERS) (Department of National Education, June 1991), and A Curriculum Model for Education in South Africa (committee of heads of education departments, November 1991). Their common recommendations were the following. First, for the governance of the entire education system a single system of education with equity and non-racial base was recommended. Second, the recommendation of a new certification system placing certification of non-formal education in a national qualification framework to facilitate student mobility among cross-sections of the education system followed (SAIRR, 1993, pp. 576-577). In regard to the training aspect, the recommendation was the integration of "national training partnerships" among all sectors in vocational education, the extension of accredited training boards to all industrial sectors and the establishment of an 'association of accredited training boards' (SAIRR, 1993, pp. 576-577).

In respect of secondary vocational education, the ERS suggested that secondary school curricula should be divided into two tracks of general- and vocational-oriented education (SAIRR, 1992, p.190). The ERS (1991) suggested that secondary vocational education should have two selecting points at Grades 7 and 9, in contrast to the current single selecting point at Grade 9 (SAIRR, 1993, p.583). In respect of reform across the sections of

the vocational education system, the ERS (1991) proposed to upgrade certain university

courses and meanwhile transfer certain diploma courses offered at universities to Technikons.

Some Technikon courses were transferred to upgraded colleges for further education known

as 'edukons', offering academic bridging courses to universities and Technikons) (SAIRR,

1993, pp.576-577). Response to these recommendations from the State President cluded the

following statement (January 1993, The State President's Office). In January 1993, the State

President, Mr F W de Klerk, announced that:

> The own affairs departments of education, the Department of Education and Training
>
> (DET), and the Department of National Education (DNE) are to be amalgamated to
>
> form one education department by the end of March 1994…the education
>
> departments of the non-independent homelands have the option of becoming part of
>
> the new administration…The position of the 'independent' homelands is to be
>
> determined during the course of negotiations. (SAIRR, 1994, p.52)

> In 1993, the State President suggested a 3-tiered system of education governance to

achieve a more balanced division between centralisation and decentralisation and

recommended that the Department of National Education should keep its present position as

co-ordinator. The President's Office also suggested establishing a regional tier, 'possibly

within a federal constitutional arrangement,' to assure all groups of having access to

education in all regions under its control The President's Office further recommended the

active participation of school communities in the governance of schools in their region

(SAIRR, 1993, p: 577).

Development of vocational education system: expansion of training and removal

of quota system in early 1990s. . *The Manpower Training Amendment Act, No. 39 of 1990*

aimed to change certain training aspects. VE providers wanted to increase the number of

people qualifying as artisans; permit shorter apprenticeships; and enable industrial training

boards which were run by employers and empowered to administer apprenticeship systems, to develop curricula, set standards, test and finance training (SAIRR, 1992, p.192).

Major changes existed in regard to the admission of African students who were admitted on a quota system into White vocational educational institutions. Changes also applied to the unification of certification and examination. In 1991, the Minister of Education and Culture (House of Assembly), granted "the councils of technical colleges and Technikons authority to make decisions about the admission of students to their institutions" (SAIRR, 1992, p.185).

The *Technikons Act, No. 125 of 1993* empowered Technikons to award degrees to their students, to set specific entry requirements for specific programmes. Technikon Boards could decide on student intake in over- subscribed programmes, and had the right to make allowance for non-formal education for admission purposes (SAIRR, 1994, p.730).

The previous control over certification and examination moderation in vocational education by the racially defined education departments was changed to meet the requirements of the common certificate that the South African Certification Council issued to all students "writing the national N3 certificate and national senior certificate examinations" in terms of the *South African Certification Council Amendment Act, No. 89 of 1992*. The Certification Council for Technikon Education was empowered to conduct moderation and certification functions for all students under the *Certification Council for Technikon Education Amendment Act, No. 185 of 1993* (SAIRR, 1993, p.578).

Vocational Education System at the End of the Apartheid Period in 1994

 By the end of this period, education still remained own affairs being operated separately by groups under their own departments of education. According to Bird (2001), there were vocational education providers and a vocational training system, both public and private, constituting the VE system in South Africa at that time. The public vocational

education providers included Technikons, technical colleges and colleges of education, agriculture, nursing, and police. The first two have been discussed as follows.

The scope of Technikons included specific responsibilities in connection with student training and examining procedures. They "must prepare students for a specific profession or career and must be aimed at the practice, promotion and transfer of Technology"according to the Department of National Education (NATED, 93/01, pp. 1 02-150). Technikon programmes were minimum 3-years. These programmes were formal and led to diplomas and degrees. A Senior Certificate was the minimum entrance requirement (SAIRR, 1994, p.730). In terms of the *Report of the Commission of the European Communities (October 1992, p.23),* their statutory bodies included first, the University and Technikon Advisory Council to advise the Minister on programme and financial matters at Technikons. Second, the Certification Council for Technikons were accredited bodies that could uphold academic standards and award diplomas and certificates and third, the Committee of Technikon Principals served as a representative forum. Besides these general affairs, Technikons of each racial group performed on their own specific Act – *Technikon Amendment Act, No. 33 of 1988* for Whites, the *Advanced Technical Education Act, No. 12 of 1968,* for Indians, the *Peninsula Technikon Act, No. 52 of 1982* for Coloureds, and *Technikon (Education and Training) Act, No. 27 of 1981* for Africans – which provided the establishment of Technikon Councils with an autonomy statement.

In terms of the *Report of the Commission of the European Communities 1992* (CEC, Publisher 199, pp.38-50) technical colleges were to "provide technical and vocational education and training for students at both secondary and post-secondary levels". They offered programmes from 13 to 18 weeks per level, and each level was certified with a National Technical Certificate (abbreviated as N) ranging from N1 to N6 in which the N1-N3 level were linked to secondary level and the N4-N6 to post-secondary level. The basic

entrance requirement for N1 has been Grade 9. To date, there has been no unified credit

transfer system for articulation between technical colleges, Technikons and universities.

Though each racial group's technical colleges were under their own education department,

the finance, curriculum and administration decisions were made by the Department of

National Education. There was variation among college councils. Those in the House of

Assembly were statutory and others were advisory, while colleges in the House of Delegates

and some colleges in the Department of Education and Training had no councils. There was

no coordination among the four education departments except the Federal Committee of

Technical College Principals which however was advisory.

Apprenticeship training has been part of technical college provision since a

percentage of college students were apprentices. In terms of the Report of the Commission of

the European Communities 1992 (CEC, Publisher 1992, pp.19-22) the apprenticeship articles

lasted 3-5 years. An apprentice could enter with a Grade 9 pass. The apprentice could take

one of the models per year that included theoretical training at N1-N3 level. At the end of the

course there was an examination and in-service training afterwards. At the end of the

apprenticeship articles the apprentice had to take a Trade Test. If successful the trainee

became an artisan accredited by the respective industry Training Board. Apprentice training

has been controlled, administered and accredited by the industry Training Boards. Each of the

Boards has served the industry in which it qualified. Boards have been accredited by the

Registrar of Manpower Training under the Director General of Manpower. The National

Training Board has been under the Minister of Manpower. Apprentice training has been

implemented in terms of The *Manpower Training Amendment Act No. 39 of 1990*. There has

not been a uniform certification body for any training under the Department of Manpower. In

accordance with The *Manpower Training Amendment Act, No. 39 of 1990* the Training

Boards were responsible for training certification. As a result industrial training was 'privatised'.

Between 1978 and 1994, vocational education in South Africa witnessed racial separation, decentralization, racial inclusion and privatization. Racially separated vocational education systems developed in the Coloured, Indian and White Education Departments. While the vocational education systems of the other 'races' were subject to their own Departments of Education under their own Houses, vocational education for Africans was split into the urban system administered by the Department of Education and Training and the ten rural systems subject to the ten Departments of Education respectively located in the ten homelands. All the African Departments of Education were under the Department of National Education as part of general affairs.

Within the vocational education system of "Whites", technical colleges were decentralized. Governance was given to the provinces from the previous administration at higher level. This move made the secondary education both differentiated and diversified. But inter-access across different ethnic groups in vocational education systems gradually developed.

Development of Vocational Education System in China from 1978 to 1993

Transition process of market economy, recuperation, centralization and decentralization of vocational education from 1978 to 1989. After the Cultural Revolution, a political, economic and social reform period followed. It began with the *Third Plenary Session of the Eleventh Central Committee*, 1978. The Communist Party of China was the Party that confirmed their persistence on the socialist road, the people's democratic dictatorship and the leadership of the communist Party. It shifted the Party's working focus from the class line to economic construction (Wu & Rong, 2009, pp.101-109).

Political-economic element: socialist market between 1978 and 1993. The following economic and social reform procedure highlighted which recommendations formed the focus. First, we witnessed the re-starting of multiple forms of economy under the leading role of state-owned economy against the previous single centralized economy. Second, there was a growth balance between agriculture, and light and heavy industries compared to the previous heavy industry-orientation. Third, the opening of the economy to the rest of the world occurred through the full use of comparative advantages and export-orientation against the previous independence and import- substitution. And fourth, special economic zones along the coastal areas were set-up (Wu & Rong, 2009, pp.114-119). The shifts of priority indicated the tendency towards quality or efficiency. There was greater awareness of the power of competition, and social stratification linked to the diversification of occupations. These actions emanated in contrast to the previous antipathy towards social stratification based on the concept of everyone with all-round knowledge and ability was accepted for a job. This showed the variety of choices available to vocational education.

From 1978 to 1992, socio-economic reform was divided into two phases. During the first phase from 1978 to 1985, the previous collective economy in the rural areas under the integration of government administration with commune management was replaced by a household responsibility system under township governments (Wu & Rong, 2009, pp.109-114). As a result, the administration education provision for the rural areas changed from the previous agricultural cooperatives to township and county governments. In the urban areas, the industrial structure gave priority to light textile industry in particular (*State Development and Reform Commission, 2008:4)*. Since the textile industry is labour- intensive by nature, it was thus accepted that the urban industrial sector demanded in larger part a low skilled labour force. Therefore, both rural and urban economies in the first phase seemingly had greater need of a large number of vocational education trainees. In addition, the move of rural

educational governance under the township and county governments made the future development of rural vocational education easier.

During the second phase between 1985 and 1992, the reform focused on the urban areas based on *Decisions on Reforming Economic Structure of 1984* and the Seventh 5-Year Plan (1986-1990**)** (Wu & Rong, 2009, p.107; p.120). Within these plans, the state reduced its central plan to market readjustment by macro control over investment, finance and circulation (Wu & Rong, 2009, p.121). Therefore, the major focus of the economic development was turned to tertiary industry, especially financial industry and real estate (*State Development and Reform Commission, 2008, p.5*). This upgrading of industrial structure led to the change in employment structure. In 1990, the employment rates in primary, secondary and tertiary industries fluctuated (*State Development and Reform Commission, 2008, p.5).* This meant an increasing demand for skills improvement developed and therefore for vocational education both quantitatively and qualitatively.

In 1987 Deng Xiaoping created his theory on the Primary Stage of Socialism. The theory concluded that under the leading role of the state-owned economy, the multi- form economies and multi-form distribution were encouraged. The leaders agreed that the state regulates the market and in turn the market guides enterprises, and that the socialist market system includes both commodity (consumer and production goods) market and production factors, capital, labour, technology, information, real estate market (Wu & Rong, 2009, pp.127-128).

In 1992, according to Deng's talks and the Fourteenth National Congress of the Party, the building of a socialist market economic system was historically duly defined as the direction of China's economic reform and development (Wu & Rong, 2009, p.137). As a result the dimensional construction of a market economy was drawn with major aspects as shown below.

Decision on Building Socialist Market Economic Structure of 1993 demonstrated how to make modern enterprise rules in the state-owned enterprises, A few of the most important building blocks included the following: How to develop market economic structure, how to shift the state role to that of policy-maker to maintain the market, how to set up distribution according to labour and prioritize efficiency, establish a social welfare system and capital and labour markets, and in foreign trade how to strengthen the macro control of the state and hasten integration with the global economy (Wu & Rong, 2009,p.138).

In terms of the labour market, The *Labour Law of 1994* regulated the admission system to employment and the related skills. This was the period of the large-scale influx of migrants from the rural areas, and the rise of employment services agency and training institutions (Wu & Rong, 2009,p.139).

From 1978 to the early 1990s, the export economy mainly focused on the resource-intensive products. From the early 1990s to the mid-2000s, the majority of exported products were labour-intensive; and after the mid-2000s, capital and technology-intensive products became the heart of trade (*Research Institute of Industrial and Technological Economies, State Development and Reform Commission, 2008, pp.24-25).*

Educational element: extension, differentiation between 1978 and 1993. From 1978 to 1993 the development of the education sphere also experienced two phases. In the first phase, between 1978 and 1985, educational undertakings implemented recuperation and redress due to the disorder brought about by the Cultural Revolution (Lao, 2009, p.1). The second phase, from 1985 to 1993 was the phase of decentralization and development. Thus, up to 1993, the national education system reformed under the market economic structure, which marked further decentralization and quality improvement seen below.

The *Decision on Reforming Educational System, No.12 of 1985* (Central Committee of the Communist Party, 1985) emerged to picture the reform of the national education

system in the following period. The Committee stated that the aim of educational reform was to improve national quality and foster as many talents as possible, and that education must serve socialist construction. The Committee pointed out three existing problems in the education system. Basic education wa*s* weak. Higher educational institutions lacked autonomy, and vocational and technical education which was urgently needed by the economic construction had not yet developed properly. The Central Committee suggested measures of decentralizing basic education to the local (provincial) level, and implementing a nine-year compulsory education plan step by step.

Next, they recommended delegating more to higher education, and finally, adjusting secondary educational curriculum composition in such a way that the vocational education stream would be vigorously developed.

The *Programme for Educational Reform and Development, No.3 of 1993 (*Central Committee of the Communist Party, State Council, 1993), led to another national education reform in the 1990s. The reform programme addressed the problems that existed at the time in the national education system and mechanism, and also explained the need of expansion and quality improvement. One of the major measures was decentralization. In higher education efforts were made to set up and develop key universities and key disciplinary areas. The central government only controlled the key universities which were strong in specific specialties. The rest were subject to the provincial administration under the state fundamental policy. The local governments found it difficult to manage under changed circumstances. In pre-higher education, while the state was responsible for the fundamental policy-making and determination of the educational system, curricular standards and staffing standards and secondary and primary education were all under the local administration. The provincial and prefecture governments were responsible for urban education (basic, vocational, adult). The county and township governments were empowered by provincial governments to administer

rural education (basic, vocational, adult). Another major measure in this policy was to reform

enrolment and employment of graduates. This replaced the previous pattern of nationally

planned enrolment and allocation for higher institutions and secondary specialized schools

and skilled workers schools. The policy gave priority to the development of all types and

levels of education in the economically and culturally developed areas. Also, the policy

encouraged educational co-operation with overseas countries.

Development of a Vocational Education System: Differentiation, Extension,

Development of Rural Vocational Education

Due to the Cultural Revolution, the almost demise of the vocational education system

had left the secondary education band with a single element –one academic stream. Thus, the

1978 to 1985 cycle was the phase of recuperation, and extension of particularly senior,

secondary vocational education. It was set out as follows: First, the secondary specialized (or

technical) schools and skilled workers schools basically remained in the educational pattern

under the centrally planned economy as before the Cultural Revolution (e.g. nationally

planned enrolment and job placement). Second, recuperation and expansion were evident on

a large scale in the vocational schools that did not have state job placements for their

graduates. By this time, a vocational education system had basically been developed.

The phase from 1985 to the early 1990s started the consolidation and development of

the vocational education system. In the late 1980s attention was also focused on adult

secondary specialized schools. Efforts were made to get prepared for the 1993 national

educational reform under the market economic structure. The detailed narrative about these

four elements follows below.

Secondary specialized schools. According to the *Summary of the National*

*Secondary Specialized Educational Work Conference, No.258 of 1980 (*State Council, 1980*),*

the aim of secondary specialized schools was to foster intermediate specialized managerial

personnel. The minimum entrance condition was completion of senior secondary schooling

for 2-3 year programmes, and completion of junior secondary schooling for 3, 4 or 5 year

programmes. The programmes included full-time, part-time, half work and half study, and

corresponding types, together with cadre training in rotation. Their syllabuses and materials

were prepared by the Ministry of Education in consultation with the other Departments

concerned. As regards the governance, the instruction on educational matters by the

education departments was divided among different departments. While some were under the

sectoral central Departments, others were administered by the provincial sectoral departments

under the provincial government. The State Council also encouraged developing a number of

key-point secondary specialized schools among all of them.

Skilled workers schools. In terms of the *Circular on the Transfer of Integrated*

Management on Skilled Workers Schools, 1978 from the Ministry of Education to the

Department of Labour of 1978 (Department of Labour, 11 February 1978) skilled workers

schools previously under the Ministry of Education were returned to the Department of

Labour (Wang & Zhang, 2008, p.149). This indicated that they were centralized from the

previous decentralization to the factories and mines, enterprises, and farms that belonged to

the economic sectoral departments.

In terms of *Work Regulations on Skilled Workers Schools (Draft) of 1979*

*(*Department of Labour, 20 February 1979*)*, the aim of skilled workers schools was to

produce skilled workers at level 4 (Technical Grade 4, the last second level). The minimum

entrance requirement was the completion of senior secondary schooling of the 2-year

programme, and the completion of junior secondary schooling of the 3-year programme. For

practical training, each programme should consist of 50% general theoretical and specialized

knowledge and 50% productive practice. For the governance, under the integrated

administration by the Department of Labour, some of the schools were subject to the central

sectoral Departments, while others belonged to the provincial sectoral departments. Each

sectoral Department determined syllabuses and materials for its own schools. The enrolment

per year was on the plan of the Department of Labour in terms of the national economic plan.

Therefore, in comparison to the previous form only admitting junior secondary school leavers

and certificating Technical Grade 5 or 4, the new arrangement was an upgrading in these two

cases.

Vocational schools, rural, private, urban comprehensive vocational education

and urban vocational centres. *Report on Reforming the Secondary Education Structure,*

*No.252 of 1980 (*State Council, 1980) retrieved the term vocational schools which   were sub-

divided between vocational schools and agricultural schools respectively serving the urban

and rural areas. For the urban areas, three types of sources to such schools were encouraged

by this policy. The first type was the elective vocational subjects as an integral part of

syllabuses in the general senior secondary schools. The second type was the transformation of

some general senior secondary schools. These two types of vocational schools were

administered under the co-operation between the local education departments and local

sectoral departments concerned. The third type was the newly founded schools. These

schools were run by individuals, institutions, or all sectors of society; or transformed from the

general senior secondary schools which belonged to the factories and mines or enterprises.

Such sourced vocational schools were administered by their founders. All the vocational

schools were vocationally-oriented by nature, with 2-3 years of part work and part study

programmes, with no national allocation available to their graduates.

Reforming the Secondary Education Structure, No.252 of 1980 (State Council, 1980)

stressed that the number of students attending secondary specialized schools, skilled workers

schools and vocational schools should be enormously increased in comparison to those of the

general secondary schools.

Opinions on Reforming Urban Secondary Vocational Education Composition and developing Vocational Technical Education, No.006 of 1983 (Ministry of Education, Departments of Labour and Finance, and State Planning Commission, 1983) further increased the number of the vocational schools in the senior secondary education band in urban areas. To increase the number more vocational integral parts of syllabuses were introduced in the general secondary schools and more vocational schools were opened.. This policy provided for the establishment of two new types of vocational classes. The first group included vocational classes located in the general senior secondary schools held by local education departments and local sectoral departments concerned or cooperation between the education departments and local sectoral departments concerned, or between enterprises and public institutions. Second, the policy also provided for technical training classes held by all sectors of society; and for establishing more vocational education centres. No graduates from all these institutions had national allocation. However this policy provided for the improvement of the employment system whose motto was a person had to be trained before employment. Then, a target was set that by 1990 the students in all senior secondary vocational education institutions should reach more or less the same number as that of the general peers.

Evidently, these two policies led to the recovery of rural vocational education in the vocational schools and the rise of private vocational education in the vocational schools and training classes. The policies also gave rise to urban comprehensive vocational education in the vocational integral part of syllabuses and vocational classes in the general senior secondary schools, and the rise of urban vocational education centres. None of these were on plan.

Adult secondary specialized schools. In the late 1980s, the term adult secondary specialized schools re-appeared. In terms of the *Provisional Ordinance on Adult Secondary Specialized Schools of 1987 (*Ministry of Education, 1987), adult secondary specialized

schools re-emerged and were referred to as cadres, workers and peasants specialized secondary schools, radio and television specialized secondary schools, and correspondence specialized secondary schools. The aim of such schools was to develop the in-service people who had minimal two years working experience into applied specialized personnel at intermediate level, with programmes of 1-2 years for those who completed senior secondary education and 2-3 years for those who completed junior secondary education. The curricula were the same as those of specialized secondary schools. These schools were administered by the central or provincial sectoral departments concerned, while being instructed in educational matters by the Ministry of Education or provincial education departments.

Post-secondary vocational education. During this period there was an emergence of post-secondary vocational education. There were two major reasons for the emergence, according to Chen (2007, pp.39-41). First, due to the adoption of the Soviet educational system and later the Cultural Revolution, China's higher education band had a single academic composition. Second, at that moment, the enrolment rate of higher educational institutions was about one percent of all candidates or graduates of senior secondary education. Thus, in 1979, approved by the State Council, the Department of Labour and the Ministry of Education jointly issued a circular on the establishment of four Skilled Workers Normal Institutes (for teachers). The *Opinions on Redressing, Reforming and Accelerating the Development of Higher Education, No.76 of 1983* encouraged the establishment of specialized tertiary institutions and short-term vocational universities in the developed medium size and large cities. The *Circular on Establishing Three Pilot Five-Year Technical Specialized Schools of 1985* provided for the establishment of three 5-year technical specialized schools located respectively in the three specialized secondary schools.

Secondary vocational education system. Through the recuperation and expansion in the first phase of 1978-1985, a vocational education system for urban areas was basically

developed at senior secondary and tertiary levels, while the focus was on the senior secondary level. On these grounds a national educational reform was mapped out under the *Decisions on Reforming Educational System, No.12 of 1985 (*Central Committee of the Communist Party, 1985as outlined above. In the *Decisions*, the vocational education system was consolidated and given a growth goal for the following five years. The specific aims of secondary vocational education were to produce skilled workers at primary and intermediate levels, managerial personnel, and urban and rural labourers. The focus of the development of the vocational education system was on the senior secondary level of which the specialized secondary schools were the backbone. While junior secondary vocational education still existed, there was no neglect of the development of post-secondary vocational education whose enrolment was required to give priority to the graduates of secondary vocational education. The national vocational education system was divided into urban and rural vocational education sub-systems. The governance of secondary vocational education was also divided. While the minority were under central government Departments concerned in combination with the Ministry of Education, the majority were administered at the local (provincial and below) levels. Individuals, institutions and all sectors of society were encouraged to establish and run vocational schools. The policy goal was that after about five years the enrolment numbers of vocational and general streams at senior secondary level would be well-matched.

In 1990, the student number of vocational stream within the senior secondary (grades 10-12) education band numbered 45.7%, of the total via the 1990 Statistics of Education Ministry (Ministry of Education, 1990). The problem of a single composition of senior secondary education was basically resolved. The *Decisions on Vigorously Developing Vocational Technical Education, No.55 of 1991 (State Council, 1991)* mapped out further reform initiatives of the vocational education system for the 1990s. First, at the senior

secondary level, the reforms focused on further expansion up to a point that the student number in all vocational institutions at the senior secondary level exceeded that of their general peers, and an increase in the number of key point secondary vocational institutions, on the other hand. Second, efforts were made to strengthen the existing number and increase the number of vocational training centres for pre-employed people and for primary, junior and senior secondary school- leavers who failed to upgrade previously. The third was to reform the rural vocational education sub-system by means of four ways of primary schooling followed by 4-year comprehensive education or by junior secondary vocational schooling, and 3-year junior secondary schooling followed by 1-year vocational instruction or by 3-year senior secondary vocational schooling. The fourth was to reform the existing post-secondary vocational educational institutions. And fifth, vocational educational co-operation with overseas groups was encouraged.

By this time a national vocational education system including urban and rural vocational education sub-systems had been legally developed. This achievement prepared vocational education itself for a national education reform for the 1990s. It marked the start of a vocational education system under the market economic structure that officially began in 1992, to come to being under the *Programme for Educational Reform and Development, No.3 of 1993 (*shown above). Within the *Programme for Educational Reform and Development, No.3 of 1993*, there were specific rulings. First, the state was responsible for the general policy-making and determination of the educational system, curricular standards and staffing standards. Secondary and lower vocational education all fell under the local administration where the provincial and prefectural governments were responsible for the urban vocational education sub-system. The county and township governments were empowered by the provincial governments to administer the rural vocational education sub-system as an integral part of the economic and social development in their jurisdictions. Each

provincial government determined its own vocational education system including urban and rural sub-systems, enrolment and graduate allocation, curricula, and the like. Internally, the vocational institutions implemented a president or principal accountability system, against the previous unification of the state and vocational educational institutions to enable vocational education to integrate with the communities. Second, in particular, secondary specialized schools and skilled workers schools were now subject to the local governments or the local sectoral departments under the state general policy. In these schools the enrolment and graduate employment became part planned by the local authorities and part non-planned for both the urban and rural areas.

   Certification system regarding local and other workers. The practical training alongside the testing system of technical grades for skilled workers started with the origination of the skilled workers schools in 1954. This system was only confined to the economic sectors and regulated by the Provisional Regulations on Technical Testing of Workers of 1983 (Huang, 2007, p.44). In contrast, graduates from other vocational education institutions were only awarded academic certificates (Huang, 2007, p.44). Until the mid-1980s, the *Decisions on Reforming Educational System, No.12 of 1985* pointed out that all job-seekers had to be tested and awarded a technical grade certificate before employment. Later in the same year in terms *of Provisional Regulations on Technical Testing of Workers of 1983,* the year 1983 was determined as reference for all (Huang, 2007, p.44). The Circular on *Implementing the Regulations on Testing Workers of 1991* by the Department of Labour stated that graduates from all types of vocational educational institutions were required to be awarded both an academic and a technical grade certificate. It was called the "dual certificate system" (Huang, 2007, p.44).

   Decisions on Building Socialist Market Economic Structure of 1993 required institutions to set up occupational qualification standards and recruitment standards, and to

implement the combination of academic certificates and occupational qualification

certificates (Huang, 2007, p.44). These were followed by *the Rules of Occupational*

Technical Testing of 1993 by the Department of Labour, and the *Rules of Occupational*

Qualification Certificates of 1994 by the Departments of Labour and Personnel. These rules

stipulated that occupational technical training, testing and certification for technical workers

fell under the Department of Labour, and for professional personnel under the Department of

Personnel (Huang, 2007, p.39).

The decision (*No 12 of 1985*) which determined that job-seekers had to be tested and

awarded a technical grade certificate before employment prepared the way for future

employment requirements in the next decade shown in The *Labour Law of 1994* that legally

defined the occupational qualification system (Huang, 2007, p.39). The *Vocational Education*

Law, No.69 of 1996 stipulated that vocational education performance should be based on the

standards of occupational classification and grades that were made by the state Institutions in

accordance with the standards of the state would be responsible for and implement academic

certificates, training certificates, and occupational qualification certificates (Huang, 2007,

pp.3-4).

Realization of Vocational Education System by 1993

By the early 1990's the VE system had grown into a well-structured system.

Vocational education was provided in vocational schools that were divided into vocational

and agricultural schools respectively serving the urban and rural areas. Adult specialized

secondary schools were also included. For governance purposes, the Ministry of Education

was responsible for general policy-making. That Ministry was also responsible for the central

management planning according to the *Decisions on Vigorously Developing Vocational*

Technical Education, No.55 of 1991 (State Council, 1991) *and Programme for Educational*

*Reform and Development, No.3 of 1993 (*Central Committee of the Communist Party, State

Council, 1993) outlined above. China had a functional vocational education system by 1993, including training centres and vocational educational institutions, both public and private. The institutions were responsible for junior and senior secondary and post- secondary vocational provision. The junior secondary vocational education existed in the rural areas where nine-year compulsory education had not yet been popularized. The senior secondary vocational education was provided in the specialized secondary schools and skilled workers schools. Commissions and the Departments of Labour, Personnel, and Finance took responsibility for national planning of personnel demand, funding and employment.

The main administration of vocational education linked with the local governments and various sectoral departments concerned. Each local government made an overall investment in a set of various vocational providers, specialties, enrolment and allocation of graduates based on the economic and social needs within its jurisdiction. Besides running its affiliated vocational institutions, each sectoral department fostered distribution of various vocational institutions within its sector's specialty development, educational standards and assessment.

In respect of the internal management, the junior and senior secondary vocational educational institutions implemented the system of principal responsibility, while the post-secondary vocational institutions implemented the system of principal responsibility under the leadership of the Party committee. Society, teachers and students were encouraged to participate. These schools were encouraged to implement the integration of education and production in which they could establish industries on loan.

In summary, during the period from 1978 to 1993, vocational education in China experienced recovery, diversification, extension, bridging across vocational education and employment, and finally decentralization. From 1978 to 1985 vocational education developed from the previously declined situation into a system embracing the diversified providers at

secondary level. While the secondary specialized schools and the skilled workers schools subordinated to dual governance at both national and local levels, the vocational schools and the training centres were subject to their founders both public and private. And the volume of vocational education provision was extended to around half of the whole secondary education band. From 1985 to 1993, a bridge across vocational education and employment was built up principally through a dual certification system and employment admission rules. In the meantime, the rural vocational education system was set up. Finally, all the vocational education providers were decentralized to the provincial and prefectural governments for the urban vocational education provision and to the county and township governments for the rural vocational education provision.

Conclusion

The causal historical narrative on the vocational educational developments between 1948/9 and 1993/4 in both countries was provided through a detailed description of the period by dividing the period into five decades in each country. The years 1948 in South Africa and 1949 in China could be identified as the first critical juncture in the new political period after World War Ⅱ. The first critical juncture led to the origin of an institutional structure of a politico-economic system in each country. Institutions that were formed further influenced the vocational education spheres in both countries. In South Africa, a reform of vocational education sphere followed, which marked the changes in the governance perspective and the systematic perspective of developing vocational education for all groups. In China, a new vocational education system and new governance of the vocational education system ensued.

The year 1978 was identified as the second critical juncture in both countries. The second critical juncture witnessed a substantial change in institutional governance which in turn led to a reform of the vocational education sphere in both countries. Thereby, as assumed

in the historical institutionalist approach that was outlined in Chapter 3, the period from 1948/9 to 1993/4 could be divided into two periods, two sub-cycles in both countries.

In Chapter 5 a comparison between SA and China during the second half of the 20th century presented answers to the question about ways in which the two countries developed vocational education systems in their countries. The chapter clarified reservations about the role of culture in the approach to governance in the VE system. It highlighted similarities and differences at macro, meso and micro level between the targeted countries. The impact of foreign influence upon bringing about change in the actors' approach to VET in their respective countries emphasized the effect of socio-political, economic and culture factors on the development of education and in particular Vocational education in those divergent countries in the target era in the second half of the 20th century.

UNIVERSITY *of the*
WESTERN CAPE

Chapter 5 Comparison of Themes across Country Contexts

While Chapter 4 has provided a causal historical descriptive narrative of the evolution of vocational education in South Africa and China in the period that formed the focus for the study, this chapter proceeds on a direct comparative basis. It draws on the themes that marked the development of vocational education over the various decades in each country and then conducts the comparison across the country contexts. The purpose of this chapter is to understand how the historically different countries generated their vocational education systems. In this way, it highlights the similarities and differences that existed in their vocational education programmes.

The chapter is divided into four sections. Section one provides a brief comparison between the origins and development of vocational education during the period immediately preceding 1948/9, the focus period of the study in the two countries. A comparative outline of the ways in which vocational education originated and developed in both countries is included. In addition, the aim is to illustrate how traditions influenced the origins and evolution of vocational education in either country.

Section two proceeds to conduct the comparison across the two sub- periods identified in Chapter 4, namely 1948/9-1978 and 1978-1993/4. While the narrative in Chapter 4 outlined the changes that took place over a period of five decades, in this chapter the comparison is conducted in terms of two broad periods (1948/9-1978 and 1978-1993/4). Each of these has been marked by critical junctures in the history and evolution of vocational education in the respective countries. As outlined in Chapters 2 and 3, in each period (cycle) I identify three level institutional influences (macro, meso and micro) that impacted on the development of vocational education in both countries.

The third section probes relevant vocational education policies addressing the general trends which were identified in both cycles. This process includes a comparison of the

different policies to discover how actors changed in the policy-making process from period to period. The aim is to find out how these changes in actor behaviour contributed to the shifts in the approach to vocational education systems in both countries.

Section four synthesizes the whole comparison which has been conducted in order to identify similarities and differences. This in effect constitutes the findings of the study which highlight the comparison between the differences in approaches to vocational education at the secondary level in public education institutions in South Africa and China. The complex nature of the vocational education system in the two countries has been extensively outlined in Chapter 4 and thus is not repeated here.

By way of entering the comparative narrative, the following section draws on Chapter 1. It provided a general comparison of vocational education practices in the two countries on the eve of what formed the focus period for the study. This was done in order to set up the comparative base in the form of a scaffold for the actual study.

Comparing the Development of VE across SA and China Pre-1948/9

Indicator of similarity: Different tracks for vocational education were formalized. First, there were similar historical events that influenced the evolution of vocational education pre-1948/9 across both countries. In the early 20th century, a multi-track vocational education system was legally approved in technical colleges of "a secondary type" in the urban areas in South Africa. Vocational schools (trade, industrial, housecraft) were established and the integration of vocational subjects in the provincial high schools provided special education in the rural areas. Didactic or modern vocational education originated in the late 19th century, which meant that by the early 1930s a multi-track vocational education system was legally part of the education programme in South Africa (SA).

After the establishment of the government of the Communist Party in **China** in 1912, a vocational education system was developed with mainly three tracks. By the late 1930s

there were junior and senior secondary vocational schools. There was the integration of vocational subjects in the high primary and the general secondary schools. Then there also was the track for adults including the vocational supplementary institutions.

Influence of Confucianism British and Western traditions on vocational education. A *second similarity* was evident between the two countries. In both countries two opposing types of culture influenced vocational education in different ways   during the first half of the 20th century. In both countries didactic or modern vocational education was incorporated in the formal school curriculum through the influence of these opposing cultures. The traditional conservative cultures in the countries, the Dutch culture in SA and Confucianism in China, did not pay much attention to vocational education. British liberalism in SA and American pragmatism in China took the domain during the period of the first half of the 20th century, and under their influence the multi-track vocational education systems were legally shaped.

Vocational education was not regarded an important component of formal education in South Africa under the Dutch culture, and no specific form of vocational education was included in the curriculum. In contrast, by the early 20th century, the British culture incorporated vocational education to resolve practical social issues and legally developed it into a multi-track system. In this period, the British culture exerted a dominating influence in the field of vocational education.

In China, there were two main traditions, namely Confucianism, and the influence of the West (mainly pragmatism) in the years before 1949. These opposing traditions shaped two different education systems, and attached different meanings to vocational education. Confucianism viewed education as a way of cultivating government officials and servants, and believed in education for all without discriminating against anyone. The concept

vocational education could hardly be relevant within Confucianism as the focus was more on succeeding at school than on mastering skills and learning technology.

Under pragmatic influence of the West, education aimed to equip people for both livelihood purposes and society. In response education was developed as a differentiated system with academic and vocational streams running parallel. And within the general system, vocational education developed into a diversified multi-track system. With John Dewey's pragmatic influence in the 1930s and the development of the democratic movement in opposition to the restoration of Confucianism, the Chinese Vocational Education society was established to replace the former term Industrial education (Chen, 2007). In China the traditional Confucianism did not consider vocational education important. Yet, the American pragmatism used vocational education to address the needs of individual lives and society. The British liberalism ain SA and the American pragmatism in China took the domain in the first half of the 20th period. Under their influence the multi-track vocational education systems were legally shaped.

Indicators of difference: Different roles and purposes of vocational education.

The various types of vocational education systems in different historical periods showed marked differences between the two countries. In South Africa, vocational education served primarily as a solution to political-social conflict. In the country which was politically segregated along colour lines. Education of Black people was considered a problem as they were rated 'inferior' to Whites, but they had to receive some form of vocational training. After the discovery of gold and the development of extended industries, leaders in different areas had to meet new economic needs. Technical education became essential to develop the skills and further the improvement of the working population. Finally, (see Chapter 4), as a means of developing a multi-track system to address social stratification, the "Poor White" problem and the economic needs of other racial groups were addressed.

In China, vocational education played a role in primarily self-strengthening the people after the Opium War in the mid-19th century. Then the role of vocational education changed to meet the economic needs. After the Sino-Japanese War, Chinese people became convinced that further learning obtained from the West and more fundamental institutional level reform were both necessary and urgent. Consequently vocational education was introduced to cultivate students in the development of all industrial sectors. Finally, after the Chinese bourgeois democratic revolution, under the Three People's Principles (Nationalism, Democracy, the People's livelihood), vocational education was shaped to address individual livelihood and society needs.

The role of vocational education in South Africa was to serve racial separation and the economy. The second difference, as outlined in detail in Chapter 4, exhibited a structural difference in the practical implementation of vocational education. The time frame (or, period) leading up to vocational education evolving into a nationally centralized system, was different in the two countries. With the establishment of the Union in 1910 in South Africa, a process of centralization of vocational education followed which ended in 1925. After the Sino-Japanese War (1895), a national education system was established in China for the first time in 1904, when vocational education was included in the system.

Prior to 1948, South Africa had no vocational education at tertiary level. In contrast, China introduced tertiary vocational education already in the 1904 national education system However, it disappeared in 1912/13.

This knowledge of the early history provides a broad picture of the social environment within which the governance of vocational education in South Africa and China was situated. The evolution of education in each country includes the different tracks of institutionally-based general and vocational education and practical training.

To summarise: In the period prior to 1948/9, vocational education in both countries developed initially from didactic vocational education into a multi-track vocational education system. This evolution that took effect in the development of a vocational education system will now be addressed.

Comparison of Themes across SA and China 1948/9-1993/4

This section seeks to understand the development of vocational education systems in two diverse countries in the period that formed the focus of the study. In accordance with the analysis framework set out in the previous chapters, the two critical junctures that occurred in 1948/9 and 1978 in both countries resulted in the division of the period under review. The comparison between the two counties is directed at the macro, meso and   micro levels, focusing on socio- political and economic factors, vocational education changes and governance structures (using policy documents)

As shown in Chapter 4 in the complex world of political, social, economic and educational factors in both countries, only their political economic systems were similar during this period. In South Africa the government adopted a centralized economy and import-substitution strategies from 1948 to 1978.In China a single economic market was approved.to serve the needs of the country.

South Africa: Socio-political-economic-education Factors

The country context of South Africa differed substantially from that of China. With the victory in the election of 1948, the Nationalist Party institutionalized an apartheid system in which the racial groups were segregated politically, socially, economically and educationally in favour of the 'White' section of the population. Centralization became the aim while racially separated educational provision was introduced. From 1948 to 1966, vocational education was provided in a racially separated capacity; and each racial group's vocational education provision was centralized, during which vocational education provision

for the 'White' section of the population was in the domain. After 1966, the unification of Afrikaans- and English-speaking people happened at macro level. Community influence became visible in the national education policies. Decentralization was introduced in the vocational education system in such a way that the vocational schools and the vocational provision by provincial high schools all fell under the control of the provinces. This change enabled learners to choose among academic, pure vocational and vocationally-oriented tracks in line with their own aptitude and aspirations. This new approach to education in the mid-1970s contributed to the rise of training provided for Africans working at 'White' businesses in the border areas.

The economic segregation manifested in the following ways: Government used influx control, diversified economy in the Reserves, and decentralized labour-intensive industries in the border areas which used low-skilled or unskilled labourers. These strategies were used as the means of restricting the influx of African population in the urban areas. The 'Coloured' social category was offered employment in posts serving their own racial group. Later they were also employed in the "fields traditionally theirs" in which the acquired skills did not need much formal vocational education and training. Informal vocational training was transmitted from one generation to the next by following the elders' example. A belief was created that the person labelled as 'White' required skills in the urban areas, and this led to the need for vocational education and apprentice training for the 'White' population. It is important to note that the metropolitan area retained and extended the industries of mechanization and automation during the late 1960s, which demanded a better educated and more highly skilled labour force. This led to the rise of post-secondary vocational education.

In South Africa, the Afrikaans and English-speaking people unified at macro level in 1966. At this stage the shift from the previous centralization towards decentralization became more pronounced at certain levels in the vocational education system.

From the above, it has been evident that both countries experienced a turning point at the macro-level in this period. In addition to the similarity in political-economic systems, the latter also contributed to similar structural realizations in vocational education. The turning point in each country led to a shift from centralization to decentralization in its vocational education sphere. The nationally localized differences between both country contexts caused differences in the roles, governance and perspectives of vocational education across South Africa and China.

Vocational education changes in South Africa: centralization then decentralization.

From 1948 to 1978, apart from serving the economy, the role of vocational education in South Africa was focused on serving racial segregation by means of the racially separated provision of vocational education. Vocational education for 'White' persons in the institutionally-based vocational education sector was governed by the Department of Education and the provincial departments of education, while the apprenticeship training sector was subject to the Department of Labour. At the same time, the provision of vocational education for the other races was subordinated to the central Departments of Bantu Development, Coloured Affairs and Indian Affairs.

First, vocational education in South Africa was centralized in the early part of this period. In the institutionally-based vocational education sector, vocational education provision gradually developed separately along racial lines. Between 1948 and 1966 vocational education for African, Coloured and Indian groups was centralized and transferred from the Provincial Department to central Government Departments of Bantu Development, Coloured Affairs and Indian Affairs for each of the population groups. Vocational education for the 'White' group was under the Department of Education Arts and Science. Now each group was under the Department of Education Arts and Science.

The centralization of vocational education for the 'White' population happened as follows. Technical colleges changed from state-aided to full government institutions. Vocational schools changed from being state-financed to institutions that gave free tuition. Continuation classes, previously held by institutions or persons qualifying for grants-in-aid by the State, now became full government institutions. These educational institutions were all administered by the Department of Education, Arts and Science. Vocational provision by provincial high schools moved from provincial control to the National Advisory Education Council.

In the years between 1948 and 1966, no change in the governance in the apprenticeship sector was observed. It remained subject to the Department of Labour. However, the theoretical knowledge instruction was extended in contrast to the relative reduction of the practical training within the apprenticeship period.

From 1966 to 1978, decentralization took place to a certain extent in the institutionally based vocational education sector for the 'White' section of the population. Provinces were given control of vocational schools (previously run free by the State). Vocational provision was given to provincial high schools (previously under advisory functions of the National Advisory Education Council). Post-secondary vocational institutions, known as Colleges for Advanced Technical Education (later Technikons), legally emerged in 1967 as state-aided institutions controlled by the Department of Education, Arts and Science through their councils.

In the training sector, 1976 saw the legal start of both public and private centres in the border areas offering in-service training to those learners defined as 'Africans' in industries that were owned by sections of the 'White' population. It is important to note that the training was controlled by the Department of Bantu Education and did not lead to indentured apprenticeship.

To summarise - The vocational education system in South Africa accommodated the institutionally-based vocational education and apprenticeships separately. Vocational education for the 'White' population was offered at secondary and post-secondary levels. The post-secondary level emerged in the 1960s in the urban areas to prepare technicians. To accommodate apprenticeships at secondary level the technical colleges enrolled learners to qualify as artisans in the urban areas. Vocational schools were primarily used as vocational facilities located in the rural areas for the defective children of the 'White' section of the population. Vocational education courses were also included in provincial high schools. In practice the changes in the organisation of vocational education and training at macro level contributed to the development of vocational education in South Africa during the years between 1948 and 1978. During this period vocational education policy was characterized by one comprehensive system at meso level for all tracks of the vocational education system in accordance with guidelines stipulated in *The Vocational Education Act, No 70 of 1955*.

Definition of Vocational Education in South Africa: Dualism

According to *The Vocational Education Act, No 70 of 1955.s.*1 the definition of vocational education included the following: commercial vocational education, domestic science vocational education and technical vocational education. Extensive rulings existed regarding the required number of courses and teaching hours per week that determined the conditions that approved an education system to provide vocational education with a commercial, domestic science and technical focus. In terms of t*he Vocational Education Act, No 70 of 1955 s.*1.*s.* ii (,**Appendix B),** commercial vocational education and domestic science vocational education programmes had to provide subject-specific courses for more than one third of the curriculum in their respective curricula. An exception was made in terms of the *Vocational Education Act, No 70 of 1955 s.1.xx1,* in the case of technical vocational

education which was referred to as "a course of instruction and training (theoretical or practical or both theoretical and practical" in "any prescribed trade", but not in "handicraft".

However, the exercise of power as expressed through *The Vocational Education Act, No 70 of 1955* was confined to special schools. All schools which were entrusted with the right to include vocational education as part of their curriculum were excluded from the ambit of *The Vocational Education Act, No 70 of 1955* by the Administrator of any province in terms of *The Special Schools Act No 9 of 1948 s.1*.xxiv

Governance of Vocational Education: Power Vested in Minister

Great power vested in the Minister of Education, Arts and Science as well as in the Minister of Finance. *G*overnance was subject to specific conditions which regulated the administration of an institution as a declared technical college under the Minister of Education, Arts and Science. In terms of the conditions stipulated in *The Vocational Education Act No 70 of 1955 s.3*.1 great power was also vested in the Minister of Finance. He could issue a declaration instituting an institution as a technical college in consultation with The Government's Department of Education, Arts and Science just by means of a Government *Gazette* notice.

The Vocational Education Act No 70 of 1955 impacted on existing and new technical colleges in a negative wa*y*. College personnel lost all power over their institution. A stipulation specified in the *Gazette* notice stripped college councils of all power and authority at their institution. All power and rights and authority would now be transferred to the Minister and the institution would in future be deemed to be a "vocational school" established in terms of *The Vocational Education Act No 70 of 1955 s.3.2.* But the Minister could appoint a school council for any vocational school in terms of *The Vocational Education Act No 70 of 1955 s.4.1.* The members of this council would follow the prescribed constitution rules and the duration of membership would also be prescribed.

Another regulation determined that all employees previously employed by the individual colleges would in future be employees of the Government in its Department of Education, Arts and Science, in terms of *The Vocational Education Act No 70 of 1955.s.19.1.*

In terms of *The Vocational Education Act No 70 of 1955 s.1.xxv* evidence of the scope of power vested in the Minister of Education, Arts and Science was also seen at governance level. A potential provider could, in consultation with the Minister of Finance declare any school a vocational school that met the requirements of Government. This meant that the school had to be established under *The Vocational Education Act No 70 of 1955 s.2.4.* The same principle applied to either a newly established school under the present Act or an old vocational school established under a previous Education Act.

The power vested in the Minister was further evident in a stipulation in terms of *The Vocational Education Act, No 70 of 1955 s.6.1. T*he Minister, in consultation with the Minister of Finance could approve a grant-in-aid to any established vocational school applying to be recognized as a State-aided vocational school. If the Minister recognized the school it was within his power to allow the school to receive the grant-in-aid approved by Government for this purpose.

Access to Vocational Schools in South Africa

Every registered pupil of a vocational school would be subject to compulsory school attendance according to *The Vocational Education Act, No 70 of 1955 s*.15.1. A further stipulation decreed that no pupil should receive any payment under *The Workmen's Compensation Act No. 30 of 1941.s.*14.*The Vocational Education Act, No 70 of 1955* assured vocational education gained recognition and status in the political–economic education field which it lacked before. An example to illustrate this fact referred to a stipulation that those persons who were left out of ordinary school or even higher education study, were recognized by the Act and granted the right of attendance in terms of *Vocational Education Act, No 70 of*

1955 s.9. In terms of *s.10* of this *Act* the Minister was empowered to "establish, maintain and conduct part-time classes" for those people.

However, the *Vocational Education Act of 1955* reflected the State's authoritarian approach to education and vocational education in particular. Technical colleges were devoid of any real power in managing their institutions. Officials from other Ministries, apart from the two Ministries mentioned above were also not drawn into governance. Nor was there much opportunity for community involvement in the management style advanced by Government.

This Act (No 70 of 1955) defined two types of institutions not under provinces as vocational education providers– namely vocational schools and technical colleges. The number of vocational schools was enlarged by means of encouraging technical colleges and other public vocational education providers to become vocational schools. Vocational schools had to provide prescribed commercial or domestic science subjects for at least a third of the whole curriculum, and admit compulsory school leavers for free. Vocational schools became Government institutions in full administered by the Department of Education, Arts and Science. The Minister appointed a council for a vocational school. The members of the council should be interested in higher education. The activities of the council would be prescribed.

Technical colleges would provide theoretical subjects or training or both in prescribed trades, not in handicrafts. Technical colleges became full government institutions administered by the Department of Education, Arts and Science. The status of College Councils was that of an advisory body, while the members of the councils became Government employees.

Act 70 of 1955 also changed the type of private educational institutions, which catered for those who were left out of both compulsory schools and higher educational institutions,

into continuation classes with grants-in-aid. *Act 70 of 1955* introduced centralization of vocational education during this period. The Government and the councils (internal professional groups) were defined as actors. The prioritization of the types of vocational schools reflected the process of generalization, and the process of getting the internal professional actor non-legitimized.

The following section shows how the macro level changes led to the development of vocational education in China from 1949 to1978.

China: 1949-78 Socio-political-economic-education Factors Contrasts

As stated in the former section, the political-economic systems of both countries showed similar characteristics in this respect. China had a single centrally planned economy with import-substitution strategies between1949 and 1978.

However, the two country contexts were different in many respects. Indicators of difference between China and South Africa were the following: Socialist Transformation in China - total Territorial Segregation- Separate development in SA.

In South Africa racial separation was formalised in 1948. In China, the People's Republic of China was established in 1949 under the Communist Party. The socio-economic development model of the Soviet Union was introduced, and at first, priority was given to urban industrialization. Then urban economic activities and the working population were given priority. A new national education system, which was centrally planned, was set up to accommodate both mass education and the needs of a single centrally planned economy. While the cultivation of experts and engineers was the major responsibility of higher education, the fostering of intermediate specialized cadres and skilled workers became the assignments of vocational education. Based on the central national plan this led to the secondary specialized schools for cadres and the skilled workers schools,

Up until 1958, various attempts were made to reject the Soviet Union model. It was abandoned in1958. This shifted the previous centralization to decentralization and following certain decentralization strategies of the economy, the decentralization of the education system ensued. In the process vocational education also witnessed decentralization of the system and the rise of rural vocational education became a reality. This shift reflected the changes of vocational education.

Vocational Educational Changes in China and South Africa: Decentralization

As stated above, both countries had a turning point. The similar macro-level turning points and political economic systems contributed similar structural realization of vocational education across both countries. On the other hand, differences between the country contexts led to the different routes in the development of vocational education in both countries.

Indicators of similarity Shown in the following section some elements introduced in the VE system underscored the similarity between the two countries. Vocational education in China also experienced a centralization process as was the case in South Africa in the early years of this period. *Act 70 of 1955* introduced centralization of vocational education during this period In China the years from 1949 to 1958 witnessed the creation of a vocational education system including two elements at secondary level. The first element was secondary specialized schools for cadres, under dual governance of the Ministry of Education in combination with the central sectoral Departments concerned. The second element was skilled workers schools, at junior secondary level, under dual governance of the Department of Labour in combination with the central sectoral Departments concerned.

In China, there was no separation between the training programme and the institutionally-based vocational education. Rather, they were combined into one sector. In the period between 1949 and 1958, practical training was still emphasized in the secondary specialized schools. The practical training was, however, specifically regulated in the skilled

workers schools with 50-60% share of the whole programme in its own economic sector, leading to a Technical Worker level 4 to 5.

In China a decentralization process of the existing two elements and the emergence of two new elements at secondary level took place between 1958 and 1966. To accommodate the two existing elements, the majority of the secondary specialized schools became subject to the provincial sectoral departments concerned under the Ministry of Education, while the minority still remained as before. The skilled workers schools fell under the central sectoral Departments concerned, under their factories and mines, enterprises and farms. They were removed from the Department of Labour and transferred to the Ministry of Education.

The first task of the two newly introduced elements was establishing vocational schools, including urban vocational schools for labour force reservation and (rural) agricultural schools for peasants. The other newly-established element was the adult secondary specialized schools for in-service cadres and workers, and adult peasants. With regard to practical training, great emphasis was laid on all vocational educational institutions in direct connection with the factories and mines, enterprises and farms and in diversified time arrangements during this period. Practical training in the skilled workers schools led to a Technical Worker level 4 or 5.

As shown above decentralization took place to a certain extent in the institutionally based vocational education sector from 1966 to 1978 in South Africa. However racial separation was still prevalent among Coloured, Indian, Black and White sections of the population.

Indicators of difference between China and South Africa: the role, the governance and the perspective of VE system. First, as indicated above, the role of vocational education in China was different to that in South Africa. During this period before 1978, vocational education was set to serve the economy in China. As outlined above, a

single centrally planned economy prioritized the urban industrialization at the expense of agriculture. Thus vocational education was provided to cultivate cadres and workers separately in the urban areas at first. Later, following the decentralization of the economy, the vocational education/training of peasants in the rural areas occurred to complement the labour force.

Second, the governance of vocational education in China also differed from the governance of schools in SA. For the governance of vocational education, the secondary specialized schools were administered by dual governance across the sectoral Departments concerned and the Ministry of Education (after 1958, the provincial departments of education were involved). The skilled workers schools were also under dual governance combining the sectoral Departments concerned with the Ministry of Labour before 1958 and with the Ministry of Education later. The vocational schools were governed by their founders. Among them, those in the urban areas were under the state, or factories and mines, enterprises and farms of the central sectoral departments, or the military; and those in the rural areas were under farms or agricultural co-operatives.

Third, there was a varied perspective of the vocational education system in China. In this period, vocational education was only at secondary level and without further separation of levels. The practical training was part of the institutionally-based vocational education. Before 1958 vocational education was only provided for in the urban areas. After 1958, the rural vocational education emerged. Later adult vocational education was introduced.

In the sections above it has been evident how the macro level changes caused the changes in vocational education in China during the period from 1949 to 1978. A deeper understanding of how the meso level shaped the development of vocational education can be gained through analysing policy in this period.

Document analysis of Chinese policies (legislation): in regard to skilled workers schools. In this period, regulations on vocational education stipulated that the different tracks of the vocational education system were regulated by means of their respective policies. The first example of the informative and educational value of insight into these policies has been *Provisional Ordinance of Skilled Workers Schools of 1954 (Draft)* which focused on the track of skilled workers schools only.

Definition of skilled workers schools in China. The policy outlined in *Provisional Ordinance of Skilled Workers Schools (Draft) of 1954.s.8* defined the skilled workers schools as the schools providing instruction and training with academic and specialized theoretical knowledge and practices. The practical training shared 50-60% of the whole programme. According to *The Provisional Ordinance of Skilled Workers' Schools (Draft) of 1954 s.2, t*he specialized theoretical subjects should be taught by instructors not having lower qualifications than the technicians who had graduated from the secondary technical schools. *The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.3.s.13* **Appendix F** further stipulated that the practical training should be under the instruction of skilled workers. In accordance with *The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.13* these schools were classified in terms of the sectors, and aimed at the cultivation of skilled workers, each at level 4 or 5, for the respective sectors.

The Provisional Ordinance of Skilled Workers' Schools (Draft) of 1954 s. 24 stipulated that each skilled workers school has its own primary plans on enrolment, instruction and practical training and then report to the sectoral central Department to which the school belonged. In terms of the primary plans made by its skilled workers schools, each sectoral central Department wrote unified syllabuses for instruction and training for its schools within the sector and registered them in the Department of Labour. Training referred

to the practical instruction of skills, whereas education focused almost exclusively on theoretical knowledge.

Governance of skilled workers schools in China. In terms of *The Provisional Ordinance of Skilled Workers Schools (Draft) of 19 s.*5 each of the sectoral central Departments administered and was responsible for the governance of its own skilled workers schools for the specific sector under the professional guidance of the Department of Labour. In the light of these circumstances, each of the sectoral central Departments could entrust the companies or factories or mines directly under the respective Departments with the responsibility to direct their skilled workers schools.

In terms of the *Provisional Ordinance of Skilled Workers' Schools (Draft) of 1954 s. 23. s.25*, the establishment, transfer and disestablishment of a skilled workers school were determined by its sectoral central Department concerned, in consultation with the Department of Labour, and registered in the local Department of Labour of the sector where the school was located. The skilled workers schools in each sector referred to the appropriated educational property of the sector.

In accordance with *The Provisional Ordinance of Skilled Workers' Schools (Draft) of 1954 s.6.; s.12,* a skilled workers school should be staffed with a principal and a vice-principal who were appointed, a teaching affairs office, a general affairs office, and other offices and staff who were determined by the sectoral central Department which the school belonged to, and students.

The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.17 stipulated the enrolment plans for those skilled workers schools that were attached to the sectoral central Departments and were made by these Departments in consultation with the Department of Labour. The local Departments of Labour of the sectors where those schools were located were responsible for assisting enrolment. The enrolment plans for the other

skilled workers schools that were attached to the sectoral local departments were still determined by their sectoral central Departments, however, in consultation with the local Departments of Labour.

The certification of each of the sectoral skilled workers schools was carried out by the sectoral central Department. Certification was done in agreement with *The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.20.*

Two further aspects were implemented in accordance with *The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.18.* The learning and boarding fees of students at such schools relied on grants-in-aid. These were determined by the respective sectoral central Departments for their own schools. *The Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 s.21,* stipulated graduates from the skilled workers schools in each sector were assigned jobs mainly within this sector. In the early years peasants in rural areas were not indentured nor did they receive diplomas after having completed the course..

Admission to skilled workers schools in China. As mentioned above the skilled workers schools admitted high primary school leavers, or the equivalent. T*he Provisional Ordinance of Skilled Workers' Schools (Draft) of 1954* defined the skilled workers schools as a type of vocational educational institutions. These schools were classified in terms of the sectors. In this regard each of the sectoral Departments administered under the Department of Labour had its own skilled workers schools for the cultivation of its own workers. A sectoral Department appointed its companies or factories or mines to direct its skilled workers schools over the principals of the schools. The personnel of a school were determined by its sectoral Department. Each sectoral Department designed a unified syllabus in its sector on the basis of the advice of its schools and registered it in the Department of Labour. A sectoral Department determined certification and grants-in-aid, while involving the local sectoral departments in the process of enrolment planning,

Accordingly, the actors involving in the governance of the skilled workers schools included the Department of Labour, sectoral Departments and local departments, companies within the sectoral Departments as well as the schools themselves. The curriculum and educational activities took on the form of a type of vocation.

From the above, it is evident that the period between 1966 and 1978 saw the decline of almost the entire vocational education system in China.

Summary: Comparison between South Africa and China during the period from 1948/9 to 1978 Specific differences between their approaches were evident. The leaders in charge of skilled workers schools in China stipulated clear and detailed requirements at educational, physical and financial levels for running a school in a specific sector in contrast to the approach of leaders in charge of vocational education in South Africa. These leaders were primarily motivated by socio-political reasons for establishing vocational education facilities. The governance style of school leaders in the two countries has been a further point of difference.

In South Africa the Minister of Education, Arts and Science and the Minister of Finance had almost unlimited power with limited input from local leaders in the vocational education field. College leaders and other members on college council level had limited power and had nominal input. Governance in Chinese schools was more open since Government officials as well as provincial and local leaders in mines or factories, or farms, were jointly responsible for education and training of learners.

Comparing Themes across SA and China between 1978 and 1993/4

In South Africa, as shown in Chapter 4, before 1978 the only indicator of similarity with China was the political-economic system in the country contexts of both countries. The political- economic systems in this period showed similarities. In South Africa, the period from 1978 to 1994 witnessed the adoption of a free market system. China moved in the

direction of opening the country to the world. According to the above and the presentation in the later section, in the contexts of both countries, the similarity revealed across the political-economic systems brought about a process of liberalizing the economy. This phenomenon was responsible for such happenings in vocational education as decentralization, diversification, expansion and privatization, which were similar across the two countries. Economically, a free market system solicited multi-nationals that brought investment and high-tech industries to South Africa. This in turn led to the demand for high-skilled workers and more relevance in schooling. Then, decentralization, private schooling, and the expansion of post-secondary vocational education ensued.

However, the political, economic, social and educational perspectives between both countries varied. There were still differences between South Africa and China with regard to the roles, the governance and the perspectives of vocational education in both countries. Minimum Ministerial presence at the workers schools indicated the almost exclusive responsibility of the local leaders. In contrast the authoritarian role and power vested in the Minister of Education, Arts and Science and the Minister of Finance in South Africa reflected the different approach to VE. In South Africa, the joint jurisdiction of the 'White' section of the population and the 'Coloured' and 'Indian' sections, in Parliament led to racial division in their own respective education systems in which their vocational education systems then followed.

On the other hand, the co-opting of a small number of urban middle-class Africans in the early years of this period entailed the demands for open apprenticeships, job opportunities and union development of urban Africans. This arrangement was caused by the need for high-skilled workers and the need of skills development of all people. Thus the development of the Department of Education and Training (DET), secondary vocational education for urban Africans, as well as African Technikons (since 1981) followed. **Changes in South**

Africa after 1978: Similarity- new approach. Similarity was around extension, diversification, decentralization and privatization of vocational education in the country. South Africa experienced decentralization of vocational education in this period. This mainly referred to the institutionally-based vocational education for the 'White' section of the population in the following ways. The technical colleges and the continuation classes were transferred from full government institutions under the Department of Education, Arts and Science to the Department of Education and Culture under the House of Assembly. Thus, they were removed from higher education into secondary administrative spheres together with the vocational schools, which previously were subject to provincial governance, contributing to the differentiation in secondary education. In addition, the post-secondary vocational Technikons changed from being state-aided institutions under the Department of Education, Arts and Science to gaining semi-autonomy under the Department of Education and Culture. These changes confirmed the strengthening and expansion of post-secondary vocational education.

In the training sector, this period saw two major changes in succession. One change took place in 1981 when the racially separated training forms were replaced by a non-racial single training form under the Department of Labour. The second change occurred in 1990 with decentralization through establishing training boards, standards, certification, financing and training content under the Department of Labour empowering employers to become involved in the training of apprentices. Black trainees who were not indentured in the early years of the first phase were now indentured along with all other apprentices

Also the vocational education sphere in South Africa saw an extension. Most obviously it became accessible to the urban Africans. After the rise of the Department of Education and Training, vocational education at different levels and in different forms was established for these trainees. This period also saw the diversified and privatized forms of

vocational education that were established, including training centres and vocational schools across the board.

Although similarities between China and South Africa on the vocational education level existed   differences between the countries prevailed.

Indicators of difference: SA serving the economy and racial division. The two aspects mentioned above included the role, the governance and the perspective of vocational education in South Africa. The roles of vocational education in South Africa in this period were twofold: to serve the economy and maintain the racially based division. Although a racially inclusive training form was established as stated above as well as racially inter-access across-vocational institutions were accessible to all, the racial differences remained. In respect of the inter access, in particular, the access of other groups into "White" vocational institutions, namely a quota system, was instituted it slowly broke down in this period.

In respect of the governance within the institutionally based vocational education, vocational education institutions at all levels and in all forms for the 'White' section of the population, 'Coloured' and 'Indian' sections, became subordinated to their own Departments of Education and Culture under their own Houses respectively. In 1978 vocational educational institutions for urban Africans were opened at all levels with the establishment of the Department of Education and Training (DET) and were administered by DET. Vocational education for rural Africans fell under the 10 Departments of Education respectively located in the 10 homelands. Both the DET and the 10 Departments were under the Department of National Education (DNE) as part of general affairs. The DNE dealt with general affairs such as curriculum development, examinations, accreditation, certification, financing and co-operation for all, as well as for African education decision-making.

Apprenticeship training was part of technical college provision in which a percentage of college students were apprentices. Apprentice training was administered by the industry

training boards so that each of them located and served their industry. Training boards were accredited by the Registrar of Manpower Training under the Director General of Manpower over the National Training Board and in turn under the Minister of Manpower.

The perspective of vocational education in this period included all vocational education providers as well as the vocational training system, both public and private. The public vocational education providers included Technikons (post-secondary), technical colleges and colleges of education, agriculture, nursing, and police. The technical colleges provided both secondary and post-secondary programmes .However there was still a racial distinction among the groups. Each group was accommodated in their own House.

In the section above the scenario has been sketched to promote understanding of the ways in which the macro level change caused the changes in vocational education in South Africa in the period from 1978 to 1994. It also highlighted substantial differences between the vocational education systems of the targeted countries. In the following section, I show how the meso-level influenced the development of vocational education in this period. This was carried out by means of the scrutiny of policies and Acts to analyse the decisions of key actors and their values to enhance the understanding of their influence.

Document analysis of relevant South African Acts on VE. During this time frame (1978 1994) regulations on vocational education identified the separate and dimensional policies on the different tracks of the vocational education system. Here the analysis focuses on the track of technical colleges. The three Acts relevant to this period legalizing the changes mentioned in the previous section were *The Technical Colleges Act, No 104 0f 1981, The South African Certification Council Act, No 85 of 1986* and *The Education Affairs Act No 70 of 1988(House of Assembly)*

Definition of technical college*. In The Technical Colleges Act, No 104 0f 1981.s.1* a technical college was defined as follows: 'Technical college' means a technical college

established under section 2 or a school or state-aided school declared a technical college under that section or a technical college which came into being in pursuance of the amalgamation of two or more technical colleges under section 34.

In terms of *s.2.1* of the *TCA No 104 of 1981* The Minister could, with the concurrence of the Minister of the Budget and Works, by notice in the *Gazette* and from a date mentioned in the notice (a) establish a technical college at any place; (b) declare any school or state-aided school which provides or intends to provide post-school education a technical college.

In accordance with *The Technical Colleges Act, No 104 0f 1981s.3,* three major functions of a technical college were declared to be the following: Colleges should provide post-school education in accordance with the stipulations of the Minister. The instruction and training should be focused on pursuing a formal qualification or the development of a recreational or social skill. Persons who were past the age of compulsory school attendance or who were exempt from compulsory attendance would be ideal candidates.

Various other types of schools fell under the category that could either be merged or amalgamated to form a new technical college. *S*chools for specialized education and industrial schools were included in the list in terms of *The Education Affairs Act No 70 of 1988(House of Assembly) s.12.* According to *s.34.1*of *The Technical Colleges Act, No 104 0f 1981* two or more technical colleges could be amalgamated to form a single technical college.

Regarding the declaration of an institution as a technical college *The Education Affairs Act No 70 of 1988(House of Assembly) s.29.1. (2a)* **Appendix E** stipulated the Minister could, on such condition as he may determine, by notice in the *Gazette* declare a public school (excluding an industrial school and a reform school) to be a state-aided school. *(2b*) The Minister could establish a state-aided school at any place.

Governance of Technical Colleges in South Africa

In terms of *The Technical Colleges Act, No 104 0f 1981 s.1.a,* governance of technical colleges was assigned to "a competent authority within the provincial Government", the member of the Executive Council of that province responsible for education in the province in terms of *s.235.8,* to the member of the Executive Council of that province responsible for the budget in the province, or by default to the Minister of Finance

Two new developments were included in the new Act. These were *The Technical Colleges Act, No 104 0f 1981s.2.3, that* stipulated that a technical college shall be a juristic person. While *The Technical Colleges Act, No 104 0f 1981 s.5., s*tipulated that a technical college should comprise a college council, a principal, a board of studies, and the staff and students. Based on the fact that technical colleges now had status as a juristic person college councils were formally structured, had power and authority.

The Technical Colleges Act, No 104 0f 1981 s.6. 1, regulated college councils as follows:

"The affairs of a technical college shall be managed and controlled by the college council, which shall, subject to the provisions of this Act, exercise and perform the powers and duties of the technical college."

In terms of the *TCA No 104 of 1982 s.6.2,* a college council should l have not less than seven and not more than fifteen members as may from time to time be determined by the Minister, and shall consist of (a) the principal of the technical college; (b) one member in respect of each body or organization recognized by the Minister as a body or organization interested in such technical college, who shall represent such a body or organization on the council; (c) one or more other members.

S.6.3. of this Act stipulated: The members of a college council, excluding the member referred to in subsection 2 (a), shall be appointed by the Minister: Provided that the Minister

shall consult with a body or organization referred to subsection 2 (b) before appointing any person to represent such a body or organization on the council.

The TCA No 104 of 1981 s.6.4, stipulated: (a) A college council could with the approval of the Minister delegate any power conferred upon it by or under this Act to the principal of the technical college or authorize such principal to perform any duty assigned to a college council by or under this Act; (b) No delegation of a power under paragraph (a) shall prevent the exercise of the relevant power by the college council itself.

The TCA No 104 of 1981 s.6.5. stipulated: A college council could appoint committees of the council consisting of council members or of council members as well as other persons, and may delegate to a committee consisting solely of council members any of the council's powers: Provided that the council shall not be divested of a power so delegated by it and may amend or set aside any decision of a committee at the first meeting of the council after the decision was taken.

The Technical Colleges Act No 104 of 1981 s.7.1 also stipulated*:* The principal of a technical college shall be the chief executive officer of the technical college and shall, subject to the control and directions of the college council, be responsible for carrying out the council's decisions.

s.7.2, of the *TCA No 104 of 1981* stipulated that the principal of a technical college shall be appointed by the college council with the approval of the Minister.

According to *s.8.1* of the *TCA No 104 of 1981* the Board of Studies of a technical college should consist of the principal of the college as the chairperson, two other members from the council holding the office, and members of the teaching staff who may be designated from time to time. It further noted that the functions of such Board were designed by the college council as an oversight function to advise council as well as oversee student aspects as well as academic matters. In this regard, according to *s.16.1* of the *TCA No 104 of*

1981 the council shall on the approval of the Minister establish "a field of study or any course of instruction or training at the technical college. With regard to certification, the *South African Certification Council Act, No 85 of 1986 s.2.b,* stipulated that the college could issue certificates within a framework of a uniform standard.

   Admission to technical colleges in South Africa. The principal of a college determined the admission conditions. The college council determined tuition and boarding fees. In this period, technical colleges were defined to provide post-compulsory education that prepared pupils for a vocation or social ability. Technical colleges could admit the compulsory school leavers including handicapped children, on conditions determined by the Head of Education. The number of technical colleges was enlarged by means of encouraging non-public specialized educational institutions and public schools to become technical colleges. Technical colleges became subject to the provincial governments under the House of Assembly. A council became statutory managing and controlling the college, and its members were appointed by the Minister who was the member of the Executive Council of a province responsible for education within the province. The syllabus and teaching content were determined by the Minister. A Certification Council was established and statutory to issue certificates and ensure standards among the technical colleges.

   Accordingly, in this period, the type of vocational educational institutions, technical colleges, were decentralized from the previously national to provincial levels to address the needs of individuals in the communities. The instructions at the colleges then tended to be individualized against what was previously generalized. The actors who were involved in this sector became the national and provincial governments, the sectoral Departments, the internal professional group whose members were from the technical colleges, as well as the external interest group whose members were from the society. The following section has provided a comparison on the policy analysis between the legal changes in the two sub-periods. It has

also drawn on the role of key actors in the two periods and the extent to which they contributed to changes.

In the following section, beginning with the objectives of vocational education, changes in both values and powers of actors in the course of the two sub-periods under scrutiny have been presented for further clarification. Here the comparison between the comprehensive Act in the first period and the three Acts in the second period focused on the track of technical colleges within the vocational education system. The purpose was to seek to understand how actors changed from period to period, and how this in turn contributed towards the reflection of the actors on the values associated with the changes in the vocational education system.

Objectives of VE and Changes from 1948 to1994 in South Africa

The Vocational Education Act, No 70 of 1955 distinguished between vocational-oriented and vocational education at secondary level as pure vocational education. That term referred to technical education (provided mainly by the technical colleges) which was characterized by theoretical or practical or theoretical and practical courses; and vocational-oriented education which featured at least one third of prescribed vocational subjects and was conducted mainly by the vocational schools.

Under *The Vocational Education Act, No 70 of 1955* a technical college could be declared as, and thus deemed to be, a vocational school. Part of the previous non-vocational schools, however providing vocational education, were recognized as State-aided vocational schools; and the attendance to both the vocational schools and the State-aided vocational schools was offered to pupils only and put under the compulsory school attendance law. Schools that were granted provincial vocational education provided under *The Special Schools Act 9 of 1948* could continue teaching the subjects that were approved in their curriculum.

The Vocational Education Act, No 70 of 1955 stressed vocational schools that were vocationally-oriented, on the one hand; and on the other hand, technical colleges were connected with the apprentice training and were trade-oriented. The previous non-vocational schools were more likely to be community-oriented by nature. Thus, this implied the decline of pure vocational education. In other words, it led to the decrease of the economic and manpower values, and at the same time the lack of such social values as educational provision for the deprived groups.

The Technical Colleges Act, No 104 of 1981 defined a technical college as a post-school education provider that catered for those who were no more attendants of compulsory schools to pursue a vocation or a social or recreational skill. This tended more to be the pursuance of individual development. Under *The Technical Colleges Act, No 104 of 1981* any public school that was mostly academic by nature, and any state-aided school that mainly provided specialized education (for handicapped children) could be declared a technical college. This point indicated Government's economic and social concern. In addition, this Act brought about the amalgamation of previous technical colleges which were characterized by providing apprentice training and trade-orientation. Such a broad base resulted in the increase in the number of technical colleges. Thus, it is evident that *The Technical Colleges Act, No 104 of 1981* focused on and favoured technical colleges that implied the reduction of manpower concern and in turn the increase in educational, economic and social values.

Comparing the documents emanating from the second phase with those from the first phase, the strengthening emphasis on educational, economic and social values has been clearly noticeable. Hwever, those documents also indicated the continuity of the situation by means of the decline of the productivity values.

Governance of technical colleges was confined to the Government in the early Act (1955). Professional staff and other knowledgeable outsiders were not included in decision

making. In the three Acts in the second phase college management were granted much greater power than before and trade leaders were included in the decision making process. More details are provided in the next section.

Key Actors and Their Changes from 1948 to1994 in South Africa

These scenarios have to be understood from the aspect of the changes in the actors which were constellated in the two documents (*Vocational Education Act*s). The actor change approach focuses on the technical college sector as well.

In terms of *The Vocational Education Act, No 70 of 1955,* when a technical college was declared by the Minister of Education, Arts and Science, the Minister took over the rights, duties, powers, authority and functions of the college council of such a technical college, and all the staff of the council became the employees of the Government in its Department of Education, Arts and Science. Thus, the college council became a pure advisory body. The Minister then in consultation with the Minister of Finance determined the maintenance, management and control of a declared technical college.

Important changes occurred in the governance and status of technical colleges after 1978. Under *The Technical Colleges Act, No 104 of 1981*, the Minister in concurrence with the Minister of the Budget and Works determined the establishment of a technical college, the declaration of a school or a state-aided school as a technical college, the amalgamation of technical colleges, and the grants-in-aid for maintenance and construction of a technical college. In terms of *The Technical Colleges Act, No 104 of 1981* subject to the approval of the executive committee of the province concerned, a local authority could donate to a technical college.

The Technical Colleges Act, No 104 of 1981 changed a technical college into a juristic person; its college council became a governing body with rights, duties, powers, authority and functions; and its board of studies was responsible for academic matters. The Minister

determined the members of a college Council, and they included one member from each body recognized by the Minister as a person of interest to such technical college, who represented such a body on the Council.

In terms *of The South African Certification Council Act, No 85 of 1986*, the members of the Council included members from the departments of State, members from any society or organization with vested interests, and the executive officer.

As proof of change, there have been two aspects of change that could be recognized through the comparison of the second set of Acts with *The Vocational Education Act, No 70 of 1955.* First, the second set of Acts brought new actors on the vocational platform. In the political sphere, they were the departments of State which were involved in ensuring uniform examination and certification. They were also responsible for the provincial executive committees which were mainly involved in the Certification Council. External actors like an individual with an interest in the college, could in concurrence with the local authorities be involved with the donation process to the technical colleges. The societal interest groups were given places mainly in the Certification Council and the college councils. Second, compared to the original actors appointed by the first Act, *The Vocational Education Act, No 70 of 1955*, the second set of Acts weakened the role of the State by means of most markedly returning the rights, duties, powers and functions to the college councils. In turn the autonomy of the technical colleges was strengthened because each college became a juristic person. Therefore, these changes resulted in the weaker role of the State; the extensive inclusion of the departments of State and the provincial executive committees and local authorities; the stronger status and role of the technical colleges and the rise of the role of social interest groups.

Impact of Actor Changes on Vocational Education: Decentralization in South Africa

In terms of the theories outlined in Chapter 2/ 3, Kogan (1975) claimed the values implicated in policies were as follows: First, the institutional values tended to conflict with such social values as educational provision for the deprived groups, high social mobility and socialization with communities. Second, the educational values represented by the professional groups were more likely to prefer personal autonomy, high social mobility and economic viability to educating the working population to be adapted to the changing world of work while in compliance with the institutional values.

In contrast, the sectoral parties tended to persist in the values of educational priority for those in greatest need. Similarly, the communities or social interest groups claimed their social and economic values and education to being more relevant and specialized to the needs of the communities.

Also according to the theories outlined in Chapter 2, (see Archer 1979; 1985; 1989), the State was almost exclusively strong in passing documents for the centralized education system, while the societal actors were weak by accepting the measures in the documents. Secondly, for the decentralized education system, the political actors extensively included the sectoral parties and the local authority bodies.

In view of such evidence *The Vocational Education Act No 70 of 1955,* created the centralization of technical colleges. Moreover, there were no provisions in this Act for the departments of State (or sectoral parties), the provincial executive committees and the local authorities. The roles of the professional groups were also weakened. Thus, this Act placed the role of the State at the pinnacle of vocational education policies. This clarified the reason why *The Vocational Education Act No 70 of 1955* implied the decline of the economic and manpower values and the lack of social values in respect of educational provision for the deprived groups.

In the new approach to education internal actors gained active involvement by means of refusing central policies or modifying policies at the local level, and with the external actors, pursued more specialized education to be more relevant to the communities. Meanwhile, the external actors were given more autonomy to negotiate with various educational providers for their training and other educational services, while the whole set of colleges, courses and qualifications were made subject to their autonomy. Third, regardless of politicization or de-politicization of these types of actors, each made attempts to exert influence in accordance with its values to reach a new balance that resulted in a new policy and in turn establish educational change (discontinuity) or reinforcing (continuity).

The second set of Acts, *The Technical Colleges Act No 104 of 1981*; The *South African Certification Council Act, No 85 of 1986*; *The Education Affairs Act No 70 of 1988* (House of Assembly) brought about decentralization of technical colleges. By these Acts, the role of the State was weakened. The role of technical colleges was strengthened so that the educational values implied the technical colleges were to educate people for both vocation and livelihood. These Acts also gave rise to the roles of the departments of State (sectoral parties), the provincial executive committees and the local authorities, as well as the social interest groups.

The departments of State still had a role in the certification area rather than strong involvement in the educational activities of the technical colleges themselves. Thus they had voice in the economic values but not strong enough to determine productivity values. The provincial executive committees had positions in the certification process as well as in concurrence with the local authorities, in the donation process to the technical colleges. So they raised the economic and social values for relevance to the communities. The social interest groups were given positions on the Certification Council and the college councils, so that they had opportunity to claim the social and economic values on more specialized

education to be more relevant to the communities. These may have contributed to the increase in educational, economic and social values and the decrease of productivity values.

Socio-political-economic-education Factors in China between 1978 and 1993

As outlined above, there has been some similarity between the socio-political-economic systems in both countries during this period with far-reaching effects. From 1978 to 1993 China introduced and completed a transition process towards a socialist market economy and South Africa was moving towards an open market system. Both these momentous events in the history of these countries gave a thrust towards liberating their markets. But the route each country followed emphasized once more the differences between country contexts and diversity in the educational field.

Political-economic-social educational perspectives: Socialist market. These perspectives differed greatly from those aspects in South Africa that highlighted the difference between the two countries. With a shift from a single centralized economy to the socialist market economies, the marketization of labour force created the need for skills and therefore the need for vocational education. The decline of vocational education over the previous period made education at secondary level almost a single track of academic schooling. This situation caused the recovery and development of a system of vocational education in the period from 1978 to 1985, and the building of a bridge across a vocational education system and the employment market from 1985 to 1993.

Although there was gradual upgrading of industry during the years 1985 to 1993 in China, the major sector of employment remained in the primary and secondary (mainly textile) industries, and the export remained tied to resource-intensive products. It meant that the larger part of China's economy was engaged in a low skilled labour intensive strategy fully reviewed in Chapter 2. In addition, the State played a significant role in supplying vocational education in the form of a sharp divide between general and vocational tracks.

The rural reform followed the large-scaled agricultural modernization and migration from the rural areas which took place near the time when the market economy legally started in 1993. As a result, the township governments emerged. This rendered the administration of rural vocational education under the township and county governments a necessity. This migration from the rural areas was one of the reasons for the major reform of rural vocational education starting at the beginning of the 1990s. During this period the major vocational education tasks were instructing agricultural knowledge and skills as well as training migrants.

Impact of Actor Changes in Vocational Education systems: extension, differentiation, privatization and decentralization in China. From 1978 to1985 the recovery of a vocational education system happened mainly in the urban areas but was notable in urban and rural areas. As the first step the secondary specialized schools and skilled workers schools recovered from 1978 to 1980. In the first half of the next decade vocational schools that were vocationally oriented were working at recovering their previous status, aiming at labour force reservation. In the process these schools developed into urban and rural vocational schools. The urban institutions saw the diversified forms of vocational schools. Comprehensive provision of the vocational content formed an integral part of the syllabuses and vocational classes in the general senior secondary schools and training centres. These forms were both public and private. This meant the start of private vocational education in new China.

In 1993 the deeper decentralization touched all urban and rural areas. All vocational educational institutions fell under the provincial and prefectural levels for the urban sub-system while the rural sub-system fell under the county and township levels. At the same time the developed areas and the key point vocational educational institutions were emerging as priority areas.

Objectives of VE: The Role of Vocational Education Providers in China

The role of vocational education providers, the governance of VE, the perspective of VE and the provision of VE outlined the differences between these two countries. The view of vocational education in China in this period was directed at serving the demands of a market economy. This focus marked the big difference between China and South Africa, where providers of VE were still fighting for equal treatment of all groups involved with vocational education. As outlined above, in the urban areas in China, a diversified perspective of vocational education at secondary level was set out by the mid-1980s. In the subsequent period a bridge was developed across the vocational education sector and the employment sphere. The aim of spanning this gap between the two sections was to address the economic strategies of the large section of the population that was still involved in the primary and secondary industries.

Along with the rural reform in the early 1990s, the large-scaled development of rural vocational education started in 1991 at junior and senior secondary levels to meet the need of improving skills for peasants and to cater for the migrants. There was also dual governance over part of the vocational education system. In respect of the provision of vocational education for managerial personnel, the minority was subject to the central sectoral departments concerned in combination with the Ministry of Education. The majority were under the provincial sectoral departments concerned in combination with the departments of education. Workers who were to receive vocational education were also split into two groups. The majority were subordinated to the provincial sectoral departments concerned under the Department of Labour. The smaller group was under the central sectoral Departments concerned under the Department of Labour.

The diversified forms of vocational schools, which catered for labour force reservation in the urban areas and for peasants and migrants in the rural areas, were run by

their founders who could be individuals, institutions, or all sectors of society at provincial and lower levels.

In 1993 all these types of vocational educational governance legally fell under the provincial and prefectural governments for the urban vocational education, and under the county and township governments for the rural vocational education.

Gradually, a diversified perspective of vocational education system which included the urban and rural sub-systems was created by 1993. The secondary level included the secondary specialized schools, skilled workers schools, vocational schools, vocational provision in general schools, and training centres. The first two were provided only for the urban areas. The provision of the others was for both the urban and rural areas. Vocational education in the rural areas was at both junior and senior levels.

Towards the end of this period in 1993, there was recuperation of secondary specialized schools for adults. In addition, this period also saw the slow rise of post-secondary vocational education. Yet it was not at the core of the development.

In the period between 1978 and 1993 continued emphasis remained on practical training in the skilled workers schools, with a 50% share of the whole programme, leading to a Technical Worker level 4 (the last second level). There was a legal connection across the vocational education system and employment in which rules of employment admission and vocational education undertakings under a dual certificate system were set up. The employers issued academic and occupational qualification certificates.

The section above has been presented to clarify the understanding of the way the change at macro level contributed to the changes in vocational education in China during the period from 1978 to 1993. In the following section the ways in which the meso level change influenced the development of vocational education during the same period has been attempted. Through probing and analysing the policies in this period in terms of the

definition, governance of and access to the skilled workers schools, I sought to find out how the actors were involved, how the values were projected and what practice was approved in these schools.

Document analysis: relevant policies on VE in skilled workers schools in China.

The policy relevant to this period has been *Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986(Draft).* During this period, it was customary that the different tracks of the vocational education system were regulated by their respective policies. However the providers also had access to the comprehensive policies with the overall guidelines. The policy on the track of skilled workers schools was the only policy that focused on skilled workers schools.

The policy, *Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986 s.1.3 (Draft)* defined the skilled workers schools as secondary vocational technical schools. According to *The Operational Regulations on Skilled Workers Schools, No 22 of 1986 s.1.2.3 (Draft), the school* was equivalent to the senior secondary school level to cultivate intermediate skilled workers and to conduct the instruction and training of academic and specialized theoretical knowledge and practices in terms of *The Operational Regulations on Skilled Workers Schools, No 22 of 1986 s.1.4. (Draft)*

The Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986 s.2.10.(Draft) stated that the development of a specialty should focus on the specialty with the characteristics of complex operative skills and high professional knowledge. The categorization of specialty should not be too limited in order to develop learners to be more adapted to their working life. An appointment system was proposed to be carried out progressively for teachers at skilled workers schools, in accordance with T*he Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 s.6.30. (Draft)*

The sectoral central (competent) Departments made and disseminated the syllabuses, while the skilled workers schools made their own plans on teaching matters within the schools in accordance with the syllabuses under the prescript of *The Operational Regulations on Skilled Teacher Posts at Workers Schools, No 22 of 1986 s. 3.15.(Draft)*

The Operational Governance of Skilled Workers Schools in China

For the governance of these schools this policy provided for two groups of skilled workers schools. For the national level group, the Department of Labour and Personnel was responsible for general affairs under the direction of the Education Committee in terms of *The Operational Regulations on Teacher Posts at Skilled Workers' Schools No 22 of 1986 s.8.(Draft).* For the provincial group the provincial departments of labour and personnel were responsible for general affairs under the overall coordination of the provincial education committees. The establishment, re-structuring and disestablishment of a skilled workers school at national level were to be approved by the central competent Department concerned. This process was completed in concurrence with the concerned provincial department of labour and personnel and the concerned provincial education committee. Then only was the school to be registered in *The Department of Labour and Personnel* in terms of *The Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 s.3.12.(Draft).* The establishment, re-structuring and disestablishment of a skilled workers school at provincial level should be reported to and approved by The Provincial Government concerned. It was subject to the concurrence between the concerned provincial Department of Labour and Personnel and the concerned provincial education committee. Then it should be registered in The Department of Labour and Personnel in terms of *The Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986 s. 2.12.(Draft).*

For the founding and running of the skilled workers schools, this policy *The Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986(Draft)*

created multiple forms. A skilled workers school could be founded and run by any of the sectoral central Departments and the sectoral provincial departments of Labour and Personnel in terms of *s.2.9* of *The Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986(Draft)* . Any of the Provincial Departments of Labour and Personnel, any relevant factories, mines, enterprises and institutions, or the coordination between any of the Departments and provincial departments and any of the institutions, or any of the organizations of collective ownership also had the right to register a school.

The Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 s.8 .3.8, regulated the administration within a Skilled Workers School as follows.

A skilled workers school should implement the system of principal responsibility. The principal was the chief executive officer. A school council should be established for a skilled workers school with the principal, vice-principal, officers of the departments of such a school, and other persons related to the school. The functions of a school council were to discuss the plan on the affairs within such a school. A system of teaching and an administrative staff union should be introduced to participate in the administration within such a school.

The enrolment planning process was stated in the policy *The Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 s.1.6*, as follows: The enrolment plan for skilled workers schools was to be designed by concurrence across the sectoral central (competent) Departments. The Provincial Departments of Labour and Personnel and Finance and the provincial education committees should also be involved in the enrolment plan. After being processed by the Department of Labour and Personnel, it should be reported to the Planning Committee. The enrolment plan should be integrated in the plan on the national economic and social development plan. Then it could be registered in the Education Committee.

Grants-in-aid in combination with the bursary system were paid out to those students who were enrolled in accordance with the national plan in terms of the policy T*he Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986   s. 27.* In terms of job replacements for graduates, a tripartite system was set up in this policy. Under the national plan, the schools recommended the graduates on the one hand, and on the other hand, the employers recruited the graduates according to their merits in terms of *The Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 s.7.*

Admission to skilled workers schools Operational Regulations on Teacher Postsat Skilled Workers Schools No 22 of 1986 s.1.5.;s.3, stipulated the admission, as: *A Skilled Workers School* enrols junior secondary school leavers for 3-year programmes, and senior secondary school leavers for 1 or 2 years programmes.

Beyond the mainstream of the cultivation of the students enrolled on plan, a skilled workers school may conduct training for in-service workers, apprentices, and the non-employed. In evidence of the above, in this period, skilled workers schools were defined as the type of vocational education institutions to provide comprehensive skills for people's working life.

These schools admitted junior and senior secondary school leavers, in-service workers, apprentices, and the non-employed with different programmes. These schools included two-level groups. In general affairs, the national level skilled workers schools were subject to the Department of Labour and Personnel under the Education Committee. The provincial level schools subordinated to the provincial departments of labour and personnel under the education committees also had to be recognized under the Education Committee. Syllabuses had to be determined by the sectoral Departments, and under the syllabuses these schools prepared their own teaching materials. A skilled workers school had a council managing and controlling the school, and its members were from the school. Enrolment plans

were drawn by the sectoral Departments in combination with the provincial departments of labour and personnel, departments of finance and education committees. Then these plans were reported to the Planning Committee, and finally registered in the Education Committee.

Accordingly, the skilled workers schools were decentralized. The instruction became broadened and individualized against previously specifically-focused specialized copies. The group of actors became more inclusive. In the group were the political actors of the Education Committee and provincial education committees. The Department of Labour and Personnel and provincial departments of labour and personnel, the sectoral Departments and provincial sectoral departments were also represented. Finally the Planning Committee had a role to play. The internal professional group consisted of members of the school. The external interest group included the State enterprises and institutions, and organizations of collective ownership.

The subsequent section committed itself to a comparison between the policies stipulated in the two sub-sections between 1949 to 1978 and 1978 to 1993 in China.

The comparison between the two policies in the two sub-periods only focused on the track of Skilled Workers Schools within the vocational education system. The reason for doing it in this way has been to use it as an illustrative sample to understand how actors changed from period to period leading to the change in the vocational education system.

Objectives of VE and Their Changes from 1949 to1993: Decentralization in China

The first Provisional Ordinance of Skilled Workers Schools policy of 1954(Draft) focused on the strong economic and manpower values that specifically targeted the respective economic sectors. This can mainly be deduced from the following aspects. As defined in this policy, the *Skilled Workers Schools* were the vocational education providers. They provided pure vocational education with a 50-60% share of practical training in the programmes. They catered for not lower than high primary school leavers or the equivalent, and aimed to foster

skilled workers at levels 4 and 5 for the respective sectors. Vertically, these schools included two groups. One group was subordinate to the central sectoral Departments. The other group was under the local state-owned sectoral Departments. However, the major chunk of power was still in the hands of the central sectoral Departments. Horizontally, these schools were categorized in terms of the sectors. Each of the sectoral central Departments should determine teachers at its own skilled workers schools. Such schools should cultivate students only on enrolment plans made by the sectoral central Departments. The graduates were assigned jobs mainly in the sectors where the schools belonged. The skilled workers schools were the property of the sectoral central Departments.

In the second policy, t*he Operational Regulations on Teacher Posts at Skilled Workers Schools No 22 of 1986 (Draft),* the economic, social and educational values were recognized. Comparatively, in this policy, the education provided by the skilled workers schools was defined as pure vocational education. However they were without specifically prescribed aspects of academic and specialized theoretical knowledge and practical training at senior secondary level. These schools catered mainly for junior and senior secondary school leavers. Their aim was to foster intermediate skilled workers. The cultivation of learners required teachers to equip learners with broader skills and knowledge to be more adapted to the future working life. Vertically, these schools were divided into two groups. One group was under the dual supervision of the Department of Labour and Personnel and the Education Committee. The other group was under the provincial Departments of Labour and Personnel in combination with the provincial education committees. Horizontally, these schools were classified in terms of the sectors. Moreover, the source of teachers at skilled workers schools was legally open to the society. Beyond the accommodation of students enrolled on enrolment plans, such schools were giving place for participants from the communities. In job placement of graduates, the recommendation of schools and the

recruitment on merits by employers involved under the national plan were considered. All state-owned and collectively owned organizations in society could individually or jointly found and run such schools.

In addition to the above discontinuity, there was still continuity that operated between the two policies. They all centred on the premise that the instruction and training provided by the skilled workers schools should focus on the economic development. And in the two policies, such schools were all classified in terms of the sectors, although not clearly articulated in the second policy.

Key Actors and Their Changes in Vocational Education from 1949 to 1993 in China

In terms of the first policy, *the First Provisional Ordinance of Skilled Workers Schools policy of 1954(Draft),* actors included the Department of Labour, the sectoral Departments, the local departments of Labour, and the factories, mines and companies. According to Archer's view on actual centralization (Archer, 1979; 1985; 1989), outlined in Chapter 2, and as applied in the above section, the first policy did not create actual centralization of skilled workers schools. The composition of the groups functioning as major role players was primarily limited to the sector. The Education Committee, the Planning Committee and Provincial Departments who all presented a broader base were absent.

There was no involvement by the Ministry of Education, only the Department of Labour was responsible for professional guidance. This meant that there was a very weak role of the State in such schools. In this policy, the local authorities featured very weakly. Although the factories, mines and companies were located as communities, they were directly subordinated to the sectoral Departments rather than exposed to the society. The skilled workers schools were under the direction of the factories, mines and companies. The schools had no school councils, and thus lacked autonomy. The majority of rights, duties and powers over such schools were held in the hands of the sectoral Departments (sectoral parties). Thus,

the values of the sectoral parties took the core position according to the statement of values in Kogan (1975), outlined in Chapters 2 and 3, and as indicated in the above section. This point would probably indicate why the first policy implied only strong economic and manpower values.

According to the second policy, *The Operational Regulations on Teacher Posts at Skilled Workers Schools, No 22 of 1986(Draft)*, **Appendix G** the political actors included the Department of Labour and Personnel, the Education Committee and the Planning Committee at macro level, the sectoral Departments, as well as the local authority bodies of the provincial Departments of Labour and Personnel, the provincial education committees and the provincial governments. A skilled workers school gained autonomy by means of the composition of a school council, principal responsibility, and a teaching and administrative staff union. Any state-owned and collective organization could found and run such a school. It meant that there were places in such schools open to the social interest organizations. In the interactions between such schools and the social interest organizations they were exposed to the society at certain levels. In terms of Archer's outline in Chapter 2, and as applied in the above section, the second policy shaped decentralization of skilled workers schools, see Archer, (1979; 1985; 1989). According to the claims of values Kogan (1975), outlined in Chapters 2 and 3, and as indicated in the above section, there was greater involvement in the role of the State, and it gave rise to the tendency to recognize the values of individual autonomy and professional expertise as well as regulating the perspective of key actors. There also was the strengthening of the role of the local governments as well as the other local authorities that preferred educational provision to be more relevant to the social and economic construction in their communities. The fact that the role of the skilled workers schools became stronger modified the economic values as the development of an adaptive working population. The social interest organizations also raised the effect of the idea that

educational provision should be relevant to communities. However, although the role of the sectoral central Departments moved from the control at macro level over such schools in terms of the first policy into mainly the concurrence with the provincial authorities stated in the second policy, these Departments still held the rights to approve the establishment and disestablishment of a school at national level, determine syllabuses for schools at all levels, and be involved in the process of enrolment planning. Thus, they contributed to the continuity of the economic orientation and the sectoral-classification of such schools. However, their strong economic and manpower values brought along by the first policy were modified by educational, economic and social values.

Synthesis of the Comparison

In terms of the comparative analysis above across the developments of vocational education systems in South Africa and China during the period that formed the focus of this study between (1948/9 until 1993/4), the similarities and differences have become evident. The similarities and differences have been synthesized in the sections below, in terms of purposes of vocational education reforms, structural aspects and the role of the State.

Different purposes of South Africa's and China's vocational education reforms. In the first period vocational education provision presented a racially separated perspective to serve the apartheid system in South Africa and each racial group's vocational education provision was centralized. Within this system the provision of vocational education continued to be racially separated and centralized up to 1966 and, the vocational education provision for the 'White' section of the population was in the domain. In 1967 decentralization started happening in the vocational education system. Vocational schools and vocational provision of provincial high schools all fell under the control of the provinces. This arrangement was aimed at enabling pupils to choose among academic, pure vocational and vocationally-oriented tracks based on their own aspirations.

In the second period between 1978 and 1994 the tri-cameral parliament, a free market, and the high skills in industrial strategy that demanded more relevant education led to change. The racially separated education systems were now managed by the different groups as their own affairs. Vocational education became a perspective of racially separated vocational education systems and decentralized. Across these systems the quota system took effect but broke down slowly.

In the first period in China the education system was centralized and urban industrialization-oriented to carry out mass education. The central aim was to meet the needs of a single centrally planned economy which was based on the Soviet model. Within this policy a vocational education system was formed to serve the social and economic construction and to foster cadres and workers separately in the urban areas between 1949 and 1958. After 1958, the decentralization of the education system ensued in order to serve the decentralization of the economy. In this period vocational education followed the decentralization process duringwhich the rural vocational education for peasants was introduced.

In the second period from 1978 to 1993, the process of transforming the single centrally planned economy into a socialist market economy created the marketization of the labour force and adopted the economic strategy of progressive development moving from low-skilled jobs to high-tech industries. This development generated growing structural employment pressure. These factors created the increasing number of demands for a variety of high skills. However, the existing education system featured an almost single general education track. Therefore, vocational education implemented centralization for the purpose of recovery and development. The rise of private vocational education provision, then the bridging across vocational education systems and the employment market, and finally decentralization was the final outcome this process.

Different Generic Structural Realizations of VE Systems in South Africa and China

As mentioned above, in the first period between 1948 and 1978 in South Africa, vocational education functioned in a system of racially separated vocational education provision under the central Departments of Bantu Development, Coloured Affairs and Indian Affairs respectively for "Africans", "Coloureds" and "Indians", and the Department of Education and the provincial administration for the 'White' section of the population. Vocational education provision was principally for the benefit of the 'White' section of the population. VE was limited to urban youth in technical colleges. Rural academic pupils or mentally defectives went to vocational schools while and pupils with normal age related and intellectual needs were in provincial high schools. In the period between 1948 and 1966, technical colleges changed from state-aided to fully government managed institutions, and vocational schools changed from being state-financed to offering free tuition, all under the Department of Education.

Vocational provision at provincial high schools changed from being under provincial control to being under the advisory functions of the National Advisory Education Council. After 1967 vocational schools and the vocational provision at provincial high schools fell under provincial control. During this period, the entrants to vocational programmes were mainly primary, junior and senior secondary school graduates and drop-outs, and apprentices. When post-secondary vocational education was legally instituted in 1967 certain articulation was seen. In the mid-1970s, vocational education for the other race groups started expanding. Also, the mid-1970s saw the start of increasing private involvement in vocational education.

The practice sector mainly referred to apprentice training. The apprentice training was administered by the Department of Labour that accommodated mostly "White" apprentices. The training was implemented in the form of theoretical courses in the technical colleges and

practice in the enterprises. Successful candidates were awarded Certificates to replace the apprenticeships with artisans or further training with technicians. Until the mid-1970s, "Africans" working at the "White" enterprises in the border areas were legally provided practical training, however without becoming indentured apprentices.

In the second period between 1978 and 1994, vocational education was divided into racially separated vocational education systems. The vocational education systems of the 'White' section of the population, as well as 'Coloured' and 'Indian' sections were subordinated to their own departments of education and culture under their own Houses. For urban Africans vocational education institutions at all levels were administered by the Department of Education and Training (DET). Vocational education for rural Africans fell under the 10 departments of education respectively located in the 10 homelands. Both urban and rural apprentices were under the DET. The 10 departments were under the Department of National Education (DNE), which meant that section was part of general affairs. Technical colleges, vocational schools, vocational provision at the provincial high schools as well as the post-secondary vocational institutions all fell under their Department of Education and Culture for the 'White' section of the population. A quota system was introduced to provide other race groups certain access to the "White" vocational institutions which slowly broke down late in this period. Apprentice training remained under the Department of Labour until the early 1980s, when apprentice training for all race groups was brought under a single legal system.

In the first sub-period between 1949 and 1978, a new vocational education system was established In China. The system included separate secondary specialized schools for cadres, skilled workers schools for workers, and the vocational schools for labour force reservation in the urban areas. Agricultural schools were established in the rural areas for peasants. From 1949 to 1958, the secondary specialized schools were administered by the

Ministry of Higher Education in combination with the central sectoral Departments concerned. The skilled workers schools were subject to the Department of Labour in combination with the central sectoral Departments concerned. From 1958 to 1966 the majority of the secondary specialized schools' tracks were administered by the provincial sectoral departments concerned under the Ministry of Education, while the minority remained as before. All the skilled workers schools were administered by the factories and mines, enterprises and farms of the central sectoral Departments under the Ministry of Education. The tracks of vocational schools and agricultural schools emerged in 1958 and were governed by the founders of their states, the factories and mines, enterprises and farms and the central sectoral Departments and the military. During this period, the vocational education system catered for primary, junior and senior secondary school leavers, and remained at the secondary level. No articulation was available. After 1958, practical training was stressed more through the direct integration of students in productive labour.

Practical training was integrated as part of the whole programme in each of the secondary specialized schools, skilled workers schools, and vocational and agricultural schools for all their students. Training took place in their sectoral enterprises. However, only the graduates from the skilled workers schools would be awarded with Certificates for skilled workers. Between1966 and1978, vocational education declined

In the second period between 1978 and 1993, vocational education recovered, expanded and extended into a diversified system including an urban and a rural vocational education sub-system. .The rural vocational education sub-system was mainly involved in training at junior and senior secondary levels and fell under the country and township governments. The urban vocational education sub-system included the senior secondary level of the secondary specialized schools, skilled workers schools and vocational schools. It also included the track of vocational classes and comprehensive provision with vocational courses

in the general senior secondary schools, and the track of training centres. Finally the education system also made provision for the emerging post-secondary level. By the end of the 2nd cycle, the administrations of the secondary specialized schools and skilled workers schools were gradually decentralized. Some were under the provincial governments and others under the prefectural governments. The last three tracks at the secondary level were introduced in the mid-1980s and were run by their founders comprising individuals, institutions, or all relevant sectors of society. The whole vocational education system catered for primary, junior and senior secondary school leavers. Limited articulation was provided. By the end of this cycle, the separate cultivation of cadres, workers and peasants slowly started blurring. The practical training in this period was given less attention than before.

Different Roles of the State in both South Africa and China

In terms of the relevant document analysis above, in the period between 1948 and 1978 the State controlled technical colleges at secondary level, a track of the vocational education provision for the 'White' section of the population in South Africa. The Minister controlled all the rights, powers and functions of the technical colleges at secondary level so that they became fully government controlled institutions. Except for the Minister of Education, Arts and Science's consultation with the Minister of Finance, there was no provision in the first Act for involvement of the sectoral parties, local authority bodies, or social interest groups.

In the period from 1978 to 1994, the Minister delegated the rights, powers and functions to the college councils and became the provider of grants-in-aid. In turn, the colleges gained the status of a juristic person. Under the relevant Acts in this period, the sectoral parties became involved in the certification process. The local authority bodies were involved in the certification process and donations to the colleges were approved under certain conditions. The social interest groups gained positions in the certification process and

on college councils .Thus from the beginning of the nineteen eighties these changes showed trends in terms of the reduction of the role of the State. The roles of the sectoral parties, the local authorities and the social interest groups became more prominent in the management process of the technical colleges in South Africa.

In China the State played a weak role in the period between 1949 and 1978. The Department of Labour was responsible for professional guidance of the Skilled Workers Schools also in terms of the relevant policies analysis. In reality the Ministry of Education had no role. The major part of the rights, powers and functions of such schools were in the hands of the sectoral parties, while the local authority bodies played a weak role. The factories, mines and enterprises could be considered as the communities however power and rights still belonged to the sectoral parties, and they were placed in charge of the Skilled Workers Schools.

In the period from 1978 to 1993, under the changed policy, the role of the State grew to a strong position in managing the Skilled Workers Schools. The Department of Labour and Personnel was responsible for the general affairs under the direction of the Education Committee. The Planning Committee was also involved in the enrolment planning process. The role of the sectoral parties was still prominent in concurrence with the local authority bodies. They were still reporting to the State with regard to a large part of the rights, powers and functions of these schools. The role of these schools increased by means of the establishment of the school councils as well as the teaching and administrative staff unions. Meanwhile, the role of the social interest groups grew through founding and running such schools.

During the two periods the trends indicating a growing role of the State, a weakening role of the sectoral parties, an increasing role of the local authorities, the increasing role of the schools, and the emergence of the role of the social interest groups were evident in China.

Conclusion

The comparison above revealed that the time lines of the critical junctures and the educational reforms following the critical junctures were similar to a certain extent across South Africa and China. However the differences in the management of vocational education in the two countries seemed to be dominant. The different conjunction events at the critical junctures led to the differences in the outcomes of their vocational education systems.

In SA the roles of major actors in vocational education governance gradually changed to broaden the scope of VET which resulted in shifting the approach to vocational education and training for mainly two reasons. The country needed a constantly growing number of high-skill trained workers. Over the past years towards the end of the 20th century emphasis shifted from being heavy-industry import deliverers of trade to being high- skill technological experts to be able to play a profitable role in the world. The second reason for change at meso and micro level has been that people who acknowledged universal human values recognized the needs of those most in need. International and local business partners refused to trade with SA or threatened to end all financial commercial business transactions or intellectual or cultural exchanges unless all traces of racism and racial prejudice were removed from all layers of the community.

In China the motivation for actor change was the same as the first reason for change in South Africa. China realized they had to open the market to trade internationally. They needed highly trained workers and technicians light industry and technology in order to meet the complex needs of the demanding international market. And they needed to feed the hungry masses in their country.

Now the claims of Maurer (2012) that the development of vocational education systems is the result of structural elaboration of political-economic outcomes and that "a

historical institutionalist perspective pinpoints mechanisms that may have played a crucial

role in the development of education systems" have merit.

References

International

General references

Amenta, E. (2010). Making the Most of a Historical Case Study: Configuration, Sequence, Casing, and the US Old-age Pension Movement In: D. Byrne,. & C.C. Ragin, (Eds.). *The SAGE Handbook of Case-Based Methods*, SAGE Publications

Archer, M. S. (1989). Cross-National Research and the Analysis of Educational Systems In: M.L Kohn, (Ed.). *Cross-National Research in Sociology* [American Sociological Association Presidential Series], London: SAGE Publications

Archer, M. S. (1985). Educational Politics: a model for their analysis In: I. McNay, & J. Ozga, (Eds.). *Policy-making in Education: The Breakdown of Consensus*. Britain: Pergamon Press

Archer, M. S. (1979). *Social Origins of Educational Systems*, London and Beverly Hills: SAGE Publications Ltd

Ashton, D. N. & Green, F. (1996). *Education, Training and the Global Economy*, London: Fulton

Ashton, D., Sung, J. & Turbin, J. (2000). Towards a framework for the comparative analysis of national systems of skill formation, *International Journal of Training and Development*, Vol.4, No.1, pp 8-25

Becker, G. S. (1975). *Human Capital*, New York: NBER

Becker, G. S. (1964). Human Capital (Chicago: University of Chicago Press) –"Nobel Lecture: The Economic Way of Looking at Behaviour", In: R. Swedberg, (Ed.) (1996), *Economic Sociology*, Cheltenham: Edward Elgar

Benavot, A. (1983). The Rise and Decline of Vocational Education, *Sociology of Education*, Vol.56, No.2

Bird, A. (2001). *National Monograph on Technical and Vocational Training in South Africa*, Paris: UNESCO International Institute for Educational Planning

Bowles, S. (1977). Unequal Education and the Reproduction of the Social Division of Labour In: J. Karabel, & A.H. Halsey. P*ower and Ideology in Education*, New York: Oxford University Press

Brewer, J. (2003). Historical methods In: R.L .Miller & J.D. Brewer, (Eds.) (2003). *The A-Z of Social Research: A Dictionary of Key Social Science Research Concepts*. SAGE Publications Ltd

Brown, P. (2001). Skill formation in the Twenty-First Century In: P. Brown, A. Green, & H. Lauder, *High Skills: Globalization, Competitiveness, and Skill Formation*. New York: Oxford University Press

Brown, P., Green, A. & Lauder, H.(2001). *High Skills: Globalization, Competitiveness, and Skill Formation*. Oxford: Oxford University Press

Burawoy, M. (1998).The extended case method. *Sociological Theory*, 16 (1), 4-33

Cedefop (2008). *Terminology of European Education and Training Policy: A Selection of 100 Key Terms*. Luxembourg: Publications Office

Cedefop (2004). Towards a history of vocational education and training (VET) in Europe in a comparative perspective. [Proceedings of the first international conference October 2002, Florence, Volume 1]. Luxembourg: Office for Official Publications of the European Communities

Cedefop, Paun, G., Descy, P. & Jasper, van Lao (Eds.) (2011). *The benefits of vocational education and training* [Research paper No.10]. Luxembourg: Publications Office of the European Union

Cohen, S. (Spring 1968). The Industrial Education Movement, 1906-17. *American Quarterly*, Vol.20. No.1. 95-110

Cole, R. (1964). *Comprehensive schools in action*, London: OLDBOURNE BOOK CO. LTD.

Collins, H. (2003). Discrimination, Equality and Social Inclusion, *The Modern Law Review* [0026-7961], Vol.66, Issue 1. 16-43

Collins, R. (1977). Functional and Conflict Theories of Educational Stratification In:J. Karabel, & A.H.Halsey, (1977), *Power and Ideology in Education*, New York: Oxford University Press

De Moura. Castro, C. & Alfthan, T. (1992). *Five Training Models* [Occasional Paper No.9], Geneva: Training Policies Branch of ILO

Denscombe, M.(2002). *Ground Rules for Good Research: A 10 Point Guide for Social Researchers*. Buckingham: Open University Press

Finegold, D. (1991). Education Training and Economic Performance in Comparative Perspective, *Oxford Studies in Comparative Education*, Vol.1. 57-68

Finegold,D. and Soskice, D. (1988). The Failure of Training in Britain: Analysis and Prescription *Oxford Review of Economic Policy* Vol.4. No.3 21-53

Foster, P. J. (1977). The Vocational School Fallacy in Development Planning In: J.Karabel, & A.H. Halsey, (Eds.) *Power and Ideology in Education*, New York: Oxford University Press

Gillham, B. (2000). *Case Study Research Methods* London: Continuum

Gomm, R.,, Hammersley, M. & Foster, P. (Eds.) (2000).*Case study method*, London: Sage

Gordon, L. (Ed.) (1980). *Survey of Race Relations in South Africa 1979*. Johannesburg: South African Institute of Race Relations

Gordon, P. (1980). *Selection for Secondary Education* Britain: THE WOBURN Press

Gotham, K. F. (2005). State In: G. Ritzer, (Ed.). *Encyclopaedia of Social Theory* Volume II SAGE Publications

Green, A. (1999). Education and globalization in Europe and East Asia: convergent and divergent trends. *Journal of Education Policy* Vol.14 No.1 pp. 55-71

Green, A. (1990). *Education and State Formation: The Rise of Education Systems in England, France and the USA*. London: The Macmillan Press Ltd

Grubb, W. N. (1985). The Convergence of Educational System and the Role of Vocationalism *Comparative Education Review*.Vol.29 No.4. pp. 526-548

Hall, P. A. & Taylor, R. C. R. (December 1996). Political Science and the Three New Institutionalisms. *Political Studies*. 44. pp.36-957

Hammersley, M. (2004). Case Study. In: M.S. Lewis-Beck, A. Bryman, & T.F. Liao, (Eds.) *The SAGE Encyclopaedia of Social Science Research Methods* [Volume 1]. London: SAGE Publications

Harman, G. (1984). Conceptual and theoretical issues In: J.R. Hough, (Ed.). *Educational Policy: An international survey*. Britain: Croom Helm Ltd.

Hellmann, E., Abrahams, L. & Mansergh, N. (Eds.) (1949). *Handbook on Race Relations in South Africa*, Oxford University Press

Hyslop-Margison, E. J. (2002). An Assessment of the Historical Arguments In Vocational Education Reform *Journal of Career and Technical Education* Volume 17. No.1

Kogan, M. (1975). *Educational Policy-Making: A Study of Interest Groups and Parliament*. London: George Allen & Unwin Ltd.

Llobera, J. (1998). Historical and comparative research In: C. Seale, (Ed.). *Researching Society and Culture*, London· Thousand Oaks· New Delhi: SAGE Publications

Lynch, M. (2007). Discourse Analysis In: William Outhwaite. & S.P. Turner, (Eds.) *The SAGE Handbook of Social Science Methodology*. SAGE Publications

Maclean, R. & Wilson, D. N. (2008). Introduction In: R. Maclean, D. Wilson, & C. Chinien, (Eds.). *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning*. Bonn: UNESCO, Springer

Mager, R. F. & Beach, K. M., Jr (1967). *Developing Vocational Instruction*, California: Pitman Management and Training, A Division of Pitman Learning Inc.

Malherbe, E. G. (1977). *Education in South Africa* [Volume Ⅱ: 1923-1975], SA: JUTA & Co., LTD

Mantzavinos, C. (2011). Institutions In: I.C. Jarvie, & J. Zamora-Bonilla, (Eds.) *The SAGE Handbook of the Philosophy of Social Sciences* SAGE Publications Ltd

Maurer, M. (November 2012). Structural elaboration of technical and vocational education and training systems in developing countries: the cases of Sri Lanka and Bangladesh. *Comparative Education* Vol.48 No.4. 487-503

Mayntz, R. (2003). New challenges to governance theory In: H.P. Bang, (Ed.). *Governance as social and political communication*. Manchester University Press

Retrieved   from: http://scholar.google.co.za/scholar?q=renate+mayntz+new+challenges+to+governance theory&hl+en…
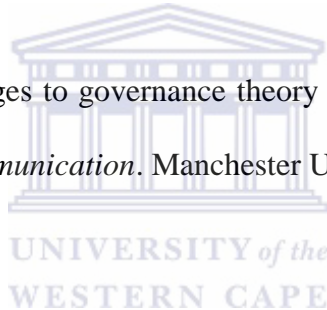
Middleton, J. & Ziderman, A. (1997). Overview: World Bank policy research on vocational education and training. *International Journal of Manpower* Vol.18 No. 1/ 2. pp. 6-28

Middleton,J., Ziderman, A & van Adams, A. 1993). *Skills for Productivity: Vocational Education and Training in Developing Countries*. World Bank: Oxford University Press

Nakosteen, M.(1965).   *The History and Philosophy of Education*. The Ronald Press Company, USA: New York

North, D.C. (1990). *Institutions,Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press

Pierson, P. & Skocpol, T. (2002). 'Historical institutionalism in contemporary political science' In: I. Katznelson, & H.V. Milner, (Eds.). *Political science: The state of the discipline*. New York: W. W. Norton

Platt, J. (2007). Case Study In: W.Outhwaite, & S.P. Turner, (Eds.) *The SAGE Handbook of Social Science Methodology*. SAGE Publications

Power, C.N.(1999).Technical and Vocational Education for the Twenty-First Century. *Prospects* Vol.29 No.1.pp 29-36

Preston, J. & Green, A. (2008). 'The role of vocational education and training in enhancing social inclusion and cohesion' In: Cedefop, *Modernizing vocational education and training: fourth report on vocational education and training research in Europe* [background report, volume 1]. Luxembourg: Publications Office

Preston, P. W. (1996). *Development Theory: An Introduction*. UK, USA: Blackwell Publishing

Psacharopolos, G. (1991). Vocational education theory, VOCED 101: including hints for 'vocational planners'. *International Journal of Educational Development* Vol.11 Issue 3. 193-199

Psacharopoulos, G. (Ed.) (1987). *Economics of Education: Research and Studies*. Oxford: Pergamon Press

Robinson, M.(1996). Governance In: A. Kuper, & J. Kuper, (Eds.). *The Social Science Encyclopedia* [Second Edition] London and New York: Routledge

Rose, R. (1991). Comparing Forms of Comparative Analysis. *Political Studies* XXXIX.pp. 446-62

Scharpf, F.(1997). *Games real actors play. Actor-centred institutionalism in policy research* Boulder/Cumnor Hill: Westview Press

Simons, H. (1996). The paradox of case study *Cambridge Journal of Education*. 26 (2) pp. 225-240

Smith, R. (1987). Teaching on stilts: a critique of classroom skills. In: M.Holt, (Ed.). *Skills and Vocationalism: The easy answer*. England: Open University Press

Smithers, A.(2002). Vocational Education In: S. Lawlor, (Ed). *Comparing standards, academic and vocational, 16-19 year olds: the report of the Politeia Education Commission*. pp.135-146. London: Politeia

Steinmo, S.(2008). What is historical institutionalism? [Chapter 7] In: D.D. Porta, & M. Keating, (Eds.). *Approaches in the Social Sciences* UK: Cambridge University Press

Vaizey, J. (1975). *Education in the Modern World* [New edition] London: Weldenfeld and Nicolson

Wade, R. (1992). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton: Princeton University Press

Wallis, R. (1996). Institutions In: Adam Kuper and Jessica Kuper (Eds.). *The Social Science Encyclopedia* [Second Edition]. London: Routledge

Wirth, A. G. (1991). Issues in the Vocational-Liberal Studies Controversy (1900-1917): John Dewey vs. the Social Efficiency Philosophers. In: D. Corson, (Ed.). *Education for Work: Background to Policy and Curriculum*. Philadelphia: Multilingual Matters LTD, the Open University Press

Wollschläger, N. & Guggenheim, E. F.(2004). From divergence to convergence: A history of vocational education and training in Europe, *European Journal of Vocational Training*, No.32, pp1-3, May-Sep 2004

Reports

ILO 1998). *World Employment Report 1998-1999, Employability in the Global Economy, How Training Matters*. Geneva: ILO

Hadow(1927). *The Education of the Adolescent* [Report (1926) of the Consultative Committee], London: HM Stationery Office

Spens (1938). *Secondary Education: with Special Reference to Grammar Schools and Technical High Schools* [Report (1938)]. London: HM Stationery Office

South Africa

General references

Allais, S. (2012). Why solving ongoing Problems with the NQF Matters In: H. Perold, N. Cloete, & J. Papier, (Eds.) *Shaping the Future of South Africa's Youth: Rethinking post-school education and skills training*. SA: African Minds

Altman, M. & Mayer, M. (2004). Overview of Industrial Policy In: Human Sciences Research Council. *Human Resources Development Review 2003: Education, Employment and skills in South Africa*. Cape Town: HSRC Press

Archer, S. (2012). Key Issues in the Assessment of South Africa's National Skills Development Strategy. In: H, Perold, N. Cloete, & J.Papier, (Eds.) *Shaping the future of South Africa's Youth: Rethinking post-school education and skills training*. SA: African Minds

Armstrong, J. (1980). The slaves 1652-1795 In: R. Elphick, & H. Giliomee, (Eds.). *The Shaping of South African Society, 1652-1820*. Cape Town: Longman Penguin Southern Africa (Pty) Ltd

Ashley, M.(1989). *Ideologies and Schooling in South Africa*.South Africa: S.A.T.A.

Badroodien, A. (2004). Technical and Vocational Education Provision in South Africa from 1920 to 1970 In: S. McGrath S, A. Badroodien, A, Kraak & L. Unwin (Eds.) *Shifting Understandings of Skills in South Africa: Overcoming the historical imprint of a low skills regime*, 20-45. Cape Town: HSRC Press

Behr, A. L. (1984). *New Perspectives in South African Education: A review of education in South Africa, 1652-1984* [Second edition]. Durban/Pretoria: Butterworth Publishers (PTY) LTD

Behr, A.L. & Macmillan, R.G. (1966). *Education in South Africa* Pretoria J. L. van Schaik, LTD, Publishers

Bird, A. (2001).*National Monograph on Technical and Vocational Training in South Africa* Paris: UNESCO International Institute for Educational Planning

CIIR (1986). *South Africa in the 1980s: State of Emergency*. London: Catholic Institute for International Relations

CIIR (1983). *South Africa in the 1980s: State of Emergency*. London: Catholic Institute for International Relations

Cosser, M. (June 2011). Pathways through the education and training system: Do we need a new model? *Perspectives in Education* Vol.29. No.2

Davenport,T. R. H. & Saunders, C. (2000). *South Africa: A Modern History* [Fifth Edition]. Britain: MACMILLAN PRESS LTD

Du Toit,A. E. & Phil, M. A. D. (1963). *The Earliest South African Documents on the Education and Civilization of the Bantu*, Pretoria: Communications of the University of South Africa

Gewer, A. (2010). *Improving quality and expanding the further education and training college system to meet the need for an inclusive growth path*. Development Bank of Southern Africa

Gibbon, T., Muller,J. & Nel, H. (2012). Higher Education and an Expanded Post-School Education System In: H. Perold, N. Cloete, & J.Papier, (Eds.) *Shaping the Future of*

South Africa's Youth: Rethinking post-school education and skills training. SA: African Minds

Guelke, L. (1980). The white settlers, 1652-1780 In: R. Elphick. & H.Giliomee, (Eds.) *The Shaping of South African Society,1652-1820.* Cape Town: Longman Penguin Southern Africa (Pty) LTD

Hlatshwayo, S. A. (2000). *Education and Independence: Education in South Africa, 1658-1988*. London: Greenwood Press

Horrell,M.(1963). *African education: Some origins and development until 1953*. Johannesburg: South African Institute of Race Relations

Kraak, A. (1992). Post-fordism and a future education and training system for South Africa In: E.Unterhalter, H.Wolpe & T. Botha, (Eds.). *Education in Future South Africa: Policy Issue for Transformation*. Trenton New Jersey: Africa World Press, Inc.

Kruger, E. G. (1986). Technical education in the Republic of South Africa In: E.G. Kruger, T.C. Bisschoff & S.M.van Heerden, *Education – Past, Present and Future* [Chapter 11]. EURO PUBLICATIONS

Malherbe, E. G. (1977). *Education in South Africa* [Volume Ⅱ: 1923-1975]. SA: JUTA & Co., LTD

Malherbe, E. G. (1977). *Education in South Africa* [Volume I:1652-1922]. SA: JUTA & Co., LTD

Molteno, F. (1984). The historical foundation of the schooling of Black South Africans In: P. Kallaway ,(Ed.). *Apartheid and Education* Johannesburg: Ravan Press

Pepper, S. (1996). *Radicalism and Education Reform in Twentieth-Century China: The Search for an Ideal Development Model*. Cambridge University Press

Reitzes, M.(2009). *The Impact of Democracy on Development: The Case of South Africa* [Research Report 120]. Johannesburg: Centre for Policy Studies

Richardson, & Van-Helten, A. J. (1982). Labour in the South African gold mining industry, 1886-1914 In:S. Marks,.& R. Rathbone, (Eds.). *Industrialization and Social Change in South Africa: African class formation, culture and consciousness, 1870-1930*. New York: Longman Group Ltd

Rose, B. & Tunmer, R. (Eds.) (1975). *Documents in South African Education* Johannesburg: AD. DONKER/PUBLISHER
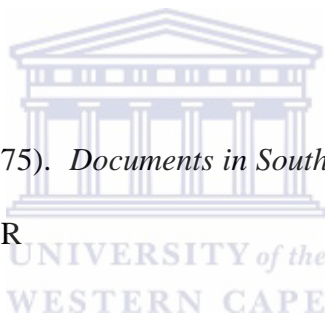
Stumpf, R., Papier, J., McBride, T. & Needham, S. (2012). Strengthening the Capacity of FET Colleges to Meet the Needs of Young People In: H.Perold, N., Cloete, & J.Papier, (Eds.) *Shaping the future of South Africa's Youth: Rethinking post-school education and skills training*. SA: African Minds

Terreblanche, S. & Nattrass, N.(1990). A periodization of the political economy from 1910 In: Nicoli Nattrass & E. Ardington, (Eds.) *The Political Economy of South Africa* Cape Town: Oxford University Press

Thaver, B. (2006). Affirmative Action in South Africa: The Limits of History In E. Kennedy-Du Bourdieu (Ed). *Race and Inequality: World Perspectives on Affirmative Action,*. Ashgate, United Kingdom

Troup, F.(1976). *Forbidden pastures: Education under Apartheid*. London: International Defense and Aid Fund

Documents

House of Assembly (1988). *Education Affairs Act (House of Assembly) 70 of 1988*

Department of National Education.(1993).*Requirements for national education programmes at Technikons* (NATED) 02-150 (93/01). Pretoria

DHET of South Africa (2009). Further Education and Training Colleges: National Certificate (Vocational) and Report 190/191 In: *Report on the Conduct of National Examinations 2009*
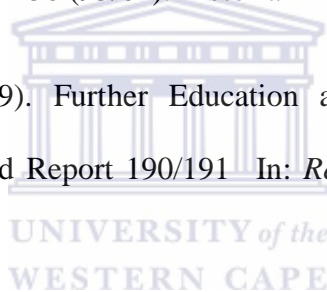
FET Colleges Amendment Act, No 1 of 2013, Cape Town

Republic of South Africa. (1986). *South African Certification Council Act, No 85 of 1986* Cape Town

Republic of South Africa (1981). *Technical Colleges Act, No 104 of 1981*

Union of South Africa (1955). *Vocational Education Act, No 70 of 1955*. Parow, C. P.

Reports

Commission of the European Communities (October 1992). *Towards a Unified Technical and Vocational Education and Training Sector: Report and Recommendations of the Technical and Vocational Education and Training Sector Review.*

Department of Education of SA (November 2008). *The Development of Education: National Report of South Africa* [48th International Conference on Education]

Statistics

SA Yearbook 2013/14

SA Yearbook 2013

SA Yearbook 2011/12

Statistics South Africa (July 2014). *Statistical Release [P0302]: Mid-year population estimates 2013*

Statistics South Africa (25 February 2014). *Statistical Release [P0441]: Gross domestic product – Annual estimates 2003-2012; Regional estimates 2003-2012; Third quarter 2013*

Race Relations Surveys

SAIRR (1994) *Race Relations Survey, 1993/94*. Johannesburg: South African Institute of Race Relations

SAIRR (1993) *Race Relations Survey, 1992/93*. Johannesburg: South African Institute of Race Relations

SAIRR (1992) *Race Relations Survey, 1991/1992*. Johannesburg: South African Institute of Race Relations

SAIRR (1990) *Race Relations Survey, 1989/90*. Johannesburg: South African Institute of Race Relations

SAIRR (1989) *Race Relations Survey, 1988/89*. Johannesburg: South African Institute of Race Relations

SAIRR (1987 *Race Relations Survey, 1986* [Part 1]. Johannesburg: South African Institute of Race Relations

SAIRR (1986) *Race Relations Survey, 1985*. Johannesburg: South African Institute of Race Relations

SAIRR (1985) *Race Relations Survey, 1984*. Johannesburg: South African Institute of Race Relations

SAIRR (1984) *Survey of Race Relations in South Africa, 1983*. Johannesburg: South African Institute of Race Relations

SAIRR (1983) *Survey of Race Relations in South Africa, 1982*. Johannesburg: South African Institute of Race Relations

SAIRR (1982) *Survey of Race Relations in South Africa, 1981*. Johannesburg: South African Institute of Race Relations

SAIRR (1980) *Survey of Race Relations in South Africa, 1979*. Johannesburg: South African Institute of Race Relations

SAIRR (1979 *Survey of Race Relations in South Africa, 1978*. Johannesburg: South African Institute of Race Relations

SAIRR (1977) *Survey of Race Relations in South Africa, 1976*. Johannesburg: South African Institute of Race Relations

SAIRR (1976) *Survey of Race Relations in South Africa, 1975*. Johannesburg: South African Institute of Race Relations

SAIRR (1972) *Survey of Race Relations in South Africa, 1971*. Johannesburg: South African Institute of Race Relations

SAIRR (1969) *Survey of Race Relations in South Africa, 1968*. Johannesburg: South African Institute of Race Relations

SAIRR (1968) *Survey of Race Relations in South Africa, 1967*. Johannesburg: South African Institute of Race Relations

SAIRR (1966) *Survey of Race Relations in South Africa, 1965*. Johannesburg: South African Institute of Race Relations

SAIRR (1962)   *Survey of Race Relations in South Africa 1961,* Johannesburg: South African Institute of Race Relations

SAIRR (1960)   *Survey of Race Relations in South Africa, 1958-1959*.Johannesburg: South African Institute of Race Relations

SAIRR (1959) *Survey of Race Relations in South Africa,, 1957-1958*. Johannesburg: South African Institute of Race Relations

SAIRR (1955) *Survey of Race Relations in South Africa 1954-1955.* Johannesburg: South African Institute of Race Relations

Hellmann,E. & Gluckman, M. (Eds.) (1949). *Handbook on Race Relations in South Africa* Cape Town, London, New York: Oxford University Press

China

General references

Chen, Yingjie (2007). *Investigation of Post-Secondary Vocational Education History in China* China: Zhong Zhou Gu Ji Press

Cummings, W. K. (1980). *Education and Equality in Japan* New Jersey, UK: Princeton University Press

Dong Baoliang, Dan Zhaobin & Chen Qing (2007). *Modern and Contemporary Higher Education History in China* China: Press of Huazhong University of Science and Technology

Hawkins, J. N. (1992). 'China' In: P.W. Cookson, Jr., A.R. Sadovnik, & S.F. Semel, (Eds.) *International Handbook of Educational Reform.* New York • Westport, Connecticut • London: Greenwood Press

Huang Yao (Ed.) (2009). *Vocational Education: Principle and Application*. China: Higher Education Press

Huang Yao (Ed.) (2007). *Study on Interconvertible Theory and Practice between Academic and Occupational Qualification Certificates*. China: Higher Education Press

Huo Xiaoxiang, Zhao Zhe & Xu Junfeng (2009). Inquiry into Curricular Coordination across Secondary and Tertiary Vocational Institutions . *Journal of Chinese Adult Education* Vol.15

Lao Kaisheng (Ed.)(2009). *Chinese Educational Reform during 30 Years: Volume of Policies and Legislations*. Beijing: Beijing Normal University Publishing Group

Liu Shiqing (2008). Values and Evolution of Education Policies since the Rise of New China. In: Yuan Zhenguo (Ed.). *Review of China's Education Policies*, Beijing: Education and Science Publishing House

Mi Jing (2009). *Investigation of Vocational Education History in China*.China: Shanghai Educational Publishing House

Sloss, R. (1981). Ideology and politics in Chinese education In: P.Broadfoot, C. Brock, & W. Tulasiewicz, *Politics and educational change: An international survey*. London: Croom Helm LTD

Tang Zhibin & Shi Weiping (2009). Attractiveness of China's Vocational Education on an International Comparison *Educational Science*. 6. pp. 62-67

Wang Dewen (2009). Vocational Education Reform and Development In: Cai Fang (Ed.). *Green Book of Population and Labour*. China: Social Science Academic Press

Wang Guangzhou and Niu Jianlin (2009). Status, Issues and Trend Projection of China's Population Education In: Cai Fang (Ed.). *Green Book of Population and Labour* China: Social Science Academic Press

Wang Qinglian & Zhang Sheyu (2008). *Sociology of Vocational Education* Beijing: Education and Science Publishing House

Wu Li & Rong Xinchun (2009). *Investigation of the Politico-Economic Strategies of the Communist Party of China* Beijing: Press of Renmin University of China

Xu Zhongyue (2008). *Struggle of China [Volume 6]: The Rise of Modern China, 1600-2000*. World Book Press

Yu Qiding (2010). Investigation of the origination of modern vocational education in China *Chinese Vocational and Technical Education*. Vol.3. pp.12-16

Zhang Bin & Zhou Guping (2007). *Education History in China: Introduction*. China: Zhejiang University Press

Documents

Central Committee of the Communist Party (27 May 1985). *Decisions on Reforming Educational System, No.12 of 1985*

Central Committee of the Communist Party, State Council (3 February 1993). *Programme for Educational Reform and Development, No.3 of 1993*

Central Committee of the Communist Party, State Council (19 September 1958). *Instructions of Educational Reform of 1958*

China Ethnic Regional Autonomy Law of 1984

China National Common Law of Language and Writing System, No. 37 of 2000

China's Constitution Amendment of 2004

Chinese People's Political Consultative Conference (29 September 1949) *Common Programme of 1949*   Retrieved from: www.baike.baidu.com/view/428031.htm

Ministry of Education, State Development and Reform Commission, Ministry of Finance, Ministry of Human Resources, Ministry of Agriculture, and Poverty-Reduction Office of the State Council of China (16 June 2014). *Modern Vocational Education Development Strategy 2014-2020, No 6 of 2014*

Ministry of Education of China (30 August 2011). *Opinion on Advancing the Coordinated Development of Secondary and Higher Vocational Education, No 9 of 2011*

Ministry of Education (17 April 1987). *Provisional Ordinance on Adult Secondary Specialized Schools, No.003 of 1987* Retrieved from: www.people.com.cn/item/flfgk/gwyfg/1987/20600198702.html

Ministries of Education, Labour and Finance, and State Planning Commission (9 May 1983). *Opinions on Reforming Urban Secondary Vocational Education Composition and Developing Vocational Technical Education, No.006 of 1983*

Ministry of Education, Ministry of Labour (7 October 1980). *Report on Reforming the Secondary Education Structure, No.252 of 1980*

Ministry of Labour (20 February 1979). *Work Regulations on Skilled Workers Schools (Draft), No. 6 of 1979*

Ministry of Labour (15 May 1961). *General Rules of Skilled Workers' Schools, No 175 of 1961*

Ministry of Labour (25 April 1954). *Provisional Ordinance of Skilled Workers Schools (Draft) of 1954 R*etrieved from: www.baike.baidu.com/update/id=3032384

National People's Congress of China (31 October 2000). *National Common Language and a Writing System Law, No 37 of 2000*

National People's Congress of China (29 August 1998). *Higher Education Law, No 7 of 1998*

National People's Congress of China (15 May 1996). *Vocational education Law, No 69 of 1996*

National People's Congress of China (5 July 1994). *Labour Law, No 28 of 1994*

State Council of China (28 October 2005). *Decisions on Vigorously Developing Vocational Education, No 35 of 2005*

State Council of China (24 August 2002). *Decisions on Vigorously Advancing the Reform and Development of Vocational Education, No 16 of 2002*

Standing Committee of the National People's Congress (31 Oct 2000). *National Common Language and a Writing System Law, No. 37 of 2000*

State Council of China (13 June 1999). *Decisions on Deepening Educational Reform and Advancing Quality Education in an All-Round Way, No 9 of 1999*

State Council of China (3 February 1993). *Programme for Educational Reform and Development, No 3 of 1993*

State Council (17 October 1991). *Decision on Vigorously Developing Vocational Technical Education, No.55 of 1991*

State Council (10 April 1980). *Summary of National Secondary Specialized Educational Work Conference, No 258 of 1980*

State Council (21 March 1952). *Instructions of Reorganizing and Developing Secondary Technical Education, No. 5 of 1952*

Retrieved from: www.cnki.com.cn/Journal/H-H2-RMJY-1952.htm

Reports

Research Institute of Industrial and Technological Economies, State Development and Reform Commission (2008). *Report on Industrial Development in China: Investigation on the Rationalization and Upgrading of Industrial Structure in the Reform and Opening Era in China*. China: Economy & Management Publishing House

Statistics

China Statistic Publishing House (April 1993). *China Population Census Data, 1990* [First edition]

Department of National Education (1994). *Statistics of National Education Development of 1993*

Ministry of Education (1990). *Statistics of National Education Development of 1990*

National Bureau of Statistics of China (2014). *China Statistical Yearbook, 2014*. China Statistics Press. etrieved from: http://www.stats.gov.cn/tjsj/ndsj/2014/index

National Bureau of Statistics (2014). *Statistic Bulletin of National Economy and Social Development of 2013*. Retrieved from: www.stats.gov.cn

National Bureau of Statistics of China (2013). *China Statistical Yearbook , 2013*. China Statistics Press Retrieved from: http://www.stats.gov.cn/tjsj/ndsj/2013/index

Chen Yingjie (2007), *Investigation of Post-Secondary Vocational Education History in China*, China: Zhong Zhou Gu Ji Press

(陈英杰(2007), 中国高等职业教育发展史研究, 中州古籍出版社)

Dong Baoliang, Dan Zhaobin & Chen Qing (2007), *Modern and Contemporary Higher Education History in China*, China: Press of Huazhong University of Science and Technology

(董宝良 但昭彬 陈晴(2007), 中国近现代高等教育史, 华中科技大学出版社)

Huang Yao (Ed.) (2009), *Vocational Education: Principle and Application*. China: Higher Education Press

(黄尧(2009), 职业教育学—原理与应用, 高等教育出版社)

Huang Yao (Ed.) (2007), *Study on Interconvertible Theory and Practice between Academic and Occupational Qualification Certificates*, China: Higher Education Press

(黄尧(2007), 学历证书与职业资格证书相互转换的理论与实践研究, 高等教育出版社)

Huo Xiaoxiang, Zhao Zhe & Xu Junfeng, Inquiry into Curricular Coordination across Secondary and Tertiary Vocational Educational Institutions, *Journal of Chinese Adult Education*, Vol. 15, 2009

(霍晓象, et al, 中高职课程衔接问题的调查研究, 《中国成人教育》,2009年,第15期)

Lao Kaisheng (Ed.) (2009), *Chinese Educational Reform during 30 Years: Volume of Policies and Legislations*. Beijing: Beijing Normal University Publishing Group

(劳凯声(2009), 中国教育改革30年: 政策与法律卷 北京师范大学出版社)

Liu Shiqing, 'Values and Evolution of Education Policies since the Rise of New China' In: Yuan Zhenguo (Ed.) (2008), *Review of China's Education Policies*, Beijing: Education and Science Publishing House

(刘世清, '论新中国成立以来我国教育政策的伦理取向及其演变机制', In: 袁振国 (2008), 中国教育政策评论 北京: 教育科学出版社)

Mi Jing (2009), *Investigation of Vocational Education History in China*, China: Shanghai Educational Publishing House

(米靖(2009), 中国职业教育史研究, 上海教育出版社)

Tang Zhibin & Shi Weiping, Attractiveness of China's Vocational Education on an International Comparison, *Educational Science*, 6, pp.62-67, 2009

(唐智彬 石伟平, 国际比较视野中的职业教育吸引力问题 《教育科学》, 2009年, 第6期)

Wang Dewen, 'Vocational Education Reform and Development' In: Cai Fang (Ed.) (2009), *Green Book of Population and Labour*. Beijing: Social Science Academic Press

(王德文, '职业教育改革与发展', 《人口与劳动绿皮书》 (2009), 北京：社会科学文献出版 社)

Wang Guangzhou & Niu Jianlin, 'Status, Issues and Trend Projection of China's Population Education' In: Cai Fang (Ed.) (2009), *Green Book of Population and Labour*. Beijing: Social Science Acad emic Press

(王广州 牛建林, '我国教育总量结构现状、问题及发展预测,《人口与劳动绿皮书》(2009),

北京: 社会科学文献出版社)

Wang Qinglian & Zhang Sheyu (2008), *Sociology of Vocational Education*, Beijing:

Education and Science Publishing House

(王清连 张社宇(2008), 职业教育社会学, 北京: 教育科学出版社)

Wu Li & Rong Xinchun (2009), *Investigation of the Politico-Economic Strategies of the*

Communist Party of China, Beijing: Press of Renmin University of China

(武力 肜新春(2009), 中国共产党治国经济方略研究, 北京: 中国人民大学

出版社)

Wu Shenyuan (2003), *History of the Modern Economy in China*, China: Shanghai Renmin

Press

(吴申元 (2003), 中国近代经济史, 上海: 上海人民出版社)

Xu Zhongyue (2008), *Struggle of China [Volume 6]: The Rise of Modern China, 1600-2000*.

World Book Press

(徐中约 (2008), The Rise of Modern China, 1600-2000 中国的奋斗 (第6

版). 世界图书出版公司)

Yu Qiding (2010), Investigation of the origination of modern vocational education in China,

Chinese Vocational and Technical Education, Vol.3, p.12-16

(俞启定, 中国近代职业教育形成的探讨, 《中国职业技术教育》, 2010年第3期, 12-16页)

Zhang Bin & Zhou Guping (2007), *Education History in China: Introduction*. China: Zhejiang University Press

(张彬 周谷平 (2007), 中国教育史导论, 浙江大学出版社)

Appendix A

English-Chinese bilingual text of the general references in

China's case

Appendix B

Vocational Education Act, No 70 of 1955 in SA

GROUP AREAS DEVELOPMENT.
VOCATIONAL EDUCATION.

1692

**Act No. 69
of 1955.**

(2) No proclamation shall be issued under sub-section (1) or (3) unless the Minister has considered a written report in regard thereto by the Group Areas Board established under the principal Act.

(3) The Governor-General may at any time in like manner withdraw or amend any proclamation issued under sub-section (1).

Short title and date of commencement.

39. This Act shall be called the Group Areas Development Act, 1955, and shall come into operation on a date to be fixed by the Governor-General by proclamation in the *Gazette*.

CAME INTO OPERATION (PROC. 231 of 1959): 23 Oct. 1959.

**Act No. 70
of 1955.**

Repealed: Act 41/67 §45

Long Title Am: 25/1958 §9.

ACT

To provide for the establishment, maintenance, management and control of <u>vocational schools</u> and <u>part-time classes</u>; for the transfer of the maintenance, management and control of certain declared institutions and State-aided vocational schools to the Government in its Department of Education, Arts and Science; for the recognition of certain institutions as State-aided vocational schools and the making of grants-in-aid to such institutions; for the recognition of certain courses of instruction and training as being included in higher education; for the recognition of certain classes as <u>continuation classes</u> and the making of grants-in-aid in respect of such classes; for the admission of persons to and their instruction and training at vocational schools, State-aided vocational schools, continuation classes and part-time classes; for the repeal of certain laws relating to higher education; and for other incidental matters.

(*Afrikaans text signed by the Governor-General.*)
(*Assented to 24th June, 1955.*)

BE IT ENACTED by the Queen's Most Excellent Majesty, the Senate and the House of Assembly of the Union of South Africa, as follows:—

Definitions.

*A: 56/1956/29.
A: 25/1958/1*

1. In this Act, unless the context otherwise indicates—

(i) "college council" means the governing authority of a declared institution; (xi)

(ii) "commercial vocational education" means a course of instruction and training in which more than a third of the subjects are prescribed commercial subjects or in respect of which more than eight hours per week are devoted to prescribed commercial subjects; (vi)

(iii) "Commission" means the Public Service Commission appointed under section *two* of the Public Service Act, 1923 (Act No. 27 of 1923); (xii)

(iv) "continuation class" means a continuation class recognized by the Minister in terms of section *nine*; (xxv)

Appendix C

Technical Colleges Act, No 104 0f 1981 in SA

Gov Publ/Act/0031

TECHNICAL COLLEGES ACT
NO. 104 OF 1981

[Assented to 15 October, 1981]   [Date of Commencement: 1 February, 1982]

(English text signed by the State President)

as amended by

Education and Culture Laws Amendment Act, No. 28 of 1983
Education and Heraldry Laws Amendment Act, No. 6 of 1984
Technical Colleges Amendment Act (House of Assembly), No. 44 of 1989

ACT

To provide for the establishment, maintenance, management and control of technical colleges; and for incidental matters.

1. **Definitions.**—In this Act, unless the context otherwise indicates—

"**advisory council**" . . . .
    [Definition of "advisory council" deleted by s. 1 (*a*) of Act No. 44 of 1989.]

"**college council**" means a college council referred to in section 5 (*a*);

"**commission**" means the Commission for Administration established by section 2 (1) of the Commission for Administration Act, 1984 (Act No. 65 of 1984);
    [Definition of "commission" substituted by s. 1 (*b*) of Act No. 44 of 1989.]

"**committee**" means the Committee of Technical College Principals referred to in section 36;
    [Definition of "committee" inserted by s. 1 (*c*) of Act No. 44 of 1989.]

"**council**", in relation to a technical college, means a college council;

"**Department**" means the Department of Education and Culture;
    [Definition of "Department" inserted by s. 1 (*c*) of Act No. 44 of 1989.]

"**Director-General**" . . . . . .
    [Definition of "Director-General" deleted by s. 1 (*d*) of Act No. 44 of 1989.]

"**employee**", in relation to a technical college, means a person employed in a temporary capacity or under a kind of contract different from that usually entered into with officers, in the service of a technical college in a post included in or additional to the fixed establishment of such technical college;

"**formal instruction or training course**" means a course in respect of which an examination as referred to in section 18 (*a*) is conducted;
    [Definition of "formal instruction or training course" inserted by s. 1 (*e*) of Act No. 44 of 1989.]

Appendix D

South African Certification Council Act, No 85 of 1986 in SA

GOVERNMENT GAZETTE, 10 SEPTEMBER 1986   No. 10420   3

SOUTH AFRICAN CERTIFICATION COUNCIL ACT, 1986   Act No. 85, 1986

ACT

To provide for control over the norms and standards of subject matter and examination, and for the issuing of certificates, at the different points of withdrawal in school and technical college education and non-formal education; and for that purpose to establish the South African Certification Council; and to provide for the conducting of common examinations; and to provide for matters connected therewith.

(Afrikaans text signed by the State President.)
(Assented to 29 August 1986.)

BE IT ENACTED by the State President and the Parliament of the Republic of South Africa, as follows:—

1. In this Act, unless the context otherwise indicates: Definitions.

  5   (i) "certificate" means a certificate contemplated in section 9 (1); (x)

  (ii) "council" means the South African Certification Council established by section 2; (ix)

  (iii) "Director-General" means the Director-General of National Education; (iii)

  10 (iv) "education department" means a department of State responsible for general or own education matters including a provincial education department; (viii)

  (v) "employee" means any person who is in the full-time or part-time employ of the council but who is not an
  15 officer; (xiv)

  (vi) "examining body" means an education department or any other body responsible for conducting examinations at a point of withdrawal; (iv)

  (vii) "executive officer" means the executive officer appoint-
  20 ed under section 4 (4); (xiii)

  (viii) "financial year" means a year ending on 31 March in each year; (ii)

  (ix) "formal education" means formal education as defined in section 1 of the National Policy for General Educa-
  25 tion Affairs Act, 1984 (Act No. 76 of 1984); (v)

  (x) "Minister" means the Minister of National Education; (vi)

  (xi) "non-formal education" means non-formal education as defined in section 1 of the National Policy for Gener-
  30 al Education Affairs Act, 1984 (Act No. 76 of 1984); (vii)

  (xii) "officer" means any person who is in the full-time employ of the council on a permanent basis; (i)

  (xiii) "point of withdrawal" means a stage in school or tech-
  35 nical college education or non-formal education at which a candidate is required to sit for an examination with a view to obtaining documentary proof of proficiency; (xii)

Appendix E

Education Affairs Act (House of Assembly), No 70 of 1988 in SA

8 and 9 Substitute respectively sections 9 and 10 of the Indians Advanced Technical Education Act 12 of 1968.

10 Amends section 11 of the Indians Advanced Technical Education Act 12 of 1968, as follows: paragraph *(a)* substitutes subsection (1); paragraph *(b)* inserts subsection (2A); paragraph *(c)* substitutes subsection (3); and paragraph *(d)* substitutes subsection (4) *(a)*.

11 Substitutes section 13 of the Indians Advanced Technical Education Act 12 of 1968.

12 (1) Amends section 14 of the Indians Advanced Technical Education Act 12 of 1968, as follows: paragraph *(a)* substitutes subsection (1); and paragraph *(b)* adds subsection (3).

(2) Any department created at any technikon in accordance with the provisions of section 14 of the principal Act prior to the commencement of this section and existing at that commencement, shall be deemed to be a school created in accordance with the provisions of the said section 14.

13 to 16 inclusive Substitute respectively sections 15, 16, 17 and 18 of the Indians Advanced Technical Education Act 12 of 1968.

17 Amends section 20 of the Indians Advanced Technical Education Act 12 of 1968, as follows: paragraph *(a)* substitutes the words preceding paragraph *(a)*; and paragraph *(b)* adds paragraph *(e)*.

18 to 20 inclusive Substitute respectively sections 21, 26 and 27 of the Indians Advanced Technical Education Act 12 of 1968.

21 Amends section 28 of the Indians Advanced Technical Education Act 12 of 1968 by substituting the words 'House of Delegates' for the word 'Parliament', wherever it occurs except the last two times in subsection (2).

22 Substitutes section 29 of the Indians Advanced Technical Education Act 12 of 1968.

23 Amends section 30 of the Indians Advanced Technical Education Act 12 of 1968, as follows: paragraph *(a)* substitutes subsection (1); and paragraph *(b)* deletes subsection (2).

24 Substitution of expression in Act 12 of 1968

The principal Act is hereby amended by the substitution for the expression 'Minister of Finance' wherever it occurs of the expression 'Minister of the Budget'.

25 Short title and commencement

This Act shall be called the Advanced Technical Education Amendment Act (House of Delegates), 1987, and shall be deemed to have come into operation on the date of commencement of the Technikons (National Education) Amendment Act, 1986.

EDUCATION AFFAIRS ACT (HOUSE OF ASSEMBLY) 70 OF 1988

[ASSENTED TO 21 JUNE 1988]   [DATE OF COMMENCEMENT: 1 APRIL 1990]

(English text signed by the State President)

as amended by

Education Affairs Amendment Act (House of Assembly) 88 of 1991
Education Affairs Amendment Act (House of Assembly) 39 of 1992
Education Affairs Amendment Act (House of Assembly) 36 of 1993
Education Laws Amendment Act (House of Assembly) 139 of 1993
Education Affairs Second Amendment Act (House of Assembly) 162 of 1993
Proclamation 138 of 1994
Proclamation R151 of 1994
South African Schools Act 84 of 1996
Institution of Legal Proceedings against certain Organs of State Act 40 of 2002

NB: See Proclamation R151 in *Government Gazette* 16049 of 31 October 1994 concerning the extent of the assignment of the administration of this Act to the provinces.

ACT

To provide for the provision and control of education in schools, and matters connected therewith.

Appendix F

Provisional Ordinance of Skilled Workers' Schools (Draft) of

1954 in China

W

Baidu百科

新闻 网页 贴吧 知道 MP3 图片 视频 **百科** 文库

劳动部关于技工学校暂行办法草案

进入词条 搜索词条 帮助 设置

首页 自然 文化 地理 历史 生活 社会 艺术 人物 经济 科学 体育 核心用户 **NBA**

劳动部关于技工学校暂行办法草案

发文单位： 劳动部

发布日期： 1954-4-25

执行日期： 1954-4-25

于一九五四年四月二十五日经中财委批准

第一条 为了有计划的培养技工，保证国家经济建设的需要，特制定本办法。

第二条 技工学校按产业管理部门分别设置，各产业管理部门应根据各该部门对于技工的需要设立技工学校，并按照国家批准的技工培养计划，培养其所需工种的技工。当所设技工学校有剩余力量时，应接受其他部门委托培养的任务。

第三条 技工学校以培养四、五级技工为主。学习期限一般规定为二年。各产业管理部根据实际需要、设备条件与培养工种、技术等级的不同，得适当地予以增减。但培养目标不得低于三级技工；年限不得少于一年半。

第四条 技工学校的学生，应招收具有高小毕业以上或相当于高小文化程度及身体健康、政治纯洁、年满十六周岁至二十三周岁的青年，经考试合格并填写志愿书后方可入学。

第五条 技工学校由各产业主管部领导，并受劳动行政部门的业务指导。在目前时期，各该部亦得根据具体情况，分别委托所属专业局（公司）或厂矿直接领导。

第六条 技工学校应派适当人员担任正副校长，并应健全教导科（处）、总务科（处）等工作机构。

第七条 技工学校，一般应有专用实习设备，凡属培养机械制造技工者，必须设有较为完善的实习工场，实习工场由教导科（处）领导。

第八条 技工学校是培养理论与技术兼备的技工。其各类课程的一般比例应是：技术实习占百分之五十至六十，技术理论、政治、文化、体育等课程共占百分之四十至五十。各校应根据具体情况适当安排。

第九条 技工学校的实习工场，在教学计划所规定的范围内，可生产一定数量的成品或接受一定数量的加工订货任务。至于实习生产和加工订货所需材料周转金的来源及其收入的处理办法，由各产业管理部自行规定。

第十条 技工学校的实习工场，在安全设备方面应符合劳动保护的要求。

第十一条 不属厂、矿直接领导的技工学校，应由其直属上级指定学校所在地区的一个具备适当条件的厂、矿企业与之固定联系，以便在教学和设备等方面，取得该厂、矿企业的指导与帮助。

第十二条 技工学校，应根据实际情况制订编制定员表，定员表应经主管产业部的批准。教职员工与学生配备的比例，一般为一比五至一比八（培养新的师资，不在此限）；其中教员与其他人员的比例，由各产业主管部自行编订。

第十三条 技工学校的教师，应尽量作到以专任为主。技术理论教师，应由相当于中等技术学校毕业以上程度的技术人员担任；技术实习教师，应选拔具有高小以上文化程度及有一般技术理论常识的优秀技工担任。政治课须配备能够胜任的教师担任之。

第十四条 技工学校应采取各种方法不断地提高师资的技术与理论水平，改进教学质量，使能符合生产建设发展的要求（经主管产业部门的批准，学校得从每期毕业生中选拔成绩优良者，继续培养成为新的师资）。

第十五条 技工学校的教师，如系调任者，若工作相同，能力相近，而工资待遇有差异者，应尽可能的加以适当调整，做到基本上同工同酬；如系兼任者，应予以适当的报酬；如系专聘者，其工资由学校按其具体情况拟定，报请直属产业管理部批准。

第十六条 对工作成绩卓著的教师，应给以名誉的或物质的奖励。具体办法可由各主管部拟定试行。

第十七条 中央各产业管理部门所属的技工学校，其招生简章与招生地区，由各产业主管部决定，征得中央人民政府劳动部同意后，由招生地区劳动部门协助招考。地方国营产业部门所属的技工学校，其招生简章与招生地区，由其直属产业管理部门决定，征得所在地劳动行政部门同意后实行。但事先均须与招生地区教育部门取得联系。

Appendix G

Operational Regulations on Skilled Workers' Schools, No 22 of

1986

技工学校工作条例

技工学校工作条例
（劳人培［1986］22号1986年11月11日劳动人事部、国家教委发布）

第一章 总则

第一条 为了贯彻执行《中共中央关于教育体制改革的决定》中的有关规定，适应

国民经济和社会发展的需要，进一步办好和发展技工学校，特制定本条例。

第二条 技工学校是培养技术工人的中等职业技术学校，是国家职业技术教育事业的重

要组成部分，属于高中阶段的职业技术教育，它必须贯彻执行党和国家的教育方

针，面向现代化，面向世界，面向未来，不断提高教学质量，把学生培养成为合格的

中级技术工人，做到多出人才、出好人才，为国民经济和社会发展服务。

第三条 技工学校在完成培养中级技术工人任务的前提下，应当根据需要和可能，积极

承担多种培训任务，包括在职工人（含班组长）的提高培训、专业培训，待业青年的

就业培训，学徒的技术培训等。

第四条 技工学校培养中级技术工人的具体要求是：

思想政治方面：培养学生爱祖国、爱人民、爱劳动、爱科学、爱社会主义、讲文明、

懂礼貌、守纪律、有良好的职业道德，有为国家富强和人民富裕而艰苦奋斗的献身精

神。

操作技术方面：培养学生熟练地掌握本工种（专业）的基本操作技能，完成本工种

（专业）中级技术水平的作业，养成遵守操作规范和安全生产、文明生产的习惯。

文化技术知识方面：培养学生扎实地掌握本工种（专业）中级技术所需要的文化和

技术理论基础知识，具有一定的分析和解决问题的能力。

身体方面：重视体育锻炼，使学生具有健康的身体。

第五条 技工学校的学制，应根据培养目标，招生对象的不同，分别确定。培养中

级技术工人，主要招收初中毕业生，学制为三年（个别工种（专业）确有需要的，可

以招收高中毕业生，经省、自治区、直辖市劳动人事部门批准，学制为一至二年）。

第六条 技工学校的招生计划，分别由国务院各主管部门和各省、自治区、直辖市