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REPORT TITLE

**TVET COLLEGES PURPOSE IN A DEVELOPMENTAL
STATE: IMPERATIVES FOR SOUTH AFRICA**

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ABBREVIATIONS

ABET	ADULT BASIC EDUCATION AND TRAINING
ANC	AFRICAN NATIONAL CONGRESS
CBO	COMMUNITY BASED ORGANISATION
CDE	CENTRE FOR ENTERPRISE DEVELOPMENT
COSATU	CONGRESS OF SOUTH AFRICAN TRADE UNIONS
DHET	DEPARTMENT OF HIGHER EDUCATION AND TRAINING
DTI	DEPARTMENT OF TRADE AND INDUSTRY
EDD	DEPARTMENT OF ECONOMIC DEVELOPMENT
EPU	EDUCATION POLICY UNIT
GDP	GROSS DOMESTIC PRODUCT
HET	HIGHER EDUCATION AND TRAINING
HRDC	HUMAN RESOURCES DEVELOPMENT COUNCIL
HSRC	HUMAN SCIENCES RESEARCH COUNCIL
ILO	INTERNATIONAL LABOUR ORGANISATION
IPAP	INDUSTRIAL POLICY ACTION PLAN
NC(V)	NATIONAL CERTIFICATE VOCATIONAL
NDP	NATIONAL DEVELOPMENT PLAN
NGP	NEW GROWTH PATH
NQF	NATIONAL QUALIFICATIONS FRAMEWORK
NEET	NOT IN EDUCATION, EMPLOYMENT AND TRAINING
NPC	NATIONAL PLANNING COMMISSION
NSDS	NATIONAL SKILLS DEVELOPMENT STRATEGY
PSET	POST SCHOOL EDUCATION AND TRAINING
SAQA	SOUTH AFRICAN QUALIFICATIONS AUTHORITY
SETA	SECTOR EDUCATION AND TRAINING AUTHORITY
TVET	TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING
UNESCO	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION

EXECUTIVE SUMMARY

The aim of this paper is to define and articulate the purpose of TVET colleges in South Africa using selected international comparisons. To achieve this,

- the study reviewed the theoretical basis of the Technical and Vocational Education and Training (TVET) systems,
- undertook a comparative analysis how other developmental states have used the theoretical underpinnings to develop their TVET policies, and then
- Argues for the reconceptualization of the role or purpose of TVET in South Africa.

Conceptualising the role or purpose of TVET requires an understanding of TVET history and its theoretical underpinnings. Historically, formal TVET has been closely tied to the process of industrialization and economic development, and therefore TVET policies have often been dominated by an economic and equity perspectives (UNESCO, 2012). The evolution of TVET systems and transformation over the years has been based on perceived role of TVET in relation to economic and or human development (Tikly, 2013).

Theoretical contestations on the role of TVET ranges from the productivity or economic approach, which is based on neo-liberal assumptions that training leads to productivity which, in turn, leads to economic growth (training for growth). The other assumption is that skills lead to employability, which in turn, leads to jobs (skills for jobs). On the other hand the human development theory asserts that TVET provisioning should be aimed at sustainable development or livelihoods. Furthermore, recent theories like the capabilities approach see the TVET as a means for supporting the development of a range of capabilities that are conceived as opportunities to develop functionings that individuals, their communities and society at large have reason to value.

On the back of these broad theoretical contestations, the paper reviewed the empirical literature on how other developmental states have used the theoretical underpinnings to develop their TVET policies. Countries with well-functioning TVET systems and similar middle-income countries were reviewed, namely: Korea, Singapore, Germany and India. The analysis revealed that in countries like Korea, Singapore and Malaysia, the success of the TVET system is based on the involvement of the government in ensuring that the purpose of TVET systems is reformed in line with the phases of the country's economic development. Based on Asian experience (Korea, Singapore, Taiwan and Malaysia), it can be concluded that success with vocational education is built on the understanding that each stage of

development requires a TVET approach that prepares the country for the next stage of its developmental path. Furthermore, to increase returns on investment, demand-driven approaches to vocationalisation need to be developed relevant to the stage of economic development, the type of the economy and regional specifics.

A review of the current policy pronouncements by government revealed a disjuncture between the Green Paper (2012) which asserts that TVET colleges should not be 'all things to all possible learners' and other government policy documents which would want the purpose of TVET sector to be broadened. The thrust is for the sector to include national social and economic goals such as economic growth and development, poverty reduction, employment creation, unequal income distribution, sustainable livelihoods, youth development, innovation and industrial advancement by providing high quality education and training programmes in the democratic developmental state.

Given that South Africa is currently faced with challenges such as chronic unemployment, inequality, and poverty; the paper argues that the South African TVET system needs to be strengthened in order provide access to high quality technical vocational education for all (youth and adults), without losing sight of the TVET's special relationship with the worlds-of-work (McGrath, 2012: 627). To achieve this, the theoretical grounding of the South African TVET policy needs to shift from the human capital approach and broadened to include the human capital approach, human capability and sustainable development approaches. On an operational level, South Africa needs to customise best practices from the Singapore, Korea and Germany models into a new South African TVET model. This model should take into account the South African economic development phases, social-economic development challenges, and learner and community expectations.

Thus, the paper calls for a TVET system located in a developmental state, aimed at helping learners secure sustainable livelihoods. In the medium to long-term, South Africa's developmental needs include economic growth, equity and transformation. The system should link education provisioning to the developmental needs of the country. It will be a TVET system located in the democratic developmental state. The purpose of such a TVET system is to create opportunities for youth and adults to acquire skills, knowledge and values for lifelong learning. The curriculum therefore needs to address the needs of the learners, industry, and community or society.

The development of job-related skills is, therefore, not only part of the TVET college sector's purpose but also employment creation, poverty reduction, socio-economic equality and

inclusive economic growth as part of a multi-pronged strategy. The idea is not to underplay the economic rationale of TVET provision, but rather to highlight the need for colleges to subscribe to a broader developmental agenda beyond the rigidly narrow economic development approach.

1. INTRODUCTION

The Technical and Vocational Education and Training (TVET) discourse in South Africa is inextricably intertwined within a distinctive set of major policies issued by the post-apartheid government which envisions the future state of the country. The common thread running through these major policies such as the *Reconstruction and Development Plan (1994)*, *Growth, Employment and Redistribution (1996)*, *National Development Plan (2012)*, *New Growth Path (2011)*, *Industrial Policy Action Plan 2 (2011)*, *Human Resource Development Strategy for South Africa 2010-2030 (2009)*, *Skills Accord (2010)* and *National Skills Development Strategy III (2010)* revolves centrally around the notion of the developmental state.

These policies together with the *Green Paper on Post-School Education and Training (2012)* outline government's social and economic policy trajectory. Explicit reference is made of the catalyst role to be played by the TVET College sector within the post-school education and training (PSET) system towards addressing the challenges faced by a developmental state.

The recent release of the *White Paper on Post-School Education and Training (2014)* further amplifies the imperative of aligning the post-school education and training system to the agenda of a developmental state. The *White Paper* sets out explicit strategies to improve the capacity of the post-school education and training system to meet South Africa's developmental needs. It outlines policy directions to guide the DHET and the institutions for which it is responsible in order to contribute to building a developmental state with a vibrant democracy and a flourishing economy. Indeed, the central question contained in the *White Paper* (DHET 2014) is the following: **how can skills development support the creation of a developmental state?** A response to this impacts the way we understand our challenges as a nation, or even how we identify the challenges. From an education and training perspective, this requires an understanding of the developmental role of TVET colleges and a reconceptualisation of their purpose in a development state.

Therefore any discussion about the purpose of the TVET college sector in South Africa should be firmly rooted within the paradigm of a developmental state. Akoojee (2010: 261) clearly captures this premise, "success in skills development is intricately linked to the success of the developmental state". There are a number of African National Congress (ANC) policy documents, plans and strategies which make a constant referral to South Africa as a "developmental state" with the solutions to the country's structural problems lying within that dynamic (ANC, 2007; 2010; 2012).

The Congress of South African Trade Unions (Cosatu, 2012) also views education and training within the developmental paradigm with the state playing a strongly interventionist role in the PSET system. The National Planning Commission (NPC, 2012) coined the phrase “capable state” with capable institutions to effectively and efficiently raise and manage resources as well as the capacity to deliver human development and ensure equity, sustainability and peace. Therefore a capable state and developmental state in this context are two sides of the same coin: a developmental state, with its underpinning ideology, and a capable state, with an effective and efficient civil administration to redress unemployment, inequality and poverty.

The historical antecedents of these policies can be traced back to the model of state-led macro-economic planning and industrial modernisation which was adopted by South East Asian nations after the Second World War (ANC, 2007; Chang, 2010; De Onis, 1999). The most basic elements of the South East Asian model of a developmental state are: sustained high GDP growth, protectionism, technology transfers, capital accumulation, central planning and rapid industrialisation (Dumon, 2012; Gumede, 2009; Chang, 2010). These states were driven by an urgent need to promote economic growth and to industrialise to “catch-up” with the West or industrialised neighbours (Anderson, 1991: 61).

Subsequently, the ruling African National Congress at its National Conference in June 2007 officially endorsed a proposal for South Africa to become a “developmental state”. The South African variant is premised on the notion that state intervention within a market system should address the major problems of unemployment, poverty, lack of education, historical inequality, rural underdevelopment and low economic growth to ensure the inclusive social and economic development of society (ANC, 2007).

From a Cosatu (2012: 103) perspective a developmental state should be interventionist, be directly involved in the production of strategic commodities, and must own critical sectors of the economy. The largest labour federation in South Africa highlights seven (7) critical elements that characterise a developmental state:

- 1) The creation of an institutional centre for government-wide economic planning.
- 2) The establishment of uniform and high entrance requirements and standards of employment in the public service.
- 3) Building the technical capacity of the state to lead the development of dynamic and globally integrated economic sectors.

- 4) Maintenance of the strategic role of the state in shaping the key sectors of the economy.
- 5) Strengthening the role of state-owned enterprises.
- 6) Building and strengthening development finance institutions.
- 7) Building the capacity of the state to mobilise the people as a whole, especially the poor, to act as their own liberators through participatory and representative democracy.

Other thinkers contend that implementation of a national agenda for development also requires the forging of strong links between labour, business, government and civil society (Gumede, 2009; De Onis, 1999; and Netshitenzhe, 2011). According to the ANC (2007), economic transformation should proceed from the understanding that the changes we seek cannot emerge spontaneously from the “invisible hand” of the market. The state must play a strategic role in shaping the contours of economic development.

Gumede (2007), Akoojee (2010), Chang (2010) and Edigheji (2006) argue that a recognisable point of departure from the South East Asian developmental states is that many of those countries reached their developmental goals under undemocratic conditions. Yet in a constitutional democracy such as South Africa, the delivery of the developmental state can only take place with a deepening of the democratic tradition. This rationale is strongly advocated by the ruling African National Congress and their tripartite alliance partners, the South African Communist Party and the Congress of South African Trade Unions (ANC, 2007).

The lesson from the South East Asian experience is that there is no single recipe for development. Chang (2010) reminds us of the peculiarities of different developmental contexts and argues that it would be erroneous to see all developmental states as having a similar trajectory. Thus while the South East Asian economies may appear to have a uniform and consistent path, their vastly different contexts required different mechanisms to achieve economic success using different industrial strategies.

More recently Brazil, Russia, India and China have adopted developmental policies and programmes to ratchet economic growth and address social development needs arguably with relative success. The African National Congress in its *Education and Health Policy Discussion Document March 2012*, mentions that South Africa must do the same (ANC,

2012: 4). Indeed, Evans (2010: 37) contends that history and development theory support the proposition that “no developmental state, no development”.

The concept of a developmental state in a democratic South Africa is informed by local realities such as popular democracy; social inclusion; economic restructuring for mass participation by the majority; improving health care, housing and education; business growth; job creation; poverty eradication; public service delivery; social protection; pro-poor growth; and sustainable livelihoods (Akoojee, 2010; Chang, 2010; Edigheji, 2006).

From an education perspective, the idea of a developmental state locates TVET colleges at the centre of the developmental matrix. Akoojee (2010: 261) asserts that skills development is contestably crucial to debates regarding the effectiveness of a development state. He goes on to mention that in the light of historical skills shortages in South Africa, implementation of skills development programmes has the potential to either advance or retard development efforts. The issue of skills development is crucially related to the history of past injustices and is a means to respond to the current globalised economic order (Akoojee, 2010: 261).

It is in this context that the DHET's *Green Paper for Post-School Education and Training* (2012) aligns the imperatives of the post-school education and training system to the overall goals of the government's national development agenda. This is aimed at aligning the TVET college sector to the national policy discourse and ensuring that colleges make a meaningful contribution to addressing the development needs of the country. This thinking is in sync with the *National Development Plan 2030* vision of an education system that will “play a greater role in building an inclusive society, providing equal opportunities and helping all South Africans to realise their full potential, in particular those previously disadvantaged by apartheid policies, namely, black people, women and people with disabilities” (NPC, 2012: 296).

The *New Growth Path* (2010: 28) comments on the notion of a “developmental state” within the lens of three critical issues - the role of the state, the market and key market players, and social mobilisation and dialogue. It makes the point that through careful alliances, clear purpose and leveraging resource and regulatory capacity, the state can align market outcomes with development needs. However, it identifies that innovative solutions and broad public support are needed for transformation towards a more equitable, decent work-generating and green economy.

2. PURPOSE OF TVET: A COMPARATIVE ANALYSIS

Conceptualising the role or purpose of TVET, needs an understanding of TVET history and its theoretical underpinnings. Historically, formal TVET has been closely tied to the process of industrialization and economic development, and therefore TVET policies have often been dominated by an economic and equity perspectives (UNESCO, 2012). The evolution of TVET systems and transformation over the years has been based on perceived role of TVET in relation to human development (Tikly, 2013).

This section firstly presents a theoretical discussion of the purpose of a TVET system in general and then offers comparative examples out of the empirical literature on how other developmental states have used the theoretical underpinnings to develop their TVET policies.

2.1. Purpose of TVET: A theoretical discussion

2.1.1. Purpose of TVET from a human capital approach

The human capital approach has its roots in the industrial revolution and the philosophy of 'productivism' (Anderson, 2009). According to this approach, TVET was perceived to have a fundamentally instrumental function in providing the necessary human capital required by industry (Tikly, 2013:5). Development finance institutions such as the World Bank have been advocating for policies to promote TVET that were principally seen as an investment in human capital and as a means for supporting economic growth.

Proponents of this approach contend that the purpose of the TVET system should be mainly economic productivity, and that the system should be focused on skills development for employability by preparing graduates more directly to meet labour force requirements (see Fien, Maclean and Park, 2008; Tikly, 2013 and Maclean and Pavlova, 2013).

Some of the criticisms of the human capital approach include, among others that it offers a simplistic, narrower and linear understanding of the relationship between skills, employment and economic growth; assumes a 'one size fits all' approach to education and skills; does not adequately consider inequality and marginalisation (Tikly, 2013). However, there has been recent broadening of the human capital approach to include interest in education's role in alleviating poverty and promoting social welfare, including women's welfare, as a basis for promoting growth and human security (Hanushek and Wößmann, 2007; World Bank, 2011; McGrath, 2012 and Tikly, 2013).

UNESCO (2012) offers further clarification by defining human capital TVET provisioning as 'demand-driven', and its curriculum as 'competency-based'. It further emphasises that:

“Competency-based training pays more attention to learners and their ability to master practical tasks and to acquire competences than to the level or type of certification, or the length of training. It is developed in accordance with identified skills needs derived from the workplace” (UNESCO, 2012: 16).

To orient TVET towards skills demands of the economy and the society at large, there should be strong partnerships and collaborations with sectoral organizations, business associations and chambers, employer associations, and other government departments (UNESCO, 2012 and Maclean and Pavlova, 2013).

2.1.2. Purpose of TVET from a sustainable development approach

A key driver for the concept of sustainable development is to develop a human-centred response to globalization that is based on principles of environmental, economic and social sustainability (Tikly, 2013). Competencies in economic literacy, sustainable consumption and managing small enterprises are emphasized in relation to the economic aspects, while using resources wisely and minimizing waste and pollution are considered central to ensuring environmental sustainability (see UNESCO, 2004; Fien and Wilson, 2005; Maclean, 2010 and Tikly, 2013).

The sustainable development approach emphasises the purpose of TVET as the provision of skills to support economic, social and environmental sustainability. Thus TVET's role is the preparation of learners for sustainable livelihoods (Tikly, 2013: 15). Just like the human capital approach, proponents of the sustainable development approach (especially UNESCO), have broadened the concept to include lifelong learning; sustainable economies in the context of the information age and the knowledge economy; education for all; and education for human security (Paris, 2001; Alkire, 2003; UNESCO, 2004 & 2005; Hughes, 2005 and Tikly, 2013).

According to UNESCO (2012) TVET can help to overcome disadvantages, achieving social as well as economic goals. It suggests that this can be done through adapting TVET teaching and learning so that it has a positive impact on social inclusion, social cohesion, health and well-being. This also includes the development of skills for cultural industries which can respect and value indigenous knowledge and support sustainable livelihoods. To

achieve this, there has to be strong linkages between TVET policies and social policies to ensure efficiency and avoid duplication and gaps in policy and service delivery (UNESCO, 2012: 17).

According to Tikly (2013: 17), one key disadvantage of this approach is that “the concept of sustainable development is rather vague ... it appears to be all things to all people, and is therefore difficult to pin down and to quantify”. King (2009) analysed the debate between making TVET more capital or sustainable development oriented and noted that “there are tensions between the idea of TVET for sustainability, and creating the wider macroeconomic conditions of growth under which TVET itself can become sustainable in the current global financial context in which TVET remains underfunded”. UNESCO (2012) further argues that the purpose of TVET can determine the financing options, as stakeholders look at incentives and expected benefits for them.

McGrath (2012), quoting Giddens (1994), argued that the current TVET system is located within a view that is narrowly economic and productivist. McGrath (2012: 625) then further argued for a TVET system that is located within the ‘broader development vision’, with special emphasis on improving the understanding of the TVET-development relationship.

2.1.3. Purpose of TVET from a human capability and social justice approach

Unlike the human capital and sustainability approaches which have been empirically tested over the years, the human capital approach is still in its infancy¹, though it builds on and extends the existing two approaches. The human capital approach is based on the assumption that the realization of human capabilities and well-being, rather than the pursuit of wealth, underpins development (see Sen, 1999 and 2009; Nussbaum, 2000 and 2006; and Tikly, 2013).

According to Tikly (2013), this new approach was developed in response to the realisation of the new challenges facing the global economy in general and TVET in particular, namely: an increasing skills gap within and between countries as an aspect of globalization, and a growing recognition of different forms of marginalization based for example on social class, rurality, gender and ethnicity.

¹ However, it has already achieved a degree of influence, for example through Sen’s contribution to the United Nations Human Development Index.

A capability approach allows for an expanded view of the purpose of TVET as supporting the development of human capabilities and functions which individuals, communities and society at large have reason to value (Tikly, 2013: 23). From this definition, it is suggested that there is no single purpose for TVET as the range of capabilities that individuals have reason to value and that make up an individual's capability set will depend on need and circumstance. Thus, the way that the purpose of TVET is defined at an institutional and societal level must rest on an aggregated evaluation of the needs of different individuals and groups. This means that the purpose of TVET will inevitably embrace a range of economic, social and cultural objectives depending on context (Tikly, 2013).

The human capability approach allows for the reconceptualization of the TVET sector, as it opens debate for bringing in divergent but important aspects such as how to bring in different forms of knowledge (including indigenous knowledge) to address contemporary issues (UNESCO, 2005) and lifelong learning with its associated issues such as different modes and levels of education (Tikly, 2013). Tikly (2013) further argues that the capability approach requires that the education system (from primary to higher education) be looked at holistically, rather than looking at sectors (such as TVET) discretely.

2.1.4. Purpose of TVET from the economic, equity and transformative lenses

Just like the human capability approach, the economic, equity and transformative (EET) approach is fairly new and has not been fully tested empirically. The other similarity is that both seem to not only encompass the human capital and sustainable development approaches, but broaden the TVET purpose to other socio-economic and local complexities of regions and societies. Furthermore, the EET was developed in response to the current challenges of chronic unemployment and underemployment (especially among the youth); rapid changes in the labour markets; an increased demand for more opportunities for education and training by young people and adults; and poor articulation of TVET to either labour market demands, higher education or contribution to socio-economic development (UNESCO, 2012).

Unlike the human capability approach which is mainly theoretical, the EET approach has a huge policy orientation. The EET is mainly aimed at how TVET policies and the entire TVET system could be transformed into “building skills for work and life”² (UNESCO, 2012). At face value, this definition suggests a combination of both the human capital and sustainability

² The title of the Main Working Document is “Transforming Technical and Vocational Education and Training: ***Building skills for work and life***”.

approaches. However, both the work and life elements could be broadened to come up with a TVET system that is “more integrated and development-sensitive...which takes into account a range of country-specific situations” (UNESCO, 2012:5-6). Thus the main purpose of the TVET system becomes the contribution to the wider development priorities of the country or society (UNESCO, 2012: 6).

The broad developmental priorities are summarised into economic, equity and transformative as per UNESCO (2012) main discussion paper for the Shanghai Conference:

- i. The **economic lens** looks at the efficiency and effectiveness with which TVET supports favourable outcomes for learners in the world of work, and the extent to which TVET can meet labour market demands for skills. It is argued that for the TVET system to meet its economic objective, it should be (a) accountable to key stakeholders; (b) responsive to local, national and global labour markets and (c) attractive to prospective learners, their communities and employers.
- ii. The **equity lens** focuses on how to make TVET accessible to all, especially previously marginalised groups such as females and the disabled. The policy implication is that the TVET system needs to be capacitated to meet the challenges of advancing access, equity and inclusion in TVET learning (formal, non-formal and informal), whether in structured programmes, in the world of work or in everyday life (equity in both access and outcomes).
- iii. The **transformative lens** looks at how TVET systems can be strengthened to include lifelong learning and other sustainable development issues (see TVET for sustainable development above). The policy options are to transform the TVET system in such a way that it will be able to (a) meet the needs of future labour markets and future generations and (b) support innovation and the development of green and sustainable economies and societies. Thus the TVET system should be aimed at and structured in such a way that it will be responsive to contextual factors and long-term development trends.

2.1.5 Purpose of TVET from the Perspective of the White Paper

Admittedly, the overriding emphasis of the White Paper (2014) on the purpose of the TVET college sector within the post-school education and training system is “to prepare workers for the labour market, or to enable individuals to earn sustainable livelihoods through self-employment or establishing a company or cooperative” (DHET, 2014: 13).

A similar narrative is peppered throughout the White Paper (2014). For example, it mentions that “The main purpose of these [TVET] colleges is to train young school leavers, providing

them with the skills, knowledge and attitudes necessary for employment in the labour market. They primarily provide training for the mid-level skills required to develop the South African economy, and tend to concentrate on occupations in the engineering and construction industries, tourism and hospitality, and general business and management studies.

The White Paper (2014) goes on to state that “Since the main purpose of TVET colleges is to prepare students for the workplace and/or self-employment, it is essential that they develop and maintain close working relationships with employers in their areas of study. Close partnerships between colleges and employers will assist the colleges to locate opportunities for work-integrated learning and help them to place students when they complete their qualifications”.

Although this discourse may resonate with what McGrath (2012), quoting Giddens (1994), argue as a narrowly economic and productivist approach to the TVET system, the White Paper (2014) does make specific reference to a ‘broader development vision’ of purpose. It mentions that the education and training system “should not only provide knowledge and skills required by the economy, it should also contribute to developing thinking citizens, who can function effectively, creatively and ethically as part of a democratic society. They should have an understanding of their society and be able to participate fully in its political, social and cultural life” (DHET, 2014).

In addition, a new institutional type, community college, is conceived to cater mainly for youth and adults who did not complete their schooling or who never attended school and thus do not qualify to study at TVET colleges and universities. These community colleges are expected to build on the strengths of the non-formal sector – particularly its community responsiveness and its focus on citizen and social education – in order to strengthen and expand popular citizen and community education. The colleges must build on the experiences and traditions of community and people’s education developed by non-formal, community-based and non-governmental organisations over many decades (DHET, 2014)

The community colleges are expected to facilitate a cycle of lifelong learning in communities by enabling the development of skills (including literacy, numeracy and vocational skills) to enhance personal, social, family and employment experiences. They will also seek to assist community organisations and institutions, local government, individuals and local businesses to work together to develop their communities by building on existing knowledge and skills. The focus on “community” implies that these colleges are located within communities, and that they will contribute to local needs and local development, building social agency and social cohesion. Links to communities will take several forms, including building relationships

with NGOs, CBOs, local government, and the local economy and labour markets (DHET, 2014).

In summary, it can be noted that main challenge faced by many nations today is “too few young people and adults are currently able to develop the skills, knowledge and attitudes they need for today’s changing world of work” and this is against the fact that “TVET provision is poorly articulated with labour market demands and TVET is not contributing towards socio-economic development needs as much as expected” (UNESCO, 2012: 5). Critics have also argued for the need for skills training to be much more closely integrated into an overall skills development and growth strategy, including different areas of economic and social policy and straddling government departments (Green et al., 2007; Tikly et al., 2003).

A further driver for the new emphasis on skills has been the growing recognition of the informal sector for supporting livelihoods and growth (Adams, 2011; King and Martin, 2002, for example).

The next section looks at how countries have developed and implemented their TVET policies in line with the broad purposes discussed above.

2.2. Comparative analysis of developmentally-oriented TVET systems

The TVET sector differs across countries in terms of its nature, size and mission. In Scandinavia, Germany and Netherlands, colleges (referred to as vocational schools) are similar to those in South Africa in servicing full-time students. In the UK, colleges are filled with full-time and part-time students whose ages range from 14 years to well past retirement. In the United States “community colleges” play a major role in providing access to higher education. In Canada, “community colleges” differ as to whether they reflect a more US or UK model according to the state in which they are located. In Japan, technical colleges, along with upper secondary vocational schools service full-time students. In Hong Kong, the TVET sector is largely based in private sector colleges with some provision in government-funded technical colleges for young people struggling to find jobs. The Technical and Vocational Education (TAFE) sector in Australia underwent marketisation in the 1990s with colleges reconstituted as largely autonomous enterprises competing with each other for learners and funding in the open market (Cosser, McGrath, Badroodien & Maja; 2003: 6).

In some countries TVET is part of compulsory schooling with young people being divided between academic and vocational schools as early as the age of 12 years. In other

countries, the vocational education pathway begins after compulsory schooling and takes place in colleges dedicated to full-time students. There are also countries whose colleges provide both academic and vocational programmes for both young people and adults. These differences reflect the way in which TVET is shaped by, embedded in, and contributes to national cultures (Cosser et al., 2003: 2).

For example, the Asian countries' experiences and outcomes of TVET are mixed. There is Japan, Korea, Taiwan and Singapore whose TVET systems are considered well established and very successful in contributing to their countries' economic development (ADB, 2004 & 2008; Cantor, 1985; Lewis, 2009). As Ul-Haq and Haq (1998) argued in the Human Development Report in South Asia 1998:

[v]ocational and technical education is a passport to better employment opportunities. This is the experience of Japan [and] the East Asian industrializing tigers where unemployment rates have remained consistently low, both because their populations possessed employable technical skills and because of the high economic growth rates that these skilled populations engineered (p. 96)³.

2.2.1. *India*

According to Agrawal (2013:20), VET programs in India have gained much greater attention in the past few years, and have been included in the main policy agenda of the government, with corresponding increases in fiscal funding. India's VET programmes are aimed at "creating employment opportunities and imparting suitable skills for self-employment, particularly in the rural and unorganized sectors". Recent employment and unemployment surveys show about 2 per cent of the population (aged 15-29 years) are reported to have received formal vocational training and another 8 per cent are reported to have received non-formal vocational training; and by 2006 the capacity in the VET programs was 3.1 million students per year. The government has set a target of up-skilling 500 million people by 2022 (Agrawal, 2013: 20).

Some of the challenges facing the Indian TVET system include lack of employment for the graduates (ILO, 2003 and Agrawal, 2012). For example, a World Bank (2008) report finds that 60 per cent of all graduates remained unemployed even three years after completion of a course. The report also found that public training institutes were not able to fulfil their role in producing skills for the informal sector. Other challenges in the system include: quality and

³ Quoted from Agrawal (2013).

financing of the system, an ineffective funding model, strong mismatch between demand and supply side factors, and lack of match between labour market needs and vocational courses. In response, the Indian government is currently taking initiatives aimed at encouraging private partnerships (mainly aimed at making the system more responsive to the need of the labour market), the upgrading of training institutions into centres of excellence through the World Bank's assistance and skills development initiative scheme (Agrawal, 2012 and 2013).

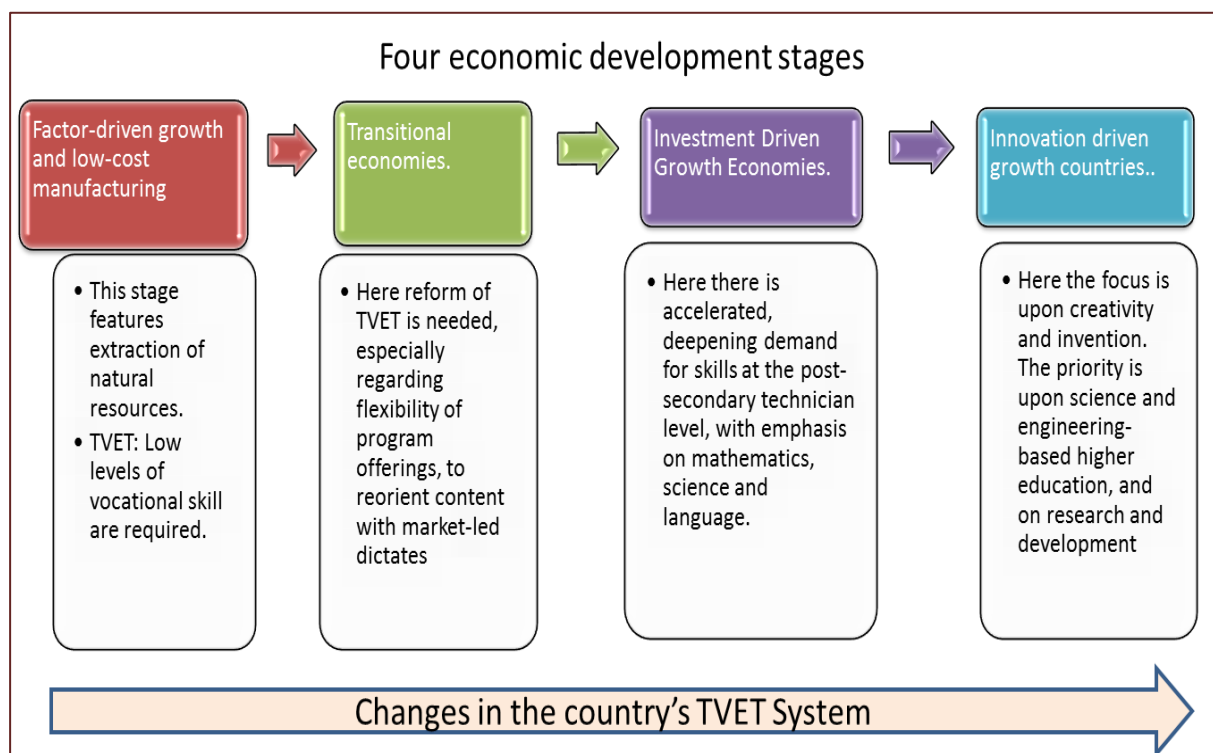
2.2.2. Korea

Korea and Taiwan are some of the few developing countries that successfully relied upon state-funded specialised vocational education in secondary schools in their early period of industrialisation (Asian Development Bank, 2008; Lewis, 2009). Korea, for example, introduced TVET at a massive scale in secondary and post-secondary schools which paid off, making sure that industry got the workers they needed (Lewis, 2009: 561). However, as the economic environment changed from industrialisation to being more knowledge driven, formal vocational education in schools has declined (Lewis, 2009: 560 and Jeong, 1999). The Korean government responded to the decline by reforming the sector: they created "new forms of vocationalism that were consistent with new forms of work, with increasing focus on knowledge and life-long learning, and the skills needed by technical workers" (Lewis, 2009: 561).

The success of the Korean TVET system is credited to a thorough curriculum, strong school–industry cooperation including internships, industry-based training for faculty members, education for mid-career industry employees, joint college/industry research programmes, information exchange, the active work of industry/college cooperation committees, and curriculum development at the industries' request. As a result, college graduates are highly valued with the employment rate of college graduates estimated at 18.1 to 21.5 per cent higher than that of four-year University graduates (Korean Council for College Education, 2005:41). Out of 329 higher education institutions in the Republic of Korea, 158 are colleges (of which 6 are national, 9 public and 143 private). Of the 80 per cent of high school graduates who pursued further studies, 45 per cent enrolled in colleges (Goodman, Hatakenaka & Kim; 2009).

Based on the Korean example, the Asian Development Bank (2008) offered a typology that correlates the type of TVET needed by a country with its stage of economic development as illustrated below.

Figure 1: Typology of TVET that correlates with stage of economic development



Source: UCS illustration from Asian Development Bank (2008) and Lewis (2009).

According to Lewis (2009), the above illustrated typology can help developing countries to structure their TVET systems in line with each stage of their economic developmental stages.

2.2.3. Singapore

Singapore's TVET system is described as a 'world-class model' (Seng, 2008 and Agrawal, 2013). The system has evolved over the years from secondary school based vocational education to post-secondary fully fledged top-line educational colleges on one hand and on the other, from serving the needs of the factor driven economy to current status of serving the needs of globalised and diversified economy⁴.

The Singapore post-secondary education landscape consists of Junior Colleges; Polytechnics and Institutes of Technical Education (ITE), which enrol a combined total of around 90% of the graduates from the ten year general education; and universities. The Junior Colleges provide an academic high school education for the top 25% of a school

⁴ See Seng (2008) and Mun (2008) for a comprehensive overview on role of vocational education in economic development of Singapore.

cohort for a university education; the next 40% of school leavers enter the Polytechnics for a wide range of practical-oriented three-year Diploma courses in preparation for middle-level professions and management; and the lower 25% of a school cohort, in terms of academic abilities, are oriented towards vocational technical education in ITE Colleges. In the South African case, the Junior Colleges are equivalent to the National Senior Certificate (Matric) while the combination of Polytechnics and Colleges of ITE would be the current TVET sector. However, in the Singapore example, the technical and polytechnic education in the country is not just as a terminal, industry-ready exit qualification but it is also seen as a viable alternative to a junior college education for progression to the university (Seng, 2008 and Agrawal, 2013).

According to Agrawal (2013) many students and their parents choose to enrol in a polytechnic because they prefer a practice-oriented education to an academic one at a junior college. Others choose polytechnic education because of the wide range of programs and courses offered in these institutes which lead directly to employment opportunities. Employers on the other hand, prefer high and semi-technical skills from technical and polytechnic education. For example, the employment rate of the graduates has been consistently high and was at 90 per cent in 2005 (Seng, 2008). It is remarked that education through polytechnics has been the 'backbone' of Singapore's industrialization (Agrawal, 2013: 23). According to Mun (2008), both the technical and polytechnic system have a very clear mission: *to train and produce technologists and middle level professionals to support the economic, social and technological development of the country* (Mun, 2008: 136-139).

Just like the Korean experience, the success of the Singapore system has been anchored on how to transform the TVET system to the various phases of economic development.

“As the economy restructured and moved from labour intensive to capital intensive, and then to knowledge intensive, the VTE system responded to ensure that the workforce had the relevant knowledge, skills, and values. The educational and training systems were reviewed, upgraded, and remodelled to stay relevant and responsive to the needs of school leavers, industry, and community” (Seng, 2008: 132-133).

The mission of the ITE is:

“To create opportunities for school leavers and adult learners to acquire skills, knowledge and values for lifelong learning” (Seng, 2007:12).

2.2.4. Malaysia

TVET in Malaysia can be traced back to the late 1890s when trade schools were being considered to prepare local youths to work as mechanics and fitters on the national railways (Leong, 2011: 4). This was later expanded in the 1920s with the introduction of agricultural schools and training facilities; the establishment of trades schools which trained mechanics, fitters, machine workers and other technicians (Ahmad, 2003; Loh, 1975); and the expansion of these schools throughout the country (including Singapore which was part of Malaysia at that time) whose focus was the preparation of apprentices as artisans in trades such as mechanics, plumbers, fitters, electricians and blacksmiths (Leong, 2011: 4). The main purpose of the TVET sector throughout these early years was to meet the needs of the country's industry (Leong, 2011: 4).

The review of the Malaysian TVET system started in the 1950s after the gained her independence. The policy reviews and restructuring lead to the streamlining the TVET offering into three main streams as shown in the table below. The Malaysian government recently established community colleges.

Table 2: Main Streams of the Education and Training System in Malaysia

Stream or Pathway	Institutions	Workforce Preparation
1. Higher education	Universities and other institutions of higher learning, both public and private	Professional and managerial personnel such as engineers, architects, and surveyors.
2. Technical and vocational education	Polytechnics, technical colleges and (more recently) community colleges	Supervisory personnel such as technical assistants and supervisors.
3. Vocational skills training	Skills training institutions, public and private	Skilled and semi-skilled workers.

Source: Leong (2011:4) and Ahmad (2003:6)

Just as in the South African TVET sector, the Malaysian TVET sector has been facing the following challenges: societal stigma and perception that TVET is a career choice for the less academically-qualified and caters for school drop-outs; multiplicity of provision, certification, standards and curricula; employer perception that programmes are largely supply-driven, not matching training to available jobs; weak monitoring and evaluation; and weaker funding structures, which cannot fully support quality and performance of TVET providers (Leong, 2011: 9).

As a way of solving some of these challenges, the Malaysian government raised the profile of the sector through re-branding; rationalised the TVET framework and structures by creating a new governance structure; created and strengthened links with industry and articulated the professional pathways among other initiatives.

Lastly, the role of the TVET sector to the country was broadened over the years to the current purpose of 'supporting the country's economic development' (Leong, 2011: 7). TVET is considered to play a pivotal role in providing the skilled workforce required for the country's economic transformation: from a middle income into a high income and developed economy by 2020 (Leong, 2011).

2.2.5. *Germany*

According to Winch (2006), the much-cited German Dual System is a best example of vocationalism that thrives in secondary and post-secondary settings. Winch (1998) argues that vocationalism in Germany is linked with liberal education and grounded in holistic notions of progress that are traceable to the thought of Freidrich List. According to Winch (1998: 369) at the core of List's conception of a political economy was the notion of "Productive Powers", that is "all the means by which a nation generates, preserves and develops its ability to produce". The economy cannot be understood as a separate entity from the law, morals, religion and the state (Winch, 1998). They all affect it profoundly as well as being affected by it. German vocationalism therefore, has a strong civic dimension. Thus more than technical competences, skills confer on the holder a special badge of citizenship. In other words, German vocationalism is interested in the whole person. Central to this idea was the notion of 'learning to learn': "through the development of key faculties individuals are enabled to acquire knowledge throughout life" (Benner, 2003: 180).

2.3. **Conclusion**

This section presented some of the major theories on the purpose of the TVET system to development. It argued that though most TVET systems were built around the notion of industrialisation, economic development or productivism, the current challenges call for a broader purpose. An analysis of the TVET system, especially in those countries where the systems are working, revealed that purposes on the TVET systems have been reformed in line with the phases of economic development. Based on the Asian experience (Korea, Singapore, and Taiwan), it can be concluded that the basis for success with vocational education is that each stage of development requires a TVET approach that prepares the country for the next stage of its development. Furthermore, to increase returns on investment, demand-driven approaches to vocationalisation need to be developed that are relevant to the stage of economic development, the type of the economy and regional specificities.

It is important to note that though the TVET systems reviewed in this section are working well in their respective countries, a TVET system that works well in Singapore may not work as well in South Africa. Goodline (2010) explained how China customised and implemented the Singapore Model: “All key implementing staff ... went to Singapore to study and adapt the approach to China’s new system” (2010: 253). The MTC Institute (2010: 2) highlighted that since each country and economic situation is different, it is important to search, identify, define, and apply what can be considered the basic principles of an effective TVET system. The MTC Institute report further listed the top six (6) principles inherent in a successful TVET system as:

- Relevance to the labour market (one that meets employer’s needs and expectations),
- Access for trainees,
- Quality of delivery,
- Standardization,
- Inclusion of soft skills, and
- Secure and uninterrupted funding for the system.

3. SOUTH AFRICAN DEVELOPMENTAL CHALLENGES

There are a multitude of developmental state challenges confronting South Africa in the 3rd decade of democracy with concomitant implications for the PSET system generally and the TVET sector, in particular. These challenges are inextricably intertwined and cannot be explained in isolation.

There is general consensus that the TVET college sector is not meeting the needs of the economy and society as a whole (NPC, 2012; EED, 2011, HRDC, 2010 and DHET, 2012). The NPC (2012: 50) candidly asserts that the Further Education and Training (FET) sector is not effective. It is too small and the quality of output is poor. According to *The Green Paper* (DHET, 2012: x), “although many advances and gains have been made since 1994, the sector continues to produce and reproduce gender, class, racial and other inequalities regarding access to educational opportunities and success”.

We have identified triple major challenges bedevilling the post-apartheid state that the TVET sector should, as part of a broader constellation of post-school institutions, fundamentally address to remain relevant to its developmental mandate, as articulated in a number of government policy documents.

3.1. Unemployment

South Africa is faced with chronic unemployment. The official unemployment rate increased from 23.2% in 2008, during the financial crisis, to a high of 25.7% in 2011 in the post-crisis period (StatsSA, 2008; 2011). Unemployment flat-lined to 24.7% in the 3rd quarter of 2013. In 2008, 4.2 million people were actively looking for employment and were available to work. In a period of close to six years the number grew by 389 000 to 4.6 million in the 3rd quarter of 2013 (StatsSA, 2013).

A disturbing revelation is that 3.3 million of the 10.4 million youth aged 15–24 years are not in employment, education or training (NEETs), which translates to a NEETs unemployment rate of 31.4% (StatsSA, 2013). The NPC (2012: 320) contends that 65% of college students are unable to find work experience (let alone find jobs). On average, 400 000 young people do not proceed with their studies after Grade 12 exams every year. This pool of young people joins the unemployed and swells the ranks of structural unemployment (Cosatu, 2012: 9).

There is much evidence that the ability of individuals to find jobs corresponding with their educational qualifications, irrespective of circumstances, is crucial for economic mobility and reductions in inequality (NPC, 2012; Cosatu, 2012; StatsSA, 2013). This is especially true in

South Africa, with its chronically high unemployment rates. In a study of *Graduate Unemployment in South Africa: a much exaggerated problem*, the Centre for Enterprise Development (2013: 1) found that unemployment increases progressively as one goes down the educational scale. Any post-school qualification increases one's job prospects:

- Just below 5% of people with university degrees are unemployed.
- Unemployment is about 16% for people with non-degree tertiary education.
- About 29% of Grade 12 graduates are unemployed.
- For those with fewer than 12 years schooling, 42% are unemployed.

On average, 400 000 young people do not proceed with their studies after writing matriculation exams every year (Cosatu, 2012). This pool of young people joins the unemployed and swells the ranks of structural unemployment, which takes the form of discouraged work-seekers. With 72% of the unemployed being young people, it makes sense that 95% do not have tertiary education because of the limited capacity of the PSET sector to absorb them. Cosatu (2012: 9), taking a different track, believes it is an exaggeration to say that the problem of youth unemployment is brought about by the mismatch between the education system and the labour market. Without at all minimising the existence of this mismatch, the fact that 60% of the unemployed have no secondary education to begin with, indicates that the problem is far more structural and deeper than suggested by the mismatch theorists.

Given its high unemployment rates, it is not surprising that South Africa does much worse on labour market opportunities than other middle-income countries. It is still interesting and telling, however, that the country's relative performance is explained not only by too few jobs, but also by the inequality that persists between race groups in their access to these few jobs. According to the 3rd Quarterly Labour Force Survey (2013) the African unemployment rate is 29.1%, Coloureds 24.2%, Indians 10.8% and Whites 6.6%. The unemployment situation is especially acute for African youth in townships, informal settlements and rural areas (StatsSA, 2013; DHET, 2012; NPC, 2012).

In view of the above, the TVET College sector has a contributory role to play in addressing the unemployment problem as part of a wider multi-pronged strategy. This should likely involve providing a range of education and training programmes across different institutional types for the unemployed, underemployed and discouraged youth and adult population on a

massive scale. The sector should also create access to learning, as part of the decent work agenda, for workers in the informal sector and “casuals” in the formal sector which in most instances takes the form of “disguised unemployment”. Besides addressing unemployment, the TVET College sector should support job creation initiatives such as Expanded Public Works Programmes (EPWP) and the yet to be implemented Strategic Integrated Projects (SIPs). Finally, the TVET college sector should play an active role in government’s job retention programmes such as the Training Layoff Scheme. In this way it begins to address the key developmental challenge of reducing unemployment in South Africa.

3.2. Inequality

The NPC (2012) states that deep poverty levels, inequitable income distribution, lack of basic services and poor education and skills were distortions of apartheid effectively denying the Black majority from participating in the mainstream economy. The Green Paper (2012: 7) asserts that the legacy of apartheid and colonialism continues to bedevil the education and training system producing and reproducing gender, class, racial and other inequalities of access to educational opportunities and success. According to the New Growth Path (EDD, 2011) the economy has not created sufficient employment opportunities over the past three decades. Creating more and better jobs must therefore lie at the heart of any strategy to fight poverty, reduce inequalities and address rural underdevelopment.

According to The World Bank (2012), South Africa stands as one of the most unequal countries in the world. The top quintile⁵ of the population accounts for 58% of the country’s income, while the bottom quintile accounts for 0.5 % and the bottom half less than 8%. In examining patterns of income inequality, StatsSA (2010) states that the top 5% earners take 30 times what the bottom 5% earners take. White people earn on average eight (8) times what Africans earn. It is estimated that an African male earns an average of R2 400 while a white male earns R19 000. This would mean that at the least, given an eight hour working day, whites earn in one hour what Africans earn in a day. An estimated 81% of Africans earns less than R6 000, whilst 56% of whites earn more than R6 000 (StatSA, 2010).

Cosatu (2012:3) mentions that 60% of the formally employed workforce earn less than R3 000 per month, alluding to the problem of the “working poor”.

Currently, in the 18 to 24 years cohort, 44.2% of Africans, 41.3% of Coloureds, 30.7% of Indians and 14.8% of Whites are not attending a post-school institution. This ensures that all

⁵ A quintile is a statistical value of a data set that represents 20% of a given population. The first quartile represents the lowest fifth of the data (1-20%); the second quartile represents the second fifth (21% - 40%) etc.

race groups, with the exception of Whites, remain disadvantaged in terms of attending institutions and securing employment (StatsSA, 2013).

From the above, it is evident that the TVET College sector has an important role to play in eradicating the inequalities that are afflicting society. The key challenge is widening access to quality learning opportunities to Black race groups and prevent them from being consigned to the NEETs category.

3.3. Poverty

The root cause of poverty is the apartheid machinations, which denied the Blacks the franchise, basic services and access to participate meaningfully in the economy. This limited Blacks from developing education and skills and therefore labour market participation. It has kept them trapped in a continuous cycle of poverty which continues to this day.

There is no official poverty line for South Africa. Yet, based on measures that are sensitive to household size, one study found that 57% of individuals in South Africa were living below the income poverty line in 2001, and this remained unchanged from 1996 (Cosatu, 2012).

At the heart of poverty in South Africa is the inability of the economy to create employment opportunities on a large scale. Unemployment stands at 25.2% (33% including “discouraged” workers), among the world’s highest (StatsSA, 2013).

According to the World Bank (2012), despite the almost 30% increase in per capita GDP since the late 1990s, reduction in poverty has been modest at best. This would have been untenable without the growing social assistance grants. The non-contributory and means-tested (except for foster care) financial transfers from the national budget account for more than 70% of the income of the bottom quintile (up from 15% in 1993 and 29% in 2000). Without the grants as part of income, those below the 40th percentile have seen a significant decline in their income. In other words, without the grants two-fifths of the population would have seen its income decline in the first decade after apartheid. Even after accounting for the equalising role of social assistance, income inequality remains extraordinarily high.

To reduce it to more reasonable levels over the long run, social assistance is clearly not enough and needs to be complemented by other initiatives. These would include a special focus on education and training, particularly for children and youth. According to the *World Economic Forum Global Competitiveness Index 2013-2014*, South Africa’s social sustainability is undermined by high income inequality, low growth rates and youth unemployment. In addition, the country has not yet achieved universal access to sanitation.

South Africa's score on the Human Development Index which measures and ranks countries on life expectancy at birth, mean years of schooling, expected years of schooling and gross national income per capita was 0.629 in 2012 compared to 0.621 in 1990.

The National Treasury (2011: 11), states in the policy document '*Confronting youth unemployment: policy options for South Africa*', that high youth unemployment is inhibiting the country's economic and social development and imposing a larger burden on the state to provide social assistance. Treasury views the TVET college sector as one aspect of a multi-pronged strategy to reduce youth unemployment by absorbing large numbers of youth into programmes to plug the chronic skills shortages for immediate skills and absorb youth into the formal labour market (National Treasury, 2011: 58).

From the above, it is evident that the TVET college sector has a contributory role to play in overcoming poverty as part of a multi-pronged strategy of the state. This should involve creating access to education and training for the poor, working poor, under-employed and poverty-stricken communities, especially in rural areas through a range of institutional types and programmes. TVET colleges should work actively with micro-enterprises in the informal economy and build institutional strengths in serving local communities. A key part of this pro-poor agenda is to develop employability and self-employment skills to enable the poor to access the labour market and mainstream economy. Special attention should be given to the needs of women due to their socio-economic status and the high concentration of poverty among them.

From the above analysis, the TVET sector is required to play a transformative and developmental role in addressing the triple problems of unemployment, inequality and poverty. For a start it requires a well-managed and effective TVET college system with sufficient human resource capacity that is capable of delivering consistently high quality education and education services, while prioritising the nation's developmental objectives. It also requires partnerships between TVET colleges and social partners, such as business, organised labour and community organisations, which implies an outward looking approach for these institutions.

4. CONTESTATIONS AROUND PURPOSE OF TVET IN SOUTH AFRICA

The purpose of a diversified TVET college sector within a differentiated PSET system in a developmental state is a terrain of ideological contestation with stakeholders adopting different positions in the debate. Interestingly, even within the tri-partite alliance there are somewhat different interpretations of what a developmental state is, the extent to which social and economic policies are developmentally-oriented, and the purpose of the TVET sector in a developmental state.

4.1. Economism to Social Transformation

McGrath (2000) is of the view that despite the range of policy pronouncements which talk explicitly to the notion of a developmental state, TVET colleges currently sit firmly within the economic development paradigm which, to all intents and purposes, is a “blowback” from its apartheid historical roots. He contends that even when TVET attempts to address poverty and inequality, it does so within the neo-liberal perspective based on the assumptions that training leads to productivity which, in turn, leads to economic growth (training for growth). The other assumption is that skills lead to employability, which in turn, leads to jobs (skills for jobs).

Many developing countries, including South Africa, remain gridlocked in the role of supplier of skilled labour to industry. Anderson (1991) attributes this to the culture of “productivism” in TVET which appears to be presupposed as a permanent and necessary feature of human existence, regardless of its environmental impact and consequences. Giving precedence to economic interests, “productivism” can subordinate the needs of individual learners to the designs of pure economics, thus reproducing apartheid capitalism in a different form.

The current contestation in South Africa occurs around, on the one hand a belief that colleges should provide broad and foundational learning in preparation for a future occupation, and on the other hand, that TVET should be focused on work preparation and therefore build close linkages with workplaces. For example, the *New Growth Path* (2011), *National Development Plan* (2012) and *The Green Paper* (2012) are couched in the language of a developmental state and their specific reference to the TVET college sector is predominantly about building a strong relationship between colleges and industry for quick absorption into the labour market. It is emphasised that industry should play a significant role in curriculum development and provide opportunities for practical learning (NPC, 2012: 321).

This thinking also sits comfortably with global financial institutions such as the World Bank and the International Monetary Fund (IMF) wherein TVET is principally seen as an investment in human capital and as a means for supporting economic growth. The underlying view of development is an economic one in which “progress” is measured in relation to levels of economic growth and prosperity. The rationale for investing in TVET is in its contribution to economic growth. In this approach gross domestic product (GDP) is understood as the most significant indicator of development (DfID, 2008).

From a Cosatu (2012: 75) perspective, there should be a dialectical understanding that social development is the basis for effective participation in political and economic transformation, and the political and economic transformation should provide the basis for social upliftment of the masses. It therefore becomes clear that the idea that social development interventions produce a “culture of dependency” whilst those interventions that are specifically aimed at addressing economic challenges are “developmental” is misleading. It is from this perspective that we should approach the issue of the purpose of the TVET sector within the South African PSET system.

The idea is not to underplay the economic rationale of TVET provision, but rather to highlight the need for colleges to subscribe to a broader developmental agenda beyond the rigidly narrow economic development approach. Wolpe (1991) is convinced that if this is not amplified sufficiently in the TVET policy discourse, then the designs of a developmental state may take the form of reformed capitalism and unmet demands of the populace.

4.2. Reconceptualising the role of TVET in South Africa

As demonstrated in the preceding section, the purpose of TVET is an area of contestation with strong economic arguments that make a case for TVET to serve wholly economic ends. The role of colleges in economic development also comes out clearly and abundantly in the NDP, NGP and *The Green Paper* (NPC, 2012; EDD, 2011; DHET, 2012).

Lewis (2009) in a paper titled ‘*Reclaiming the high ground in the discourse on vocationalism in developing countries*’ maintains that no where has this hardened stance been more evident and has prevailed more than in the literature on education and economic development, and especially in relation to the desires of developing countries to diversify their school curricula. Here the dominant voices tend to be that of economists, whose rationalism leads them to see the worth of education no differently than they do the worth of tractors or fertiliser.

This polemic is emerging in the current discourse on TVET in South Africa. Magnus et al (2013) states there is a view that the vocationally-oriented NC(V) programmes offered at colleges are not useful, work-focused and flexible, thus leading employers to reject the programme offerings. Returning to the global debate, Lewis (2009) contends that failure of vocational programmes anywhere ought not to be taken as an indictment of vocationalism. In the developing world there is a need to see the educative virtues of vocationalism, and to include these in conceptualisations of the curriculum. This applies equally to South Africa.

Using the much-cited German Dual System as an example, Winch (2006) maintains that vocationalism thrives in secondary and post-secondary settings. Vocational education grew organically as a natural parallel of industrialism and societal progress, and was backed by supportive ideologies. Winch (1998) and Benner (2003) argue that German vocationalism has a strong civic dimension, is interested in the whole person, and includes the development of key faculties, where individuals are enabled to acquire knowledge throughout life. The German social dimension of vocationalism resonates loudly with Cosatu's (2012: 75) social transformation imperatives of developing citizens imbued with a love of their people, their country and humanity, and to honour human brotherhood, liberty and peace.

Sifuna (1992) undertook a review of the African vocationalism experience and found that in Kenya, Tanzania, or Zambia, vocationalisation initiatives that were prompted by post-independence aspirations failed. Failure was a result of high provisioning costs, lack of student interest, mismatch with employer needs, lack of capacity, among other factors.

More recently Palmer (2007) examined Ghanaian attempts to promote skills development in the informal sector of the economy. Palmer found that there is more rhetoric than action with respect to skills policy, and he contends that skills in the informal sector will not lead to livelihoods unless there is an economic strategy that specifically targets the poor. In a similar vein, the ANC in its *Economic Policy Transformation Document (2007)* asserts that black people are caught in a poverty trap, a marginalised second economy, excluded from the mainstream first economy. For the ANC, the most significant vehicle for sharing growth would be to eliminate the second economy. The concept of two economies does not propose the existence of two socio-economic formations in one country, but describes different circumstances in the lives of South Africans (ANC, 2007).

This line of thought is supported by Japan International Cooperation Agency (JICA) which states that the African nations tend to be caught into thinking that TVET is a way to catch up to developed nations by increasing resources allocation to cutting-edge science and

engineering programmes at polytechnic schools. Considering their industry, labour market and economic performance, such policy lacks realism and the course of its progress has not been strategically ascertained with any clarity (Yamada *et al.*, 2007).

Tilak (2002), taking the Asian experience as a backdrop, contends that vocational education is necessary for economic development, and proposes a strong role for governments in the allocation of resources to it. He further contends that it could take place in schools as well as firms. Moreover, he argues for a holistic conception of vocational education that extends beyond the economic, to historical, social, and political contexts of countries. He does not paint all developing countries with the same broad brush. Rather, he argues that each country has to make decisions in keeping with its level of development and demand for skills.

South African policy-makers are mindful of the more urgent, not more important, need to address high unemployment, racial inequalities and poverty in society. Skills programmes such as apprenticeships and learnerships, which can rapidly produce large numbers of skilled black youth, need to take precedence and be scaled up – at least in the short- to medium-term. It could be argued that this is the rationale of policy-makers when they make the case for TVET to respond to the needs of the labour market.

McGrath and Akoojee (2009) also reflect on the South African case in which the post-apartheid government views investment in vocational skills training as a way to bring large numbers of black unemployed workers into the formal workforce as a prelude to the larger goal of full civic participation. In the long-term, however, the concept of educational transformation entails the development of whole, socially conscious, skilled citizens. This will require a re-balancing of the occupational-dualistic dimensions of education and training over a time horizon.

This may explain the prominence given to skilling by the democratic government, their partiality to market dictates on the skill question, and minimisation of more philosophical considerations such as the democratic goal of social equality. At its most basic level, it requires providing the historically dispossessed with the means to find employment.

On a related track, Ashton (2006: 31) contends that following apartheid, the concept of a high skills society offered prospects for a new beginning, but this would maintain the status quo in the labour market - one of polarisation. The economy has not generated sufficient jobs, hence unemployment rates have been high compared to other middle-income economies. Ashton (2006) suggests that South Africa should draw on the “Asian Tiger” experience, by

adopting a low-skills approach that would help alleviate unemployment in the workforce. He writes that a low skill strategy would provide the material basis for building the skills and training capacity of the country, ready for subsequent expansion into highly skilled jobs. By taking large groups of people out of poverty and transforming them into productive workers, resources can be created for improvement of the skills infrastructure” (Ashton, 2006: 31).

McGrath (2012), Walker et al (2009) and Powell (2009), using the South Africa higher education sector in general and the TVET sector in particular, argued that the purpose of TVET should be broader, ‘going far beyond the economic domain’. This includes focus on the human well-being, lifelong learning and supporting learning for multiple purposes. McGrath (2012: 627) suggests that for this approach to work there is need for “dialogue between learners, teachers, professional bodies, clients and other stakeholders”. TVET learners quoted in Powell’s 2012 study revealed that their expectations are broad. These include opportunities to access the labour market (and an opportunity to gain satisfying work in workplaces where they will be respected and where they can make a contribution); access to higher education; and a sustainable livelihood. TVET learners “are concerned with relationships with family members and with members of their community, their spiritual development, their personal dignity and with the social and economic challenges faced by their families and other members of their community” (Powell, 2012: 21).

4.3. Widening Access

According to Akoojee and Nkomo (2010: 1) “equity and access in higher education are critical for achieving both social and economic progress”. The right to access education has been, and remains a powerful claim in South Africa and nowhere is this claim stated more explicitly than in the Freedom Charter (1955) which declares that the “doors of learning and culture shall be opened”. Similar generalised views stem from the people’s education movement with its emphasis, echoing the Freedom Charter, on the right of people to have access to education and training. One of the resolutions of the 1989 National Education Co-ordinating Committee (NECC) Conference was that “higher education and technical training shall be opened to all by means of state allowances and scholarships awarded on the basis of merit” (Wolpe, 1991: 8). In this respect there is no shortage of literature and documents of a range of organisations which emphasise the need for, or right to, education, training and skills acquisition.

There is a tendency to perceive access to education purely in terms as admission to institutions. This is a narrow view of access. Broadly speaking, access refers to entry to different institutional types and programmes, good facilities, employability, positive leaning

environments, RPL, quality teaching and learning, support services, affordable and relevant education and training across the urban-rural, age, gender, racial, and socio-economic class divide (Akoojee and Nkomo, 2007).

As stated above, around 400,000 mainly African youth do not proceed with their studies after writing matriculation exams every year (Cosatu, 2012). This pool of young people joins the 3.3 million unemployed youth swelling the category of unemployment (StatsSA, 2013).

The DHET (2013) aims to expand access to PSET to 1.62 million in universities, 2.5 million in TVET colleges, 1 million in the community education and training centres (CETCs), and 0.5 million in private institutions by 2030. Cosatu's (2012) proposal is to expand the TVET sector to accept 1 million learners per annum by 2014, compared to the current 650,000 per annum.

According to the DHET (2013), delivery in the evolving PSET system will take place through different institutional types such as TVET Colleges, community education and training centres, community learning centres, private providers and registered workplaces. Programmes will include the National Certificate Vocational [NC(V)], apprenticeship and learnership programmes and other occupational programmes as well as shorter courses. Expansion of enrolments will inevitably also require additional campuses, twelve of which will be established in the next two years - that is, by 2015. Later, new colleges will need to be established to allow for the expansion of the sector that is projected to reach 4 million students by 2030.

Cosatu (2012) believes expansion will reduce the size of the youth labour force by extending their stay in the education and training system, so that they acquire basic and high-level cognitive skills. State-owned enterprises, agencies and departments should absorb young people into practical training and provide work experience, especially given the massive infrastructure backlogs and maintenance that has to be done. Likewise the private sector can do the same without being given wage subsidies, but policies must be in place to support industrialisation and agriculture.

Despite progress in ensuring access, there are challenges in terms of quality, physical infrastructure, funding, universal access and affordability arising out of a combination of historical backlogs and a growing demand for provision.

5. TVET PURPOSE IN A DEVELOPMENTAL STATE

5.1. Current context

The TVET college sector in South Africa has strong historical antecedents. The demand for technical education for white youth was an outgrowth of industrial development which occurred in the late 19th century (Smuts, 1937). It was linked to the development of mining, railways, harbours and small engineering workshops in urban centres (Pittendrigh, 1988). The origins of the formation of technical colleges can be traced back to this era, and to this particular framing and vision of technical education (Chisholm, 1992).

A defining feature of the TVET sector until 2006, with the promulgation of the *Further Education and Training Colleges Act 16 of 2006*, was that it reflected a strong general and technical education divide. The focus was mainly on apprenticeship training up to the establishment of SETAs in 2000, when there was a sharp decline in apprenticeships.

The above-mentioned *Act* envisaged a considerably broad role for TVET colleges which includes enabling learners to acquire the necessary knowledge; practical skills and applied vocational and occupational competence; and provide learners with the necessary attributes required for employment, entry to a particular vocation, occupation or trade, or entry into a higher education institution.

This dynamic is reflective of the global divisions of TVET within the United Nations (UN) system whereby UNESCO's focus centred on "education", while the ILO focused on "training" at the workplace, by stressing the concept of decent work and the welfare of workers as the global demand to be satisfied (UNESCO, 2005: 7). International participants at the Second International Congress on Technical and Vocational Training in Seoul, Korea (April, 1999), clearly pointed that UNESCO and the ILO should stop insisting that UNESCO's role is vocational education, while ILO's role is vocational training. In the light of international attention of the need to share collective responsibility for workforce development, the term "training" was included in the UNESCO's programme and terminology when referring to workplace and workforce education (UNESCO-UNEVOC, 2012: 17-18).

Likewise, the enactment of the *FET Act 16 of 2006* represented a similar, but unsuccessful, response to bridge the education-training divide. By offering the National Certificate Vocational [NC(V)] programmes the pendulum swung from pre-2006 technical education to post-2006 vocational education, which essentially is a 3 year programme on a full-time basis.

The mainstreaming of NC(V) programmes was accomplished as a result of considerable state funding support for colleges and students from the onset. The other qualification set which continues to be offered at TVET Colleges is NATED/Report 191 Programmes which provides theoretical foundation for trade apprenticeships. After the introduction of the NC(V), the NATED programmes were gazetted for gradual phase-out. However, due to lack of flexibility and lack of industry support for the NC(V) programmes, the phase-out of the engineering NATED programmes was halted in 2010 (Magnus, 2013).

The NC(V) exclusively and NATED programmes mainly target school-going learners or learners who have not entered the labour market. There is hardly any possibility for employed workers to attend NC(V) programmes since these are delivered on a full-time basis. As a result colleges have become increasingly de-linked from the worlds of skills development and occupational training, and a *cul-de-sac* for learners hoping to progress into higher education (Magnus, 2013).

According to Minister Nzimande (2009), bringing universities, TVET colleges, Community Education and Training Centres (CETCs), SETAs, NGOs and private providers together into a coherent but diverse and differentiated post school learning system provides a powerful basis for addressing the needs of a developmental state within the framework of the Human Resource Development Strategy for South Africa.

5.2. Purpose of the TVET college sector

According to Green Paper for Post-School Education and Training (2012), the purpose of the TVET college sector is located within *“a vision for a single, coherent, differentiated and highly articulated post-school education and training system. This PSET system is supposed to “contribute to overcoming the structural challenges facing our society by expanding access to education and training opportunities and increasing equity, as well as achieving high levels of excellence and innovation” (2012: x).*

An important policy or strategic shift proposed by the Green Paper (2012) is to rename the Further Education and Training (FET) colleges Technical and Vocational Education and Training colleges. According to the Green Paper (2012: 21); the “vision for the public FET colleges is one of vibrant institutions that offer vocational and occupational qualifications, mainly to young people (16 to 24 years old). They will be the primary sites for vocational skills development for artisans and other occupations at a similar level in areas such as engineering, construction, tourism and hospitality, business administration, early childhood education. [The].vision is for colleges to primarily offer two types of qualifications:

- general vocational qualifications [the NC(V)]; and
- more focused occupational programmes in which they will primarily offer the theory components of both trade and non-trade programmes, (including apprenticeships and learnerships) as well as where necessary the practical training component of the particular qualification or award.”

Vocational education is defined as ‘middle level of education which provides *knowledge and skills to enter the economy* while occupational education refers to educational programmes that are focused on *preparation for specific occupations*, as well as ongoing professional development and training in the workplace’ Green Paper (2012: 1). This supposes a TVET system firmly located in the human capital, economism and productivism paradigm. McGrath (2012) argues that this “approach to [T]VET is grounded in an outdated model of development” (2012: 623).

However, the broad visions of the National Development Plan (2012), New Growth Path (2011), Industrial Policy Action Plan 2 (2011) and Human Resource Development Strategy for South Africa 2010-2030 (2009), collectively articulates the need for the TVET college sector to contribute effectively to the national social and economic goals of inclusive growth. The SA Development Report (2011) further notes that the current policy and planning focus of the government is on ‘skills for an inclusive growth path’ as a key goal for the government. “This overarching formulation emphasises the contribution of skills to an all-encompassing economic growth path, in contrast to the economic trajectory over the past decade, which recorded economic growth but failed to narrow inequality or relieve joblessness in the country” (2011: 217). This approach leans towards the sustainable development and economic, equity and transformative approach advanced by UNESCO.

There is therefore a disjuncture between the Green Paper (2012) which does not want TVET colleges to be ‘all things to all possible learners’ and other government policy documents which would want the purpose of TVET sector to be broadened to include national social and economic goals such as economic growth and development, poverty reduction, employment creation, unequal income distribution, sustainable livelihoods, youth development, innovation and industrial advancement by providing high quality education and training programmes in the democratic developmental state.

Thus, the real challenge facing the TVET system in South Africa is to provide access to high quality technical vocational education for all, without losing sight of the TVET’s special relationship with the worlds-of-work (McGrath, 2012: 627). To achieve this, the theoretical

grounding of the South African TVET policy needs to shift from the human capital approach, and broadened to include the human capital approach, human capability and sustainable development approaches. On an operational level, South Africa needs to customise the best practices from the Singapore, Korea and Germany models into a new South African TVET model. This model should take into account the South African economic development phases, social-economic development challenges, and learner and community expectations.

Given the triple challenges of unemployment, inequality and poverty on one hand and the need for colleges to play a significant role in a broader developmental agenda beyond the rigidly narrow economic development approach, the purpose of the TVET colleges sector can be progressively broadened in line with the development trajectory of the country. The proposed purpose (see table below):

- Speaks to overall long-term Mission and Vision for the sector, which is to create opportunities for youth and adults to acquire skills, knowledge and values for lifelong learning.
- Reflects TVET for economic and broader societal and developmental objectives (with the involvement of the Department of Trade and Industry, the Economic Development Department, the National Planning Commission, national business formations, national labour formations).
- Takes cognisance of TVET for local economy (local businesses, provincial and local government, informal sector).
- Emphasises that the immediate focus should be on occupations and the acquisition of mid-level skills.

Table 3: Purpose of the TVET College Sector in the Immediate, Medium to Long-Term

Purpose	Immediate Term (5 years)	Medium Term (5 years)	Long Term (5 years)
Focus	<ul style="list-style-type: none"> • Labour market (formal and informal labour market) 	<ul style="list-style-type: none"> • Labour market (formal and informal labour market) • Community/local needs • (CETC and TVET Colleges) 	Expanded, comprehensive and differentiated colleges
Target Group	<ul style="list-style-type: none"> • Pre-employed • Employed • Unemployed/ Post-employed 	Youths and Adults (both pre-employed and employed and un/post employed)	
Alignment with	DTI (Industrial Policies) EDD (National Dvpt) Local Labour markets	Economic and Community	Responsiveness to the learner (in broadest sense)
Purpose	The main purpose of these colleges is to train young post-school leavers, providing them with the skills (incorporating knowledge and attitudes) necessary for employment (formal)	Youths and adults <i>“building skills for work and life”</i> <i>Main purpose to provide labour market needs and community development</i>	Economic, equity and transformation
Learning Mode	F/T, with P/T provision (WIL crucial)	F/T, with P/T provision (WIL crucial) - <i>Community engagement</i>	Multiple modes – online, e-learning, blended learning

Source: Underhill Corporate Solutions (2014)

Therefore the purpose of a TVET college should be to provide students with technical and vocational education, containing an appropriate balance of theoretical and practical aspects, devised in collaboration with the professional community and education authorities for the following:

- improve graduate access to socially and economically rewarding jobs,
- reduce poverty,
- redress racial income equality,
- promote decent work,
- re-train of retrenched workers,
- inculcate good citizenship,
- encourage entrepreneurship,
- develop small business,

- secure college-to-work transitions for NEETs and dropouts,
- develop skills for the poor, vulnerable, historically disadvantaged and marginalised to sustainable livelihoods.

The development of job-related skills is, therefore, not only part of the TVET college sector's purpose but also employment creation, poverty reduction, socio-economic equality and inclusive economic growth as part of a multi-pronged strategy.

6. CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

The main objective of this paper was to define and properly articulate the purpose of TVET colleges in South Africa using selected international comparisons. The paper uses both theoretical and empirical analysis of the broader purposes of the TVET sector internationally. The analysis found that historically, the TVET sector was built on productivism, which had the following two key assumptions: (i) training leads to productivity, leads to economic growth (training for growth), and (ii) skills lead to employability, lead to jobs (skills for work).

However, the world economies, including South Africa, are faced with numerous socio-economic challenges. These challenges include chronic unemployment and labour market and skills mismatch; increased demand for opportunities for education and training young people and adults. There are calls for an improvement in the relevance of education and training to the world of work and employers' demand for an ever increasing range and level of skills and competences, combining technical and interpersonal skills. Other challenges incorporate the other expectations by governments and other stakeholders for TVET to address multiple social and economic development priorities, from poverty reduction, food security and social cohesion to economic growth and competitiveness.

Researchers and policy makers (especially UNESCO) have realised that there is a need to broaden current TVET provisioning to economic, equity and transformative lenses. This also includes debates on incorporating the notions of sustainable development, lifelong learning and sustainable livelihoods. Empirical literature, which shows high levels of employment among TVET graduates especially in Korea, Taiwan, Singapore and Germany shows that the TVET system is anchored on strong state intervention (developmental state), strong correlation between TVET offering to the country's economic development phase, and building a holistic learner.

This is a model proposed for the South African TVET system, which is also in line with the National Development Plan (2012), New Growth Path (2011), Industrial Policy Action Plan 2 (2011) and Human Resource Development Strategy for South Africa 2010-2030 (2009).

At an operational level, the proposed South African TVET system is a developmentally-driven TVET college sector, consisting of different institutional types in a differentiated PSET system. The sector will be working collaboratively with various social partners, including business, labour, civic formations, rural communities and marginalised groups.

The sector would be offering a diverse range of responsive general (matric to NQF 6), vocational, occupational (learnerships and apprenticeships) and short skills programmes with a strong technical focus, containing an appropriate balance of institution-based and work-integrated learning. This will be done through multiple delivery platforms to grade 9 -12 graduates from formal schools, out-of-school youth (NEETs), unemployed adults and employed workers across the urban-rural and socio-economic divide who want to access education and training for employment, self-employment, social mobility and life-long learning in a supportive institutional environment that is fiscally, administratively, pedagogically sound and responsive to the socio-economic challenges of the developmental state.

The TVET Colleges sector will be capacitated to offer education and training programmes up to NQF 6 to graduates of NCV 4, Grade 12 and other equivalent qualifications who want to achieve higher education and training qualifications. Learners that successfully complete NQF 6 programmes at a TVET college will obtain two years credits towards a nested professional degree that must be completed at an awarding higher education and training institution.

6.2. Recommendations

To accomplish the above purpose, the college sector requires strong leadership, institutional support, performance and accountability frameworks, and funding from the DHET to build internal strengths, establish partnerships, widen access, expand capacities, improve learner and staff performance, develop specialisations and distinctive identities to offer differentiated education and training programmes in various social and economic contexts served by the colleges and their constituent campuses.

The Green Paper (2012) and White Paper (2013) propose the establishment of a South African Institute for Vocational and Continuing Education and Training (SAIVCET) as a key part of a long-term strategy to build institutional capacity. This should not only be applauded, but the government is strongly encouraged to quicken SAIVCET's establishment.

The paper recommends that this institution be established along the same lines of the Malaysian model and Singapore's Institute of Technical Education (ITE). The proposed SAIVCET should be structured in such a way that it has the following units or functions: research and policy, quality assurance (including consistency of standards throughout the colleges), curriculum, examinations, lecturer development, marketing and branding among other key functions.

It is also proposed that board members of SAIVCET should be from government (especially DHET, DTI, EED, DoE), higher education institutions, employers, labour and CBOs. The key staff's immediate task should be study tours to Singapore, Korea, Germany, etc and then developing a customised TVET model for South Africa. SAIVCET should be mandated to develop and implement a 5-Year TVET Sector Development Plan/Strategy.

In the final analysis, to win the public confidence and contribute meaningfully to meeting the goals of a developmental state, the TVET college sector must respond to the socio-economic challenges by providing quality education and training offerings to address the triple challenge of high unemployment, grinding poverty and distortive inequalities which continue to bedevil the country in the third decade of democracy.

The other specific recommendations are contained in the other three separate papers, namely: partnerships, pathways and positive learning experience.

REFERENCES

- Ahmad, O. (2003). *The role of the National Vocational Training Council in the management of vocational training in Malaysia: A critical evaluation*. Batu Pahat: KUITTHO
- Asian Development Bank. (2004). *Improving technical education and vocational training: Strategies for Asia*. Manila, Philippines: Asian Development Bank.
- Agrawal, T. (2012). Vocational education and training in India: Challenges, status and labour market outcomes. *Journal of Vocational Education & Training*, 64(4), 453-474.
- Agrawal, T. (2013). Vocational education and training programs (VET): An Asian perspective. *Asia-Pacific Journal of Cooperative Education*, 2013, 14(1), 15-26
- Akoojee S (2010). Intermediate skills development in South Africa: understanding the context, responding to the challenge. HSRC: Cape Town.
- Akoojee, S., Nkomo, M. (2007). Access and quality in South African higher education: The twin challenges of transformation. *South African Journal of Higher Education*, 21(3):385-399.
- Akoojee, S and Nkomo, M. (2010). Widening equity and retaining efficiency: Considerations from the IBSA southern coalface. *International Journal of Educational Development*, pp 1-8
- ANC (2007). Strategy and Tactics of the ANC, 20 December. African National Congress. Johannesburg.
- ANC (2010). Transformation of state and governance. Pretoria: African National Congress. Johannesburg.
- ANC (2012). Education and Health: policy discussion document, March. Pretoria: African National Congress. Johannesburg.
- Anderson D (1991). From productivism to ecologism: dilemmas, issues and strategies for VET. *Australian Vocational Review*, 10(1): 1-14.
- Anderson, D. (2009). Productivism and ecologism: changing discourses in TVET. In J. Fien, R. Maclean and M.-G. Park (ed). *Work, Learning and Sustainable Development*, Vol. 8. Dordrecht, Netherlands: Springer, pp. 35–57.
- Ashton D 2005. High skills: the concept and its application to South Africa. *Journal of Education and Work*: 18(91) 19–32.
- Benner, D. (2003) *Wilhelm von Humboldts Bildungstheorie*. Weinheim and Munich: Juventa Verlag.
- CDE (2013). Graduate Unemployment in South Africa: a much exaggerated problem, April: Centre for Enterprise Development: Johannesburg.
- Chang HJ (2010). How “to do” a developmental state: political, organisational and human resource requirements for a developmental state. HSRC: Cape Town.
- Chisholm L (1992). South Africa’s technical colleges: policy options. Paper presented to NEPI. EPUs (UDW & Wits University): South Africa.

Congress of South African Trade Unions (2012). Socio-Economic Report to the 11th Congress. September. COSATU: Johannesburg.

DHET (2012). Green Paper for Post School Education and Training. Department of Higher Education & Training: Pretoria.

DHET (2013). Draft White Paper on Higher Education and Training. Pretoria: Department of Higher Education & Training.

DHET (2012). National Skills Development Strategy III. . Pretoria: Department of Higher Education & Training.

DTI (2011). Industrial Policy Action Plan 2. Pretoria: Department of Trade & Industry.

De Onis M (1999). Battle Hymn of the model minority: myth, poverty and policy analysis; Journal of Social Sciences, 37 (2): 137-143.

DfID (2008). Jobs labour markets and shared growth: trends and issues. London: Department for International Development.

Dumon A (2012). Can South Africa be considered a Developmental State? The New Growth Path and National Developmental Plan in Perspective. Consultancy Africa Intelligence: South Africa.

EDD (2011). New Growth Path. Pretoria: Department of Economic Development: Pretoria.

EDD (2010). National Skills Accord. EDD. Department of Economic Development: Pretoria.

Edigheji O (2010). Constructing a democratic developmental state in South Africa: pitfall and challenges. HSRC: Cape Town.

Evans B (2010). Constructing the 21st century developmental state: potentialities and pitfalls. HSRC: Cape Town.

FET Colleges Act 16 of 2006. South Africa.

Fien, J. and Wilson, D. (2005). Promoting sustainable development in TVET: the Bonn declaration. Prospects, Vol. 35, No. 3, pp. 273–288.

Goodine, I. (2010). TVET Teacher education towards sustainable development: Framework and initiatives. ESD in TVET 2010, Conference Proceeding. Available online: <http://iveta2010.cpsctech.org/downloads/materials/full%20papers/29.%20Framework%20and%20Initiatives-Goodine.pdf> (Accessed 28 December 2013).

Goodman, Hatakenaka & Kim, (2009). The changing status of vocational higher education in contemporary Japan and the Republic of Korea, A discussion paper. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. Bonn: UNESCO-UNEVOC.

Gumede W (2009). Delivering the democratic developmental state in South Africa (Working paper Series 9). Development Bank of Southern Africa: Johannesburg.

Hanushek, E. A. and Wößmann, L. (2007). Education quality and economic growth. Washington DC: World Bank.

HRDC. 2010. Human Resource Development Strategy – South Africa. Human Resource Development Council.

International Labor Organization. (2003). Industrial training institutes of India: The efficiency study report. New Delhi, India: ILO.

Korean Council for College Education. (2005). College and Professional Education Newsletter, January.

Leong, P.C. (2011). Key Reforms in Revitalising Technical and Vocational Education and Training (TVET) in Malaysia. Paper presented at the Regional Conference on Human Resource Development Through TVET as a Development Strategy in Asia, Colombo, SRI LANKA, 2-3 August 2011.

Lewis T (2009). Towards reclaiming the high ground in the discourse on vocationalism in developing countries. *International Journal of Educational Development*, 29 (2009): 558–564.

Maclean, R. (2010). The power of education: Lifelong learning for sustainable development, peace building and the end of poverty. Chair Professors Public Lecture Series. Hong Kong, Hong Kong Institute of Education.

Maclean, R and Pavlova, M. (2013). Vocationalization of secondary and higher education: Pathways to the world of work, in *Revisiting global trends in TVET: Reflections on theory and practice*, edited by K. Ananiadou. Bonn: UNESCO-UNEVOC.

Magnus G, Bird A, Prinsloo F and Singh A. (2013). Concept paper: building a TVET system in South Africa. DHET: Pretoria.

McGrath S (2000). Coming in from the cold? FET in South Africa. *Compare*. 30:1: 65-84.

McGrath S, Akoojee S (2009). Vocational education and training for sustainability in South Africa: the role of public and private provision. *International Journal of Educational Development* 29 (2): 149–156.

MTC Institute (2010). Principles and Strategies of a Successful TVET Program. Centerville: MTC Institute.

Mun, C. L. (2008). Polytechnic education. In L. S. Kong, G. C. Boon, B. Fredriksen, & T. J. Peng (Eds.), *Toward a better future: Education and training for economic development in Singapore since 1965* (pp. 135-148). Washington, DC: The World Bank.

Netshitenzhe J (2011). A Developmental State: South Africa's developmental capacity. UCT Summer School, 28 January 2011.

NPC (2012). The National Development Plan 2030. Pretoria: National Planning Commission.

Seng, L. S. (2007). Vocational technical education and economic development: The Singapore experience. ITE Paper No 9, 2007. Institute of Technical Education, SINGAPORE.

Seng, L. S. (2008). Vocational technical education and economic development: The Singapore experience, In L. S. Kong, G. C. Boon, B. Fredriksen, & T. J. Peng (Eds.), *Toward a better future: Education and training for economic development in Singapore since 1965* (pp. 114-134). Washington, DC: The World Bank.

Sifuna, D.N., 1992. Diversifying the secondary school curriculum: the African experience. *International Review of Education* 38 (1): 5–18.

Smuts AJ (1937). *The education of adolescents in South Africa*. Juta: Cape Town.

South African Qualifications Authority Act 58 of 1995. South Africa.

Statistics SA. (2009). Quarterly Labour Force Survey, 3rd Quarter. Statistics SA: Pretoria.

Statistics SA. (2010). Quarterly Labour Force Survey, 3rd Quarter. Statistics SA: Pretoria.

Statistics SA. (2011). Quarterly Labour Force Survey, 3rd Quarter. Statistics SA: Pretoria.

Statistics SA. (2012). Quarterly Labour Force Survey, 3rd Quarter. Statistics SA: Pretoria.

Statistics SA. (2013). Quarterly Labour Force Survey, 3rd Quarter. Statistics SA: Pretoria.

Tilak, J.B.G., 2002. Vocational education and training in Asia. In: John P, Reeves, Rye Watanabe, (Eds.). *The Handbook on Educational Research in the Asia Pacific Region*.

Tikly, L. (2013). Reconceptualizing TVET and development: A human capability and social justice approach, in *Revisiting global trends in TVET: Reflections on theory and practice*, edited by K. Ananiadou. Bonn: UNESCO-UNEVOC.

Ul-Haq, M., & Haq, K. (Eds.). (1998). *Human Development Report in South Asia 1998*. Delhi, India: Oxford University Press.

UNESCO (United Nations Educational, Social and Cultural Organisation). (2004). *Learning for work, citizenship and sustainability: the Bonn declaration*. Paris: UNESCO.

UNESCO (2004). *Bonn Declaration on TVET*. Bonn: UNESCO.

UNESCO (2010). *UNESCO's Strategy for TVET: 2010-2015* Paris: UNESCO.

UNESCO-UNEVOC (2012). *Transforming TVET: from ideas to action*. Bonn: UNESCO.

UNESCO. (2012). *Transforming Technical and Vocational Education and Training: Building skills for work and life, Main Working Document*. Third International Congress on Technical and Vocational Education and Training Shanghai, People's Republic of China, 13-16 May 2012.

Winch (2006). Georg Kerschensteiner - founding the dual system in Germany. *Oxford Review of Education* 32 (3), 381–396.

Wolpe H (1991). Education and social transformation in South Africa. IN Unterhalter E, Wolpe H & Botha T (1991). *Education in a future South Africa*. Johannesburg: Heinemann.

World Bank. (2011). *Learning for all: investing in people's knowledge and skills to promote development: World Bank Group Education Strategy 2020*. Washington DC: World Bank.

World Bank (2012). *South Africa: focus of inequality of opportunity*. World Bank: New York.

World Economic Forum (2013). *World Economic Forum Global Competitiveness Index 2013-2014*. WEF: Davos.

Yamada S Matsuda N (2007). Vocational and Industrial Human Resource Development through TVET in Africa: Changing Assistance Environments and Human Resource Demands. Japan International Cooperation Agency, Tokyo, Japan.