

**The Life Skills programme in the National Certificate Vocational (NCV) and
'employability' – A Human Capital Development**

Joseph Nefdt
Student Number: 9537506

2015

Research Paper submitted in fulfillment of the requirements for the Masters Degree in Adult
Learning and Global Change

University of the Western Cape

The logo of the University of the Western Cape, featuring a stylized classical building with columns and a pediment, rendered in a light blue color. Below the building, the text "UNIVERSITY of the WESTERN CAPE" is written in a serif font, with "UNIVERSITY" in all caps, "of the" in lowercase, and "WESTERN CAPE" in all caps.

UNIVERSITY *of the*
WESTERN CAPE

Supervisor: Professor Zelda Groener

Word count: 27506

Key words

Generic employability skills,

Life skills,

Employability skills,

Soft skills

Work readiness

New knowledge economy

Human capital

Communication

Leadership

Teamwork

Problem solving

Critical thinking



Abstract

Scholars argue within a human capital perspective that generic employability skills such as critical thinking, computer literacy, independent thinking, problem solving, communication skills must be included in human capital development. Employers are demanding that education and training institutions enable students to develop generic employability skills so that they can be ‘work ready’ for employment in the ‘new knowledge economy’. As a consequence, the implementation of generic employability skills programmes can be found in Technical Vocational Education and Training (TVET) colleges worldwide. Framed within a human capital perspective, this research paper focuses on an investigation into the extent to which the National Certificate (Vocational) Life Skills course, offered at a TVET college in the Western Cape, enables students to develop the required generic employability skills of communication, problem solving, teamwork, leadership and critical thinking. Findings reveal that the NCV Life Skills course was both successful and unsuccessful in enabling participants to develop generic skills which make them ‘ready for work’.



ACKNOWLEDGEMENTS

I am grateful to Barry Isaacs, the head of Human Resources, City of Cape Town, for facilitating my interviews with the respective participants. Without his cooperation, this research would not have been possible. To Zelna Cloete, my colleague, for serving as a bouncing board when I was low on ideas. Additionally I want to thank Heather Davis who agreed to serve as editor for my research thesis. Lastly I want to extend my gratitude towards my supervisor, Professor Zelda Groener, who guided me through the research process.



DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfillment of the requirement for the degree of Master in Adult Education and Global Change at the Centre for Adult and Continuing Education, University of the Western Cape. It has not been submitted before for any degree or examination in any university. All the sources I have used or quoted have been indicated and acknowledged as complete references.

Joseph Nefdt

Signed:

December 2015



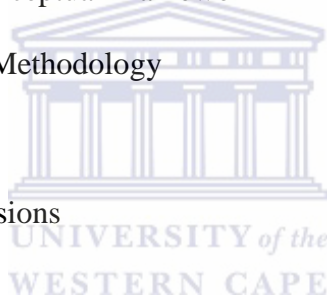
GLOSSARY OF TERMS

NCV	National Certificate (Vocational)
TVET	Technical Vocational and Education and Training
FET	Further Education and Training
LO	Life Orientation
NQF	National Qualifications Framework



INDEX

	Pages
KEY WORDS	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
DECLARATION	iv
GLOSSARY OF TERMS	v
INDEX	vi
SECTION 1 – Introduction	1
SECTION 2 - Literature review / Conceptual Framework	6
SECTION 3 - Research Design and Methodology	38
SECTION 4 - Data analysis	45
SECTION 5 – Summary and Conclusions	76
REFERENCES	82
APPENDICES	90



SECTION 1

Background and Context

Globally neo-liberalism is seen as the dominant economic model, supported by globally powerful institutions such as the World Bank and the International Monetary Fund. Developing member states are coerced into adopting their economic principles in order to secure loans. This economic framework permeates throughout various policies in all spheres of governments, hence its influence in education, where input is measured in terms of economic growth (Moutsios, 2009 and Milana, 2012). Moutsios (2009) investigates the role played by transnational organisations such as the World Bank and others in fostering global neo-liberal policies by using education as a tool. He argues that the World Bank, during the years 1962-1980 prioritised “institutions of technical and vocational training while it inhibited the promotion of educational contents with ‘pure’ science, arts or humanities, and even the construction of libraries, as these were considered merely unproductive academic activities” (p. 474).

The Minister of Higher Education in South Africa and a well-known communist, Dr Blade Nzimande treads carefully when having to justify the direction, which he has decided to chart in vocational education in order to ensure economic growth. He emphasizes in the White Paper for Post-School Education and Training (2013), that: “... education and training 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.” (p. 9).

The above statement reveals his thinking that education should not solely be about providing for the economy but should correspondingly accommodate values that will strengthen civil society. The White Paper sets transformation ideals within a human capital model by making them interdependent on one another. It states that, “... social justice is closely dependent on equitable access by all sections of the population to quality education. ... Education will not guarantee economic growth, but without it, economic growth is not possible and society will not fulfill its potential with regards to social and cultural development” (p. 24).

He further emphasizes that education should be used to eradicate the legacies of the past and should be the driver to narrow the gap that exists between rich and poor. Using unemployment, inequalities and poverty as barometers, the White Paper (2013) justifies the shift from old transformative policies, to a new direction based on the National Development Plan and the Growth Plan, using education as an instrument for economic growth. It reasons that, "... achievement of this goal will enable the expansion of the key economic focus and equip young people to obtain work" (p. 2).

In recent history, South Africa has spent billions of rands on creating technical and vocational colleges with the expressed aim of expanding the economy and contributing towards the development of a more egalitarian society. South African technical colleges have their roots as far back as 1910 when the economy shifted from being agricultural to industrial as the mining needs of the country increased (Dutschke, 2010). Dutschke reasons that these colleges fell out of favour with the democratic government that was established in 1994 as it was seen as benefitting only one population group (whites) through its apprenticeship model.

South Africa's TVET colleges are relatively young institutions. They were established as recently as 2002 as promulgated in terms of the FET Act, No 98 of 1998 with the colleges of education, former technical colleges and training centres merging to form the 50 FET colleges. In 2013 they were once again renamed, from Further Education and Training Colleges to TVET Colleges. This was done to "better reflect their nature and better defines (sic) their main role in the diversified post-school education and training system" (White Paper, 2013, p. 12). The Department of Higher Education and Training's aim, ultimately, is to offer a wide range of 'mid-level skills' courses that would position the TVET colleges better to serve the needs of a growing economy. Core courses would include: Engineering and Related Designs; Construction Industries; Business Management; Tourism and Hospitality (White Paper, 2013).

During 2007, the Department of Higher Education and Training decided to introduce a National Certificate (Vocational) (NCV), as an additional strategy to further back the expressed intentions of poverty alleviation. The NCV is aimed at National Qualifications Framework (NQF) Levels 2-4. The NCV course runs over 3 years and it starts with an introductory level 2, with level 4 being the exit year. The programme entails doing three so called fundamental subjects, namely: English as an additional language, Mathematics, and Life Orientation (LO). Added to these are four selected vocational subjects, which consist of courses in Civil Engineering, Electrical Engineering, Engineering and Related Designs and Safety in Society. The LO course is further divided into a Life Skills part and a computer literacy part. The Life Skills part of the curriculum is aimed at preparing

students for the ‘world of work’ and civil society in general. Students should develop the cognitive abilities to “adapt, survive and succeed in a constantly changing world” (NCV LO Subject Guidelines, 2014, p. 2).

The Life Skills course includes generic employability skills which comprise thinking skills, such as logical and analytical reasoning, research skills, problem solving skills, teamwork, effective communication skills, diversity training, good work ethics, principles for work productivity, explore work shadowing, developing a personal development plan, personal development, leadership skills, study skills, etc. (NCV LO Subject Guidelines, 2014). The Subject Guidelines (2014) further state that “ The subject aims to enable students to respond positively to the challenges of a constantly changing world, to make informed and responsible decisions, realize their potential and make a meaningful contribution to our South African society and economy, as they become vocationally qualified” (p. 2).

The LO Fundamental course of NCV, forms part of all vocational orientated qualifications that qualify students to progress from the General Education band into continuous learning streams in various vocational fields. (NCV LO Subject Guidelines, 2014) The LO skills part of the course is viewed as important by education authorities, whose hope it is that with teaching these various topics, it will inculcate values, beliefs and attitudes that will prepare students to become good citizens who in turn will contribute positively to processes and systems of our country which in turn will lead to increased productivity and global competitiveness.

At the end of a 3 year comprehensive programme, every student in the TVET sector is assessed to test their knowledge and insights gained in every subject, including the Life Skills course. My research investigates the extent to which the Life Orientation course in the NCV programme enables students to develop generic skills which contribute to their employability. The participants whom I have selected for my investigation have completed a 3 year NCV Safety in Society that includes subjects like, Life Orientation, English as an Additional Language, Mathematical Literacy, Policing, Criminology, Governance and Law Procedure, and Evidence. They are subsequently employed as law enforcement officers by a local municipal authority.

Although there is convergence among some researchers about what the key generic skills should be, there are others who support different variations. Because of the variety prevalent in generic skills, different researchers name these skills in a variety of ways and have different recommendations on how to instill these attributes into graduates and others. Curtis and McKenzie (2002) suggest that,

“The term generic employability skills come closest to capturing the essence of how the debate evolved. Generic implies that which is learned in one context can be applied in others. Employability implies qualities of resourcefulness, adaptability and flexibility” (p. 7). In this research report I am using the terms, generic skills, employability skills, soft skills, life skills, horizontal skilling or generic employability skills interchangeably to identify those critical skills that are in demand by employers.

Rationale

Higher Education and TVET institutions are increasingly being challenged to produce graduates who will be able to adapt to work situations that are increasingly becoming flexible and complex as their needs change. Human Capital theorists (which I will discuss in detail later) have theorised that the theory of human capital resonates well with the dynamic nature of the new ‘knowledge economy’. They perceive skills as ‘capital’ that humans require to be successful in work settings. Vocational education and training has been put forward by theorists (which I will focus on later) as a solution to increase the competitiveness of countries on a global scale. Many nation states have adopted measures to improve the vocational qualities of their population through the implementation of vocational education and training courses.

Complementing this vocational skills are the generic skills which would instill attributes into students which would see them better prepared for their work environment. It thus comes as no surprise that industry and governments have increasingly given generous attention to generic skills or what we often refer to as ‘life skills’, ‘soft skills’ or ‘employability skills’. Workers need to communicate well, solve problems within a team or on their own, and must understand the importance of working within a team. These skills are also recognised by human capital theorists as necessary to improve or increase productivity and to reduce the levels of poverty prevalent in developing countries.

Research Problem

To investigate whether the role played by TVET colleges in inculcating generic employability skills made any difference to how prepared students are to meet the challenges of a new ‘knowledge economy’

Aims and Objectives

- To investigate the extent to which the Life Skills programme offered in the NCV stream contributes to ‘employability’.
- To generate new knowledge and theoretical insights about the contributions of the Life Skills course in the NCV stream at TVET colleges on ‘employability’.

Research Question

To what extent does the Life Skills course, offered in the NCV programme at the TVET colleges, facilitate the development of generic employability skills in ways that contribute to the employability of students?

Limitations

Possible limitations of the Researcher

As the researcher, I may be inclined to be biased as I am teaching the Life Skills course.

Possible limitations of the participants

Participants may overestimate/underestimate their own generic abilities. Participants may tend to be positive about the Life Skills course as they know the course.

Anticipated Findings

- The Life Skills course offered by the NCV programme at TVET colleges prepares students with the necessary generic employability skills needed by industry.
- The participants are utilizing their generic skills to carry out their responsibilities in the workplace.

SECTION 2

Literature Review and Conceptual Framework

Introduction

Empirical evidence from research studies detailing the value of the Life Skills course offered by TVET colleges in South Africa is difficult to find. Finding longitudinal studies that explore studies that relate to how useful or appropriate their generic courses were, in relation to adapting successfully to their work environment, is yet another challenge as the NCV programme in TVET colleges is comparatively new in relation to other TVET streams. Researchers (Kruss, 2012, Papier et al. 2012 and Wedekind, 2012) have reflected upon the fact that data on TVET/FET colleges in South Africa is woefully inadequate and this has a profound impact on assessment of the impact TVET/FET colleges have on skills development and the economy. Papier et al. (2012) state that, “Any potential quantitative study faces the problem of a lack of current, reliable data held at a national, provincial and institutional level” (p. 14). Literature exploring the teaching of generic skills at TVET colleges and higher education institutions in Western and Eastern countries is fairly wide-ranging.

Students participating in the NCV programme, offered by the TVET colleges in South Africa, participate in a compulsory Life Skills course which offers a range of life skills.

In finding an appropriate conceptual framework for my investigation, I studied the literature that discusses the relationship between education and employment. Relying on Candy (1989) who declares that, “Few pieces of research are ever ‘pure’ examples of any one paradigm fitting unequivocally into one category to the exclusion of the other” (Candy, 1989, p. 8), I assert that researchers often find it difficult to use one exclusive framework for a particular research study.

One of the more prominent interpretive theoretical frameworks is the Constructivist perspective, through which social researchers suggest that knowledge is first socially constructed and then embraced by individuals (Doolittle & Camp, 1999). In his situated learning perspective, Wenger (2008) values learning in authentic settings. He declares that collaboration and social interaction form the pillars of this given theory. Constructivists such as Kolb, Boyatzis and Mainemelis (2000) theorise about experiential learning through arguing that knowledge is created by transforming and understanding experience.

An alternative pedagogical approach towards the transfer of knowledge leading from constructivism

is that of navigationalism. This approach looks at the need to prepare learners to solving problems that do not exist yet, to do jobs that still need to be created and to deal with technology that has not been invented. Chandrakumara (2014) theorises that this type of methodology enables learners to, "... find, identify, manipulate and evaluate information and knowledge..." (p. 13). This theory encourages individuals to make the knowledge part of their existence and encourages them to be open to solving problems and to communicate their knowledge to others.

While not disputing the values of the said theories, the focus of my research is to investigate the impact of classroom learning, involving abstract knowledge and using various methodologies to transfer specific knowledge in order to render the research participants ready for the 'world of work'. Learning methodologies will come into focus later in my research when investigating its worth in comparison to the current classroom instructional setting.

For this research paper, I will use as my conceptual framework, the Human Capital Theory (HCT), which proposes that an investment is made in knowledge and skills in order to ensure economic growth. It is accepted that education serves the purpose to socialize students into accepting behaviour, processes and systems that will ensure economic productivity.

This form of socialization of students is carried out during the Life Skills course offered at South African TVET institutions by way of instilling different generic skills in students to prepare them for employability. Examples thereof are the generic employability skills of communication, teamwork, problem solving, etc. In this section I will review the literature on HCT/ human capital development and generic skills as my conceptual framework.

Human Capital Development

The standard argument by proponents of HCT is that investments in skills and knowledge should yield an economic return for the investor. This is argued by West (2000) when he proposes that, "... governments investing in higher education on behalf of the public – often wish to see some general economic payback" (p. 574). Traditionally investors were reluctant to invest in knowledge and skills to increase productivity of workers. Investors were mostly interested in investing in physical capital to ensure profits on their investments. Smith (1776) propose an alternate idea to that of largely concentrating on investing in physical capital (machines, tools, buildings, etc.).

Smith (1776), who is largely viewed as a key figure in establishing modern capitalism, declares that,

“The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges that expense with a profit” (p. 265). He thus postulates that investing in human capital should be seen as equally important as investing in physical capital.

Following on Smith’s ideas of ‘improved dexterity of a workman’, Schultz in the year 1961, defines the theory of human capital when he pronounces that the investing of knowledge and skills into human beings cannot be ignored when economic development is in discussion. Schultz (1961) postulates that people obtain useful skills and knowledge and, “that these skills and knowledge are a form of capital, that this capital is in substantial part a product of deliberate investment,” (p. 313). Schultz (1961) additionally expands on his explanation when he states that, “The failure to treat human resources explicitly as a form of capital, as a produced means of production, as the product of investment has fostered the retention of the classical notion of labor as a capacity to do manual work requiring little knowledge and skill, ...” (p. 314).

Schultz further elucidates his human capital theory in 1972 when he identifies the skills and knowledge garnered by people as capital, as it relates to future earnings. He argues that it is human because it forms part of man (sic). He expresses that skills and knowledge is a,

“... form of capital because it is the source of future earnings, or of future satisfaction, or of both of them. It is human because it is an integral part of man (sic)” (p. 5).

This causal relationship between the cost and benefits of investing in knowledge and skills are further propositioned by proponents of HCT when they emphasize its economic benefits. Woodhall (2004) states that, “Education is now universally recognized as a form of investment in human capital that yields economic benefits and contributes to a country’s future wealth by increasing the productive capacity of its people” (p. 23). As in 1967, Woodhall still maintains the same argument in 2004 (at an UNESCO, International Institute for Education Planning Conference), when she imparts that expenditure on education should be justified in terms of its contribution towards the economic growth of a nation state.

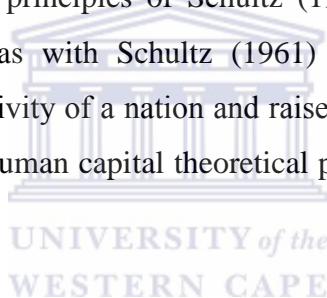
Fitzsimons (1999) emphasizes the importance of HCT and its contribution towards economic growth when he states that HCT is “the most influential economic theory of Western education, setting the framework of government policies since the early 1960’s” (p. 1). Schultz (1961) declares that the increase in national output in Western societies is due to the investment in human capital and not due

to 'resource productivity'. Shultz (1961) postulates that,

“This knowledge and skills are in great part the product of investment and, combined with other human investment, predominantly account for the productive superiority of the technically advanced countries. To omit them in studying growth is like trying to explain the Soviet ideology without Marx” (p. 314).

Schultz (1972) implies that the knowledge and skills that workers acquire, have economic value and this caused them to be an integral part of capital. He says that, “Labourers have become capitalist, not from a diffusion of the ownership of corporation stocks, as folklore would have it, but from the acquisition of knowledge and skills that have value” (p. 6). Schultz (1972) suggests that workers cannot be viewed as a homogeneous group, but rather as individuals with different levels of abilities and skills with which they can negotiate to be remunerated individually.

Becker (1964) corroborates the HCT principles of Schultz (1961) as he argues its relevance for economic development. He argues, as with Schultz (1961) that developing skills in humans, contribute towards the general productivity of a nation and raises workers' income. Becker, Murphy and Tamura still adhere to that same human capital theoretical principle in the year 1994 when they posit that,



“The evidence is now quite strong of a close link between investments in human capital and growth. Since human capital is embodied knowledge and skills, and economic development depends on advance in scientific knowledge, development presumably depends on the accumulation of human capital” (p. 324).

Becker et al. (1994) theorise that the economic growth of countries is faster when knowledge and skills are more in abundance. Therefore the more investment in human capital, the faster the rate of economic growth of a country. Becker et al (1994) state that, “Crucial to our analysis is the assumption that rates of return on investment in human capital rise rather than decline as the stock in human capital increases,” (p. 324).

Although there is widespread support for HCT, there are also critics who are opposed to HCT's narrow focus on investing in people with the aim of ensuring economic returns and therefore argue for a focus on holistic human development. Tickly (2013) is principally opposed to the principles of HCT in as far as it proposes that education and training should be about the 'pursuit of wealth' and

he argues that it should rather underpin the ‘well-being’ of human beings. Bowles and Gintis (1975), Bildirici et al (2005), and other critics of HCT reveal that HCT advocates employers to be primarily the beneficiaries of the economic system to the neglect of workers.

While Schultz (1961) concentrates more on the investment needed to enable humans to operate in contemporary industrial settings, Brenton (2012) argues that investment in human skills and capital infrastructure is interdependent. He argues that to enable a decent economic growth, you have to invest in both categories. He says, “If human capital and physical capital are complementary, then historically either type of capital or both could have been the factor limiting investment in the other type of capital” (p. 6).

Moutsios (2009), however, treats the investment given to developing countries by international global financial institution with suspicion. He does not criticize ‘resource productivity’ as Schultz (1961) does. His attention is on the restricted focus of international financial institutions when aiding developing countries. He criticizes them for forcing human capital policies upon them as he sees these policies as being incomplete for the holistic development of a nation. He supposes that their ultimate aim is to use education to “abolish restrictions in global trade and to open selectively domestic markets to capital flows” (p. 468). His criticism continues as he expresses his regret at how developing nation states are being coerced into accepting policy fundamentals, due to their reliance on financial aid. He says that “As a rule, investments in education supported by the ‘Bank’ have to be substantiated on the basis of human capital needs of the country under consideration” (p. 474).

Ramirez (2012) cautions that we should not neglect to argue the influence of capitalism when looking at education and how it contributes to economic growth of respective countries. He argues that, when analyzing the merits of HCT, it should be evaluated within the context of this globally dominant economic system. He says, “For many scholars the world environment is first and foremost a world capitalist economy,” (Ramirez, 2012, p.7). Ramirez (2012) implies that HCT, as a framework for educational development, augments the principles of the capitalist economic system.

Tickly (2013), as later argued, proposes that HCT ensures its continuance as it adapts to new ideas and ideologies but still retains its core argument that investments in skills should yield an economic return for the investor. Upon analyzing the previous statements by Ramirez (2012) and Tickly (2013) it can be concluded that HCT’s function is to ensure that the division of labour and other capitalist practices endure.

Shultz's (1961) HCT puts him in opposition to Marxist philosophies as he sees the acquisition of skills by employees as having a direct link to salary improvements and a growth in a country's GDP. Shultz (1972) sees no room for HCT in Marxist philosophies as it is "too restricted to the classical vintage of material capital" (p. 5) Schultz questions the correctness of classical Marxists doctrines on labour and declares that, "Counting individuals who can and want to work and treating such a count as a measure of the quality of an economic factor is no more meaningful than it would be to count the number of all manner of machines..." (p. 6).

More recently, as proposed by Tickly (2013), "... the proponents of HCT have begun to display an 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" (p. 6). This development can be understood in the light of new emerging theories such as: 'Sustainable Development Theory and the Capability Approach' which is challenging the dominance of HCT by criticizing its lack of focus on culture, equity, environment and social sustainability when analyzing education and its relation to economic growth (Tickly, 2013). HCT is interested in the aforementioned factors such as culture, etc. only if it will enhance economic growth patterns as articulated by Tickly (2013) when he claims that, "In this approach gross domestic product is understood as the most significant indicator of development" (p. 5).

Gewer (2009) argues that HCT ignores the social context of skills and knowledge. HCT "... ignores the nature of skills created and their relation to the developmental context of the country concern" (p. 25). Tickly (2013) concurs and explains an alternate economic model to HCT when he states that, "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" (p. 14). Succinctly, according to Tickly (2013), economic growth for the benefit of the nation would be the natural by-product if emphasis is placed on sustainable human development and fulfillment.

Bloch (2010), a well-known and respected South African educationist, recognizes the emphasis placed on linking education to getting employment. He, however, cautions that education's importance cannot only be measured in terms of knowledge and skills, but it should additionally be, "... about values, attitudes and creative and emotional development, all of which contribute to 'responsible, active and productive citizenship'" (p. 11). As with Tickly (2013), he uses it as a platform to propose an alternate model to HCT which include various relevant social aspects and cultural values in order to establish a more holistic approach to education.

HCT has not stagnated, as suggested by most modern day critics, as contemporary theories and necessities have forced it to relook its position and adapt to present day needs (Tickly, 2013). Critics developing new concepts generally base these developments on HCT models. Criticisms are based mostly on the ‘narrow’ focus of HCT on economic growth and the absence of elements that advance the social development of human beings. As with Bloch (2010), they generally argue for an education that incorporates values such as social justice, the humanities and ‘new knowledge’. Moutsios, (2009) and Tickly, (2013) inadvertently reveal HCT’s relevance today as it was in the past, as they debate the role of major international financial institutions such as the World Bank and the International Monetary Fund, whom they claim, still embrace it.

Curtis and McKenzie (2002) in a distinctive research report on ‘employability skills’ for the Australian industry, say that skills development, needs to be flexible and has to be continually adapted to stay relevant to an ever changing technologically driven (new knowledge) economy. Lees (2002) agrees and postulates that “The interest in employability is associated with human capital theories of innovation and economic performance. Growth in the stock of human capital is essential for economic growth,” (p. 1). She proposes that an investment in knowledge and skills is an essential ingredient for employability and economic growth.

Allias and Nathan (2012) support the argument made by Lees (2002) and Curtis and McKenzie (2002) that knowledge and skills should develop and enhance individuals’ employability and productivity. They propose that HCT “... lies unstated and unacknowledged behind much policy discourse as well as research in this area” (p. 6).

Gewer (2009), however, reasons that a too narrow focus on churning out employable students, would counter the critical stance of higher learning’s engagement in seeking knowledge. This view gets supported by Chandrakumara (2014), Gewer (2009) and Hea-Jung and Ji-Hyun (2012). Chandrakumara (2014) identifies a threat in education being focused too narrowly on churning out ‘employable’ students. He criticises the skills revolution in Sri – Lanka and says that “the students are trained aiming at the employers” (p. 28). He argues that this state of affairs will not benefit society at large as employers only comprise one section of stakeholders. Hea-Jung and Ji-Hyun (2012) state that, “Vocational education should achieve not only employment ability increase but also increase psychological stabilization, social adaptability and vocational ability preservation” (p. 10).

Bildirici et al. (2005) make similar arguments to Zweimüller (2000) and Chandrakumara’s (2014)

about *'employers who benefit'* from human capital investments. Bildirici et al. (2005) argue that employers again will benefit from the fragmentation of the classical workforce (as perceived from a class structure perception), with the introduction of the HCT model. The difference in education and skills levels that workers possess mean that there will be a variation in their wages, as workers will be paid according to the explicit skills they possess. He postulates that workers will be left divided when confronting employers on salaries and other working conditions. He says that "Human Capital Theory (HCT), together with homogeneous work force assumption of neo classic theory, is replaced by heterogeneity of labor (sic)" (Bildirici et al, 2005, p. 110).

Continuing on the theme of *'employers who benefit'* from HCT, Bowles and Gintis (1975), in a Marxian critique on HCT, express concern about HCT's 'attack' on the classical class system and theorise that employers want to co-opt workers into a system that would not benefit the working class. They lament neo-classical economists' long standing principles of treating workers as commodities. They see the introduction of HCT as almost a natural development in the shift towards treating workers as 'capital goods'. Bowles and Gintis (1975) contend that HCT expresses the theory of: "... every worker ... is now a capitalist" (p. 74). They argue that HCT includes a partial theory of production, which looks at 'technical relations' which is inadequate as an economic theoretical concept.

As with Becker et al (1994), the British Council (2014) emphasises the importance of developing human potential in a 'knowledge economy'. They suggest that, "In increasingly knowledge intensive economies, human capital is a critical factor for competitiveness and growth bringing with it a talent war for knowledge workers" (p. 18). Here, human capital is acknowledged as being pivotal in developing an advanced modern-day economic system.

Levin and Kelly (1994) advocate that 'the acquisition of knowledge and skills' would have little value if certain pre-conditions towards its implementation are not met. They suggest that HCT is probable but not as easy implementable or straightforward as proponents of HCT suggest. They note that in order for HCT to succeed, there should be 'complementary inputs' from all stakeholders when investigating the value of education on improving throughput in industry. They argue that the workplace should be expansive in its make-up. Workers should have job-security, training should be available and managers should be receptive to new and innovative ideas from workers. Levin and Kelly (1994) submit that, "New managerial approaches must be undertaken to provide support for productive approaches to worker participation as well as to create more integrated approaches to research, training, product development, marketing production and finances" (p. 102). A conclusion

can accordingly be made that in a new knowledge economy, old Fordist ways of doing should make way for a Post – Fordist or a more expansive workplace where employees, with highly developed technical and generic skills, can in more than one way, contribute to the growth of their respective economies.

Human Capital development and generic employability skills for the knowledge economy

In its latest manifestation, proponents of HCT/Human Capital Development, propose the inclusion of generic employability skills to improve the employability of workers and to satisfy industrial needs within the knowledge economy. Schultz (1975) emphasises the need for education and training to be directed at an ever-increasing industry that requires the worker to adapt to a global knowledge economy. Developing generic employability skills in students, before entering the workplace, would benefit both the employer and employee and it would fit snugly into Human Capital theorists' principles of expanding the economy by inculcating the necessary skills into them to ensure maximum profits.

Hyslop-Morgenson and Graham (2001) state that, “Contemporary human capital education emphasizes generic employability skills rather than technical abilities to address current labour-market needs” (p. 345). Rasul, Amnah, Rauf and Mansor (2013) concur with this analysis of Hyslop-Morgenson and Graham (2001) and argue that contemporary education, accentuates generic employability skills in students to ensure maximum productivity from workers.

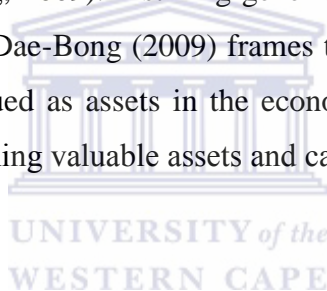
Wellman (2010) and Calma (2013) are in agreement when they note that all sectors generally involved with industrial progress concur with the importance of instilling generic skills into students that would enhance their work compatibility which will lead to an increase in economic growth. Wellman (2010) found that of significance is that employers are more interested in experience than a degree. He deduces that employers believe that experience facilitates the growth of generic skills within individuals. Wellman (2010) says that “Experience within the sector, and/or of marketing and/or of the specific work role was required for 190 (76 per cent) of the posts” (p. 917)

Work experience, as argued by Wellman (2010), can contribute towards developing generic employability skills required in industry. This work experience can be developed by being on the job or by students doing job-shadowing as advocated by Andrews and Higson (2008). They argue that work placement programmes are highly valued by employers and students alike and suggest that students should be given the opportunity to do a ‘twelve-month period of formal work-placement’.

They conclude that this work-placement “afforded multiple benefits, providing a valuable learning opportunity whilst theoretical skills could be applied to ‘real-life’ employment” (p. 416). It furthermore serves the purpose of narrowing the ‘employability gap.’ During my research, I will assess how the life skills taught at college compare to learning on-the-job.

Spence (1973) in a research study asserts that generic skills in workers get valued by employers and suggest that they look at education levels of potential employees to gauge whether they do have the ability to be trained easily. If they can be trained quicker, the employer can save on the cost of training and consequently increase profit margins. Spencer (1973) states, “In any one of the equilibria the employer is able to make perfect point predictions concerning the productivity of any individual, having observed his level of education” (p. 363).

Generic employability skills are increasingly being valued by various countries on the basis that its economic success depends on instilling these skills into their people to ready them for a globalised, knowledge based economy (Dae-Bong, 2009). Instilling generic skills into people is a requisite for the new technological revolution and Dae-Bong (2009) frames this development in a human capital context, where humans are being valued as assets in the economic development of a country. He says, “In the end, the people are becoming valuable assets and can be recognised within a framework of human capital” (p. 1).



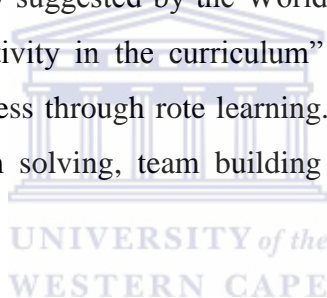
Dawe (2002), in a study to establish whether the Australian training sector provides for adequate generic training, agrees with the views expressed by Spence (1973) and discloses that employers have already identified the critical nature of generic skills. She asserts that that selection processes focus on acquiring new staff with suitable generic skills as “these were harder to develop than the specific technical skills required for the job” (p. 7).

In the United Kingdom the value of generic skills has also featured largely. Martin, Villeneuve-Smith, Marshall and McKenzie (2008), after exploring employability skills in the UK, found that most employers believe that after five years on the job, the employability skills of the employee will be fully developed. Instituting these different generic skills into potential workers, would benefit employers by way of saving them a lot of time and money by cutting into the five years of ‘on-the-job-learning’. Martin et al (2008) in his research states that, “The results show that employers expect candidates seeking a job that requires five years’ experience to have much more fully developed employability skills. Over 80% of respondents believe that by this stage literacy skills (89.1%), timekeeping (88.7%), communication skills (87.3%), enthusiasm/commitment (86.5%), numeracy

skills (86.5%) and personal presentation (82.8%) should be fully developed. Over 90% of employers expect the full range of employability skills to be at least partially developed” (p. 24).

Correspondingly in South-Asian countries, education has its focus on developing skills that would augment economic development. It is suggested that giving more attention to ‘horizontal skilling’ could spearhead an industrial boom (British Council, 2014). They additionally propose that inculcating ‘soft skills’ into workers, could make them more productive. “The services orientation of South Asian economies suggests more attention to “horizontal skilling” could be a boon to productivity, with the value of “soft skills” such as English language and communications enhancing the competitiveness of workers in key sectors such as business process outsourcing and hospitality” (British Council, 2014, p. 16). A conclusion can consequently be made that the generation of generic skills is framed within HCT and can be viewed as an important element in up skilling workers in order to escalate productivity in a modern knowledge economic order.

In keeping with the educational policy suggested by the World Bank, Singapore has introduced “a range of initiatives to stimulate creativity in the curriculum” (Tickly, 2013, p. 10) after it was criticised for gaining educational success through rote learning. This included emphasizing generic employability skills such as: problem solving, team building and communication skills (Tickly, 2013).



Tickly (2013) suggests that ‘placing people in human capital frameworks’ have made contemporary HCT theorists uncomfortable and they are adapting their theories to ensure its continuation. Apart from looking at the role of culture, equity and other social issues, Tickly (2013) suggests that the new emphasis on ‘skills for growth’ has activated them into redefining ‘skills’ to include generic employability skills. This, he asserts, is contained in the latest World bank strategies.

“In keeping with the findings of previous reports, there is an emphasis on supporting system assessments, impact evaluations and assessments of learning and skills (including not only basic literacy and numeracy but also a range of further skills including information and communications technology (ICT), critical thinking, problem solving and team skills” (Tickly, 2013, p. 9).

However, it is not all employers that value this trait, and workers have to possess the necessary social capital to manage such employers as argued by Levin and Kelly (1994). Hager et al (2002), in their position paper, look at the so called ‘employability gap’ and suggest frameworks to incorporate

generic skills at various levels. Hager et al. (2002) suggest that instilling good social and cultural capital into students would prepare them better for the industry and would encourage productive behaviours. They pronounce that, "... the attitudinal and dispositional qualities are better seen as products of cultural, ethical and social circumstances that may be refined and modified by knowledge and reflection" (p. 3). This relates to Tickly's (2013) previous arguments that HCT proponents would accommodate social aspects of people only as far as it would benefit economic growth.

Chandrakumara (2014) reveals that the University of Dundee has adopted this suggestion and introduced innovative approaches to make their students more employable. They created a 'graduate skill award' for their students. Skills that are measured include: communication skills, problem solving skills, information technology, planning etc.

Higher education and the development of generic skills for human capital needs (for the knowledge economy)

Because of the wide range of attributes that can be considered as generic skills, there are wide assortments of skills that are often deemed as appropriate towards developing employability in individuals. This variety leads to complications when academics have to decide which of the attributes should be included in a higher education curriculum.

Atkins (1999) emphasises the necessity of developing generic skills for the 'new knowledge economy' as he cites the report of the Dearing Committee of Inquiry into Higher Education (1997), that emphasises the importance of undergraduates receiving skills that would ensure their competency at: communication, numeracy and information technology whilst 'generic professional skills are encouraged for post-graduates' (p. 26).

Atkins (1999) additionally refers to a survey done by Cooper and Leibrand (CVCP survey, 1997), where universities that are not as much favoured by employers as the more 'elite' universities, seem to adopt a more positive outlook on incorporating generic skills into their courses. He deliberates if incorporating generic skills is more to do with "compensating for perceived deficits in social and cultural capital than anything else" (p. 272).

Hager et al. (2002) emphasise the generic skills of: 'being able to think independently and critically' in workers that are valued by employers. Hager et al. (2002) in their position paper to the

Business/Higher Education Round Table of Australia, additionally note the “the relative importance of the skills required to the employers themselves and concludes that the greatest skill deficiencies among new graduates were perceived to be in the areas of 'creativity and flair', 'oral business communications' and 'problem-solving’”(p. 4).

Barrie (2006) and Wickramasinghe and Perera (2010) describe the implicit and explicit manner in which generic skills are implemented as ‘patchy’. Wickramasinghe and Perera (2010) declare that previous studies on this subject matter in Sri Lanka, claim that skills are being taught during the undergraduate course. They dispute this and state in their report that. “... exactly where in the curriculum these skills are included and how to impart the skills are beyond the scope of this study” (p. 240).

Fallows and Steven (2000), Hager et al (2002), Crebert et al. (2004), Ballantine and McCourt Larres (2007) and Wickramasinghe and Perera (2010) propose that generic employability skills should be incorporated in a more structured way in institutions of higher learning. They argue that it should be included in the institution’s policies and its curriculum. Most researchers have their focus on the need for generic employability skills to form part of a specific course curriculum and how its general embeddedness into subjects, can benefit human capital developments. Ballantine and Mc Court Larres (2007) argue that, “... accounting education at tertiary level should be aware of the need to provide education and training which delivers generic skills, i.e. communicative, analytical and other skills, besides technical and theoretical knowledge, to prepare accounting students for a career in their chosen profession” (p. 127).

While there are those who support the notion that generic employability skills should be taught in a general profile template that cuts across industries, others like Atkins (1999), Watty, Jackling, Wilson and Sano (2012), recognise that students following a course with embedded employability skills, are more likely to be successful in a work situation. They argue for a ‘greater variation in preparation for employment’ (p. 271). Watty et al. (2012) propose the development of ‘knowledge individuals’ by embedding the accounting skills required into the accounting curriculum to ensure their readiness for the contemporary work environment. Watty et al.(2012) use “in-depth interviews” with Australian academics across five discipline areas and suggest that, “ ... evidence is provided which highlights the unique, discipline-specific conceptualisations of three generic attributes problem-solving, critical thinking, and communication” (p .2). They conclude by acknowledging , “... that personal transferable skills are shaped by the fact that their professional and disciplinary context assists academic staff with the concept of embedding their development and

assessment as part of curriculum design” (p. 2).

Interestingly, Atkins (1999) argues that a dedicated generic course should be introduced after graduation as it would make it more meaningful to the person as he/she will be looking for employment.

Sugahara, Suzuki and Boland (2008) in a study of university students in Australia’s capital city, found that the accountancy course on offer has a ‘limited impact’ on what is required in today’s accountancy profession. This study established that, “existing accounting programs failed in their attempt to provide graduates with generic skills and specialized professional education despite strong demand by the workforce” (p. 4). They suggest a complete overhaul of the curriculum and making generic skills a core part of it. They make an example whereby they propose, “to incorporate more special learning activities such as work integrated learning (WIL) including work experience and internships into reformed curriculums” (Sugahara et al. 2008, p. 22). An additional example that highlights the importance of generic skills can be found in Calma’s (2013) research which establishes, similarly to that of Sugahara et al. (2008) that business graduates at the University of Melbourne lack the required human capital to make them competitive in the new knowledge world of business.

Andrews and Higson (2008) add to the debate by looking at the “perceptions and experiences of business graduates and employers in four European countries” (Austria, UK, Slovenia and Romania) (p. 411). Universities that participated were Aston University (UK); Graz University & Fachhochschule (both Austria); the University of Primorska (Slovenia) and the University of Craiova (Romania). The main aim of the study was to identify “key individual and business-related skills and competencies required by employers of business graduates” (p. 412) and to see if or to what extent these human capital requirements are being met. Andrews and Higson (2008) claim that despite differences in social and economic global status, the business undergraduate course is remarkably similar in its content in all countries studied. They found that graduates’ and employers’ perceptions of generic competencies were remarkably similar. Most graduates recognized the value of having been equipped with generic skills that enabled them to have good writing skills. This, however, was not the case with ‘oral skills’. This generic skill they acquired whilst working in groups at university.

In another South-Asian country, Singh and Singh (2008) researched perceptions of Malaysian employers regarding employability skills needed for the job-market and graduates insights into what employability skills they currently possess. Singh & Singh (2008) lament the fact that too many

graduates are leaving universities without the necessary generic skills needed to enter the world of work. Employers thus find them to be inadequately prepared and have to spend vast amounts of money to get them 'work ready'. Singh and Singh (2008) assert that,

“Educational institutions have come under intense pressure to equip students with more than just the academic skills. A number of reports issued by employers have urged universities to make more explicit efforts to develop the ‘key’, ‘core’, ‘transferable’, ‘soft’, ‘employable’ and/or ‘generic skills’ needed in many types of employment” (p. 18).

Barrie (2006), however, suggests that whilst generic skills training should be explicit, it should still be embedded into the different courses. Various attributes such as “... communication ability, problem-solving, capacity to work with others, and managing oneself” (Hager et al, p. 10) are seen as valuable employment-related skills.

Muslim and Yunos (2014), however, claim that the required generic skills are indeed imbedded into the Malaysian University's curriculum. Singh and Singh (2008) found that employers are satisfied with their training levels within their fields of specializations but are not altogether happy with the generic skills acquired. Malaysian employers are searching for well-adjusted graduates, “with good academic achievement and possessing ‘soft skills’ such as communication skills, problem solving skills, interpersonal skills and the ability to be flexible” (p. 17).

Singh and Singh (2008) claim that graduates, in analysing their own generic skill abilities, found themselves to be equipped with all the generic skills needed for employment. It can be that, employers have a greater expectation of graduates' generic abilities or that graduates were biased in their appraisal of themselves. Singh and Singh (2008) find it interesting to note that the younger the employer, the better rating it would give students regarding their employability skills. He notes that it is imperative for, “... educational institutions to have a working relationship with industry to meet the requirements and needs of the employers” (Singh & Singh, 2008, p. 18) to cancel misconceptions and misunderstandings about the importance of developing skills. This ties in with an earlier question asked by Levin and Kelly (1994) on whether some employers are ready to receive a more flexible and dynamic worker.

Singh and Singh (2008) express similar sentiments to Curtis and McKenzie (2002), and disagree with Barrie (2006), who argues against a 'general profile template', when they reason that, “Employability skills are not job specific, but are skills which cut horizontally across all industries

and vertically across all jobs from entry level to chief executive officer” (Singh & Singh, 2008, p. 16).

This position reflects the South African situation in the TVET colleges where a dedicated, compulsory, general Life Skills Programme is part of the NCV course on offer. It is compulsory to pass the Life Orientation course (which is split between Life Skills and ITS), in order to be certificated. The life skills taught are not job-specific or embedded into a course but rather cuts across all industries.

Barrie (2006) disagrees with this ‘general profile’ arrangement and discourages the use of a general profile template to inculcate different attributes. Ballantine and McCourt Larres (2007) argue for a single semester in the final year in which students would concentrate exclusively on acquiring generic skills. They look at a cooperative teaching style, to complement students’ generic skills.

Barrie (2006), as previously mentioned, laments the often haphazard implementation of generic skills development at higher education institutions. He further states that a “bewildering array of terms has emerged...” (p. 217), to describe these qualities. In his research, he highlights the fact that academics’ understanding of ‘graduated attributes’, as mentioned before, qualitatively differs and there is no consensus among lecturers as to the definition of this concept. Barrie implores the need for a common understanding as the nature of universities is dynamic and change is inevitable as society’s aspirations change.

Barrie pronounces that the Australian government has heeded the importance of generic skills as “Australian universities are now required, at the minimum, to include in their operational plans a statement of the generic outcomes of a university education, as a condition of funding” (p. 216).

South African universities have not given considerable attention to ensuring effective collaboration between the needs of industry and the supply of employable workers, as argued by Archer and Chetty (2013) when they highlight the constant pressure the South African universities are under to produce ‘employable’ graduates that would be valuable for an ever-changing ‘knowledge driven economy’. However, Archer and Chetty’s (2013) concentration was not specifically focused on the role which generic skills plays but rather on the employment rates of their graduates. They did not emphasise the role generic skills could play in producing graduates that would be more employable and comfortable in the various work situations. They admit that in South Africa, “The disconnect between what universities produce and what employers want, is problematic, with universities under

increasing pressure to close the gap” (Archer and Chetty, 2013, p. 134).

TVET – A global response to the knowledge economy

Okorafor and Okorafor (2013) argue that as the conditions in the 21st century change, employers have adapted to look at different skills when recruiting personnel. They look for adaptability and creativity in their workforce rather than for standardised skills and experience. They argue that adaptability is important because of ‘rapid technological developments’ which is the reason that jobs become obsolete more speedily than before. They state that, “High quality human resource is a critical factor in organizing a vibrant economy that must survive in the globalizing knowledge economy” (p. 1).

They additionally justify the development to place more emphasis on soft skills instead of concentrating largely on ‘industry specific’ skills, by emphasizing the need for employees to be more adaptable and creative in their workplaces. Regarding TVET colleges, they emphasise the role it can play in the inculcation of required skills that are needed in the knowledge economy. They specifically point to the generic skills of “problem solving, communication and teamwork and those relevant to ICT areas” (Okorafor and Okorafor, 2013, p. 6) as becoming more vital.

All over the world governments are studying and applying strategies to either boost their economic competitiveness or to retain their competitive global edge. Various nation states (some coerced, others not) have adopted the HCT strategy to ensure they become or remain relevant on the global stage. In Colombo, Sri Lanka, the challenge to produce ‘new knowledge’ workers to respond to new challenges akin to the shift from, “...narrow to broadband, wired to wireless, Petro- based to Agro-based, and finally from divergent to convergent technologies” (Majumdar, (2009, p. 92).

Majumdar (2009) postulates that the pressure on TVET colleges would be more imminent as the need for these scarce higher order generic skills become more apparent. Majumdar (2009) emphasises that, “ One of the ways believed to aid in coping with rapid technological change is building the foundations for a set of generic and soft skills as baseline skills set of the next generation learners” (p. 2). This pressure to develop knowledge workers, though making use of TVET structures, is recognised by Ismail and Abiddin (2014) when they propose that, “Training that takes place in technical and vocational education need to be consistent with industry. This is important to ensure that human capital development focusses on developing ‘knowledge – workers’ (p. 9).

Tickly (2013) suggests that TVET should be understood in relation to its underlying role in human development and how it is being viewed by governments in key policies and priorities. He claims that HCT is the dominant approach when conceptualizing TVET even though UNESCO's interest in TVET developments are seen to be "linked to a more human – centered view as a means to support sustainable development" (p. 3). These views, he claims, are rarely made to be explicit by UNESCO.

UNESCO (2012) found that the foundations set in many countries' educational and training institutions are clearly not as strategic as it could be as education and training is mostly supply driven and this leads to a mismatch in the different economies. The need for better communication, between the various sectors involved in ensuring a prosperous economy, is suggested. This needs to be done in order to ensure that the demands by industry and society are met.

In a study done by the Commonwealth Secretariat (2013) on five commonwealth countries (Bangladesh, The Gambia, Jamaica, Kenya and Papua New Guinea), similar conclusions, as suggested by UNESCO (2012), were made. They suggest that, "Greater collaboration is needed between TVET institutions and industries and the relevant departments to create synergy in the sector" (p. 10).

The ideal for industries and educational and training institutions to collaborate are once again highlighted when Khambayat and Majundar (2010) propose that the "nature of the skills required for a knowledge economy is a moving target, and can only be predicted at a highly aggregated level for a few years ahead." (p. 10). They propose that the knowledge economy demands workers with higher order thinking skills. These skills include critical thinking skills as well as problem solving skills. TVET and other institutions accordingly need to adapt to new forms of methodologies and strategies to ensure that students get employable for the knowledge economy.

The importance of generic skills to contribute towards 'human capacity building' is underlined in Young and Chapman's (2010) research study which established that a large majority of employers in Australia and New Zealand now require employees to possess higher order generic skills. They state that "Employees with excellent generic competencies quickly found themselves in higher demand than those with advanced, yet subject-specific, technical skills" (p. 3).

Young and Chapman (2010) additionally refer to a European Commission study done in 2001 which states that of all the European countries studied, The UK, with the exception of Ireland, was the only

respondent to have "... incorporated generic competencies as separate from subject-specific competencies in the curriculum" (p. 13). They further conclude that while important progress has been made to develop consistent generic skills frameworks, a lot still needs to be done to define and assess these generic competencies.

The UNESCO (2012) report concurs with the analysis of Khambayat and Majundar (2010) and Young and Chapman (2010) when summarizing the need for developing the human capital for tomorrow's societies and economics. UNESCO sees the role of TVET colleges as producing those workers with highly developed generic skills that could adapt rapidly to changing technological progress. "Individuals in tomorrow's societies and economies are entitled to be prepared for change, to benefit equitably from TVET learning and to have this learning recognized by others" (UNESCO, 2012, p. 28).

Upon analysing the role of TVET's contribution and its potential to contribute towards a successful knowledge economy, the Asian Development Bank (2009) looks at TVET's role in the modern economy. It emphasises the greater demands on workers as it is expected of them to be problem-solvers, communicators and to be adept at 'multitasking'. It states that, "Employers want employees who are creative problem-solvers and innovators who are constantly updating their knowledge and expertise" (Asian Development Bank, 2009, p. 21).

As argued by the Asian Development Bank (2009), King and Palmer (2007) similarly see the need for vocational education and training (VET) institutes to contribute towards skills development in order to ensure economic growth which in turn will lead to breaking the back of poverty. They state that, "The claims about the beneficial results or skills required through TVET perpetuate the assumption that this training leads to economic growth and poverty reduction" (King and Palmer, 2007, p. 8).

On the African continent, the need for generic skills has not gone unheeded. The African 'Continental Strategy' contained in its Technical Vocational Education and Training Implementation Report (2012), as with the Asian Development Bank (2009) and King and Palmer (2007), includes achieving stated goals regarding TVET institutions. The African Union who faces more challenges than any other continent, "... puts special focus on relevant curriculum development and critical skills for employability..." (p. 7). As with UNESCO (2012), the African Union Commission (2012) has monitored the economic performance of its member states and has developed a "Continental Strategy" to develop and rejuvenate TVET in Africa to ensure its members stay or become relevant

on the global stage. Amongst its objectives is the aim to “... contribute to human capacity building in Africa” (p. 2).

The question on how effective the assessment of generic skills of engineering students at TVET institutions is, was argued by Daud (2013) at The 4th International Research Symposium on Problem-Based Learning. He suggests that having a problem-based curriculum would ensure the effective development of knowledge and skills required for industrial needs.

In Canada, Canadian Community Colleges are forced to stay in touch with modern trends and developments within the economy as they ensure the participation of employers at every level of the institution (Association of Canadian Community Colleges, 2012). This ensures that the curriculum remains responsive to rapid evolving economic needs. This model represents what most HCT proponents are suggesting what should happen to ensure maximum economic growth.

However, there are others, as argued before, who caution that this could lead to the narrow interest of employers being met at the expense of other role players within the broader societal spectrum. They argue that constructors of curriculum should be broader than just education and business and the needs of human beings should be conceptualized in a more holistic manner. Tickly (2013) expresses this adequately when he pronounces that, “... whilst economic growth is important, it is not an end in itself and human centred developments needs to be conceptualized more holistically than simply in terms of increases in GDP...” (p. 12).

Khambayat and Majundar (2010) note the importance of TVET in meeting the demand of a global knowledge economy when they urge TVET policy makers to, “... act in response rapidly to the changing scenario ..., the new graduates from the institutions of TVET have to be world class and the education quality has to be of global standards” (p. 9) They place great expectations on TVET as they further propose that “TVET must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life and help to achieve sustainable development” (p. 10).

UNESCO and the British High Commission (2014), reiterate the importance of integrating generic employability skills into the curriculum as proposed by the African Union (2012). In a report done in collaboration with the British Council, UNESCO (Bangkok) and the British High Commission (Singapore) on the integration of transferable skills in the TVET curriculum, role players from all spheres came together to strategise a way to integrate life skills into the TVET curriculum.(Paryono,

Nawe, Rosa, Abdullah, Mujah, Othman and Haji, 2014.) What is of significance for the learning of generic skills was when one of the policy makers suggested that it should be broadened and expanded by, “encouraging the students to explore and expand their life skills from within and beyond the school setting?” (Paryono et al, 2014. p. 11).

Barrie (2006) as previously debated, laments the fact that academics’ understanding and focus of generic employability skills differs vastly and urges institutions to garner consensus around the quality and definition of the concept. Listed below are five such skills which shows global significance for human capital development:

Communication as a skill for the knowledge economy

A common definition of communication would be the practice of sharing information, views and feelings between people through writing, speaking, or body language. Khattak, Yagoob and Basri (2003) define communication in their research paper as,

” ... a two-way process of reaching mutual understanding, in which participants not only exchange (encode-decode) information but also create and share meaning” (p1). In other words its success is dependent on a person’s proficiency in communication. They claim that, “... communication is successful only when both the sender and the receiver reach a common understanding regarding the same information as a result of the communication process. By successfully getting your message across, you convey your thoughts and ideas...” (p. 1)

Jalaludin and Inkasan (2014) in their research on communications skills for master’s students at TVET colleges found that employers question the ineffectiveness of communication skills among graduates. They, as with Diouf (1994) argue for a ‘greater awareness’ of the importance of this skill when it comes to employability and general interaction. According to Jalaludin and Inkasan (2014), employers identify the lack of communication skills, as the root cause of interview failures. Jalaludin and Inkasan (2014) pronounce that, “It is found that their failure in communication skills can cause problems in terms of social existence, cooperation, communication techniques and conflict management.” (p. 111).

Diouf (1994) finds synergy in Jalaludin and Inkasan’s (2014) arguments and adds that communication skills help to build a common sense of identity among people which would assist them in identifying common issues and implementing their collective strategies and decisions as suggested by socio-cultural theorists. Communication skills should thus be viewed as a fundamental

skill to have, as it assists with other generic employability skills such as teamwork, problem solving and leadership skills.

Diouf (1994) says that,

“A decisive role can be played by communication in promoting human development in today's new climate of social change. As the world moves towards greater democracy, decentralization and the market economy, conditions are becoming more favourable for people to start steering their own course of change. But it is vital to stimulate their awareness, participation and capabilities” (p. 2).

Nam (2009) agrees with Jalaludin and Inkasan (2014) and echoes the demand for communication skills in the workplace by the Organisation for Economic Co-operation and Development (OECD) countries, through raising the critical role it plays in new knowledge economic developments. His research of OECD countries incorporates non OECD countries such as India, Malaysia and South Africa. He states that, “ In brief, jobs emphasizing expert thinking and complex communication skills continues to rise as technology supplants jobs accomplished by following set rules” (Nam, 2009, p. 5).

Nam (2009) additionally emphasises the importance of being able to interact with diverse groups of people. He states that, “One must have the capacity to interact and engage effectively with others in heterogeneous groups.” (p. 6). He, however, concludes in his research of OECD and a few non – OECD counties, that a large percentage of employers found that vocational education and training prepared employees to be ‘workplace ready’.

Teamwork as a skill for the knowledge economy

Tarricone and Luca (2002) describe teamwork as “... individuals working together in a cooperative environment to achieve common team goals through sharing knowledge and skills” (p. 641)

Teamwork is seen as an important generic employability skill as it has a direct impact on economic growth as argued by Ghorbanhosseini (2013), King and Palmer (2007), Tikly (2013) and Wickramasinghe and Perera (2012).

Ghorbanhosseini (2013) argues that,

“... teamwork had direct and significant impact on human capital and organizational

commitment. Its implication is that mobilization of actions, knowledge, skills and expertise of all employees in the form of team activities is very crucial in the organizations” (p. 1024). Ghorbanhosseini (2013) thus argues that organising activities in teams, serves as a catalyst for commitment and support from employees to an organization which would consequently increase their human capital and lead to increased productivity.

Tikly (2013) too finds reason in the argument presented by Ghorbanhosseini (2013) and others as he argues in a report in a UNESCO journal where he claims that, “The new emphasis on skills for growth has led exponents of human capital theory to suggest different kinds of policy solutions” (p. 7). He states that apart from the emphasis on supporting system change through system assessments, there is further emphasis laid on the assessments of learning and skills from the World Bank that include team skills, critical thinking and problem-solving skills.

Wickramasinghe and Perera (2012) agree with Ghorbanhosseini (2013) and others who contend that teamwork skills is a capacity skill that needs to be prioritised for human capital development. It is seen as a fundamental human capital generic skill enabling employees to be effective and competitive in the new knowledge work environment.

Leadership as a skill for the knowledge economy

Sandman and Vandenberg (1995) conclude that “... leadership development for the 21st century is holistic: it is centered in groups or organizations, rather than individuals, and engages the group in heart, mind, spirit, and energy. The driving forces of this philosophy, then, are community, the heart of a group's leadership; vision, which engages the spirit; learning, which stimulates the mind; and action, which compels energy” (p. 1).

As with communication and teamwork skills, leadership skills can additionally be viewed as an essential part of generic employability skills. Leadership has to be prepared to face new challenges and different ways of dealing with demands of the new knowledge economy. Leaders have to deal with critical thinkers, be problem solvers, be prepared to adapt to new innovation and be diverse in their approach to managing human capital (Canwell, Dongrie, Neveras and Stockton, 2014).

Canwell et al (2014) assert that,

“Companies face new leadership challenges, including developing Millennials and multiple generations of leaders, meeting the demand for leaders with global fluency and flexibility,

building the ability to innovate and inspire others to perform, and acquiring new levels of understanding of rapidly changing technologies and new disciplines and fields” (p. 2).

Dilts (1996) agrees with Canwell et al.(2014) when he puts forward that good leadership skills, in a new knowledge world, is paramount to our future ‘success and survival’. He says that,

“As we try to take command of our own destiny and guide the destinies of our families, communities, organisations and our planet, the necessity of effective leadership ability has become increasingly obvious” (Dilts, 1996, p. 1).

Problem solving as a skill for the knowledge economy

Geldenhuys (2007), when defining problem solving, says that,

“In a typical problem solving process, symptoms are usually identified, the root causes of the problem are analysed, possible solutions are brainstormed, best alternative solutions are selected and action plans for implementation are developed.” (p. 1)

Gamble (2013) and others (Singh and Singh, 2008; Wickramasinghe & Perera, 2012; and Barrie, 2006) see higher order conceptual skills such as problem solving skills as fundamental in developing the ‘knowledge economy’. Geldenhuys (2007) agrees and states that problem solving skills is crucial in a modern economy and defines it as the process that identifies the root problem, brainstorm possible solutions, selects the most viable solutions and puts in action plans for implementation.

The Asian Development Bank (2009) in their report, ‘Good Practice in Technical and Vocational Education and Training’ argues that the TVET sector is arguably “... the most challenging subsector to manage because of its changing labour demands, diverse clientele, the range of programs and high inherent cost” (p. 2). It argues that TVET skills development should be seen as an important cog in raising productivity and to reduce poverty. It sees it as having a causal relationship. The report further stresses that “New forms of work organization require greater responsibility and skills from the workforce, including problem-solving and communication skills” (p. 7) The report agree with Okorafor and Okorafor (2013) when it comes to the role that TVET institutions play in garnering those skills.

Mohamad and Graaff (2013) at the 4th International Research Symposium on Problem-Based Learning (2013) stress the importance of the transference of knowledge by using a problem-based

learning methodology. They recognize that in order to solve problems, the individual should have: “strong conceptual understanding of the subject matter; the ability to reason with incomplete information ...; motivation for self-directed learning...” (p. 128).

Mohamad and Graaff (2013) address the important issue of teaching problem solving skills to students using problem-based learning methodology. They recognize, as previously argued during my literature review, that in order to solve problems, fundamental components such as ‘strong conceptual understanding; ‘the ability to reason’ and motivation for ‘self-directed learning’ have to be part of the students critical generic skills uptake.

As discussed before, the Asian Development Bank (2009), in their report, ‘Good Practice in Technical and Vocational Education and Training’ agrees with Okorafor and Okorafor (2013) when it comes to the role that TVET institutions should play in inculcating problem solving skills into students. They argue that new forms of work organisation require greater responsibility and different skills from its workforce which include the generation of problem solving skills. This, according to them, would lead to greater productivity and reduce poverty.

Daud (2013), at the 4th International Research Symposium on Problem-Based Learning, argued that Technical Vocational Education and Training engineering students, who have completed a problem-based curriculum, would have enhanced human capital skills and would ultimately contribute towards economic growth. Okorafor and Okorafor (2013) concur with this view and say that TVET colleges have a major role to play in developing generic skills like problem solving among others which plays a crucial role in expanding the knowledge economy.

Arguments of Bhuwanee (2012) are similar to those of Daud (2013), Okorafor and Okorafor (2013), and Mohamad and Graaff (2013) when he highlights the significance of generic skills in the workplace and its importance when it comes to applying knowledge and skills. He mentions solving problems among others as examples when he makes this argument. He pronounces that, “... generic skills focus on the capacity to apply knowledge and skills in an integrated way in work situations” (Bhuwanee, 2012, p. 28). Daud (2013) makes similar arguments when he asserts that, “Though generic skills are important for the graduates during the job hunting, it is also a need for them to acquire technical skills through hands-on experience that will enable them to solve problems which emulate industrial problems” (p. 89).

Critical thinking as a skill for the knowledge economy

Critical thinking skills additionally are another generic employability skill that is sought after in the ‘new knowledge’ era as discussed by Thompson (2011) Brotherton (2011), and Gamble (2013). Gamble (2013) asserts that the ‘knowledge economy’ is in need of workers who have developed “higher-order skills of reasoning, conceptual problem - solving and communication” (p. 207).

Thompson (2011) defines critical thinkers as individuals with curious natures and they possess the ability to realise that some situations require ‘multiple approaches’ and that for some questions there can be more than one answer. He further declares that,

“... critical thinkers are cognizant of potential barriers and difficulties and are always prepared to identify solutions to these problems. In doing so they are systematic and methodical in their approaches to solving problems” (p. 2).

Brotherton (2011) agrees with Thompson (2011) and Gamble (2013) and emphasises the importance of critical thinking in a new knowledge economy when he states that,

“With the continuous economic upheaval, the speed of technological change, and the on-going need to deal with uncertainty and complexity, critical thinking skills have risen to the top of the list of competencies needed to lead organizations effectively into the future” (p. 1)

South African TVET colleges, the NCV and generic employability skills for the knowledge economy

Kruss et al. (2012) asserts that workers need to respond to new technologies that is information intensive and seek creative ways to respond to the challenge of new production methods to ensure that the South African nation state become competitive on the global stage.

Gewer (2009) blames apartheid for colleges’ inability to effectively impact on economic developments. He says that, “Colleges have inherited a legacy of a disjointed institutional and labour market created under apartheid and this invariably has an impact on their capacity to respond to the needs of the economy in which they operate.” (p. 98). Kruss et al. (2012) support the arguments made by Gewer (2009) and claim that the ever-changing ‘shifting mandate’ the TVET college

system has to endure, makes it difficult for those institutions to adequately prepare young adults for the current labour market. This legacy has led to a credibility question that colleges have to overcome with the industrial stakeholders in order to develop better communication strategies in order to develop better bilateral relationships. Kruss et al. (2012) propose that, “The institutional and structural arrangements between education, the labour market, the production system and other social and economic institutions do not always facilitate appropriate, responsive and up-to-date development of skills and capabilities that will enhance global competitiveness” (p. 1).

Wedekind (2012) supports the arguments of Kruss et al. (2012) and Guison-Dowdy (2012) that the technical colleges need to make a fundamental shift in order to become more relevant, or as he puts it, ‘more responsive’ to an ever emerging knowledge economy. Wedekind (2012) urges those stakeholders within the college sector to fully comprehend the challenges associated with developing responsiveness towards contemporary industrial requirements. He suggests that the challenges facing vocational institutions worldwide are fairly similar but raises an argument to exclude South Africa in this statement as he regards the South African vocational institutions as unique, with their additional responsibility of redressing their apartheid past. He states that, “While the issues or external factors are broadly similar for vocational institutions throughout the world, there is an argument that suggests that South Africa’s colleges have additional matters on their agenda through the role they are expected to play in redressing the past” (Wedekind, 2012, p. 4).

Papier et al (2012) similarly recognise the importance of TVET institutions in playing a key role in issues of redressing apartheid wrongs and furthering equity. Papier et al. (2012) reflect on a road long travelled by TVET/FET colleges in South Africa and articulates their challenges in “... shedding their inglorious past, from their time as technical colleges for the training of white workers in a former exclusionary, apartheid-driven employment dispensation” (p. 2) to institutions that need to focus on the redress of past inequalities.

The diverse nature of the South African TVET institutions concerning the various programmes they offer, the diverse student population, the ‘shifting mandates’ from education authorities and the pressure from industry to prepare students for a knowledge economy, place a lot of pressure on the TVET colleges (Gewer, 2009).

In a comparative study of technical colleges in South Africa and England, McGrath et al (2010), express caution and warn that we must not succumb to employers’ interest as employers understanding of economics can become ‘part of the problem’. Developing the ‘knowledge

economy' cannot be confined to the needs of employers but it should be more expansive in its outlook. McGrath et al (2010) and Wedekind (2012) concur that developing skills for employment is much broader than just pleasing the narrow interest of employers. They argue that workers have to be prepared for the volatility of global economic markets. As previously argued by Khambayat and Majundar (2010), Young and Chapman (2010) and UNESCO (2012), Wedekind (2012) additionally argues that instilling skills into students would enable them to adapt to the future demands of the 'new knowledge economy'. He argues that, "the labour market cannot predict future need and so colleges also need a predictive response that pre-empts future demands" (p. 5). They, similar to many others, reiterate the need for communication between the various role-players in the economy.

McGrath et al (2010) in their study, however, solely concentrate on the vocational subjects and fail to note contributions made by the fundamental subjects, in the NCV stream. These subjects include Life Orientation, Mathematics and English. Wedekind (2012) similarly misses the opportunity to expand on contributions from the fundamental course, when he states that, if the need for generic skills is so in demand, it should "work across all aspects of the vocational curriculum" (p. 14) He further alerts that, "... there is little work on the ways in which employability skills are embedded (or not) within the curriculum" (p. 14). My research contributes to this limited investigation into generic employability skills in the LO course.

Papier et al. (2012), in a comprehensive report on contemporary issues in public TVET/FET colleges in South Africa are complementary in their analysis of the NCV course, curriculum design. They state that, "The design and underpinning philosophy of the NCV can be traced to debates on the kind of knowledge and skills required in a 'modern knowledge economy'" (p. 5).

However, Papier et al. (2012), in their research also neglect to recognise the contributions of the NCV course, fundamental subjects, in developing crucial critical employability skills but recognise that TVET curricula are positioned to enhance employability. This can be seen in their conclusion that, "From a macro policy perspective, conceptual frameworks have largely positioned FET Colleges to drive skills training for successive economic imperatives, though this has not been reflected in official curricula and programmes according to those who believe curricula should reflect a stronger occupational orientation" (Papier et al. 2012, p. 14).

Researchers such as Kruss et al, (2012), and Gamble (2013) similarly suggest that the South African economy cannot operate with a workforce that only possess technical knowledge, but lacks generic or higher level skills, if it wants to be globally competitive. Gamble (2013) verbalizes that. "... it is

claimed that the so-called knowledge economy now requires all students to develop higher-order skills of reasoning, conceptual problem-solving and communication,” (p. 207). Kruss et al pronounce that, “It is now widely accepted that the skills of the workforce is a critical determinant of global competitiveness, as new technologies become more complex and competition is increasingly driven by quality, flexibility, design, reliability and networking” (p. 1)

TVET colleges in South Africa, however, are unapologetically working in partnership with industry to frame their curricula within human capital principles. The White Paper for Post-school Education (2013) clearly states that, “This means that training systems, including curricula, need to be designed around close cooperation between employers and education and training providers (p. 9). In its executive summary, the White Paper (2013) outlines that, “Employers should also be in a position to advise the college system and individual colleges around issues of curriculum, and experts from industry could teach at colleges on a part-time or occasional basis (p. xii).

The various institutions are challenged to produce graduates who will be able to adapt to work situations that are increasingly becoming flexible and complex as their needs changes. The White Paper (2013) pronounces on this and states that,

“The post-school education and training system is a centrally important institutional mechanism established by society and must be responsive to its needs. This includes responding to the needs of the economy and the labour market through imparting skills as described above. It can also lead to technical innovation and economic advancement that can have a major impact on the strength and effectiveness” (White Paper, 2013, p. 10)

Watson (2014) explains the South African educational authorities’ drive to reconstitute post education sector. She declares that, “The need to innovate, to find our place in the global knowledge society, to develop the country’s infrastructure and to expand the manufacturing sector, are some of the key imperatives energising the government’s drive to reconfigure the post-school sector” (p. 17).

Watson (2014) sees the call for workers to be employable as in line with the human capital framework in which education and training are being administered, She says that,“ Within the employability debate, the skills needs of the country are, in line with conventional human capital development models, linked to economic prosperity for individuals” (p. 17).

Watson (2014) questions the need for higher order skills in the modern knowledge economy. She argues that this would erode worker security. She claims that in this human capital developmental

model, workers are perceived as autonomous and responsible for developing skills that are required by industry, at their own expense. “Simply put, students and workers are pressurized to make themselves employable...” (Watson, 2014, p. 8). She envisages that the increased restructuring in industry is a neo-liberal ploy to recapture control over workers. She laments their increased intervention and contributions in curricula developments and sees this as ‘control education’.

Locally employers are increasingly demanding employees to not only have the hard skills required for a job, but also the soft skills (generic employability skills) that would augment their employability and productivity for a new knowledge labour market. The White Paper (2013) states that, “The main purpose of these colleges is to train young school leavers, providing them with the skills, knowledge and attitudes necessary for employment in the labour market” (p. 11). McGrath et al (2010) advise that this transition into employment can be enhanced by ensuring that critical technical and generic skills get developed by education and training institutions in liaison with the labour markets.

The South African Government’s expressed aim of establishing the TVET colleges was to ensure South Africa has enough employable workers to ensure economic prosperity and to alleviate poverty. Including a general soft skills (generic) course could be viewed as a necessary step in order to compensate for the time most people had to endure an inferior educational system under the Apartheid system. The NCV skills course should thus directly contribute towards students’ employability and thereby reducing the poverty levels in South Africa.

Researchers are generally in agreement that the South African college system has a credibility problem that needs to be addressed. In order to be more responsive to the needs of industry, the educational hierarchy needs to forge closer links with industry as suggested in the White Paper for Post-School Education and Training (2013).

In the next section I discuss the design and methodology for investigating the incorporation of generic skills for employability into NCV students.

SECTION 3

Research design and methodology

Research Approach

My research followed a qualitative approach to investigate whether the NCV Life Skills programme has enabled students to communicate effectively; think critically; solve problems; display leadership skills and if they are able to work within a team within their work environment.

My research followed a linear path but the structure was flexible to accommodate the qualitative strategy of this specific research, as suggested by Bryman (2012). I used open-ended questions to allow for the exploration and comprehension of participants' social reality.

I conducted face-to-face interviews with the participants at their workplace by using an interview guide. Bryman (2012) describes the interview guide as “a list of questions or fairly specific topics to be covered” (p. 471).

The ontological position of my research can be described as constructivist as I reflected a social reality that cannot be regarded as stagnant, as it can be revised to reflect a different social reality as time passes. Bryman (2012), states that, “... the researcher always presents a specific version of social reality, rather than one that can be regarded as definitive” (p. 33).

Research Method

The research instrument that I used was a semi-structured interview guide, which allowed me to pose questions to all participants as I had the advantage to ask follow up questions or to rephrase questions for clarity. I followed a semi-structured interview approach which was appropriate for the qualitative research design. Bryman (2012) highlights the appropriateness of the semi-structured interview in qualitative research in his discussion on how it differs from the structured interview in quantitative research. The less structured nature of the interview in the qualitative approach, according to Bryman (2012), encourages ‘rambling’ because “it gives the interviewer insight into what the interviewee sees as relevant and important” (p. 470).

Turner (2010) cautions researchers to be attentive of how they clarify questions when using an interview guide, as this could cause inconsistency as “researchers can interchange the way he or she poses them” (p. 755). Bryman (2012) suggests that, “... if an interview is properly executed, variation in people’s replies will be due to ‘true’ or ‘real’ variation and not due to the interview context” (p. 210). I ensured that I was fully conversant with the questions I set to the participants, as suggested by Bryman (2012). Additionally I had to be cautious when rephrasing or clarifying questions so as to ensure consistency and not to lose the crux of the question asked. I was attentive to actions and reactions from participants as to gauge their easiness or uneasiness in answering questions. I ensured that an appropriate atmosphere was created in order for participants to partake in answering questions in a spontaneous manner as suggested by Bryman (2012). I cut short any line of questioning when noticing if they were becoming uncomfortable by their body language, as suggested by Bryman (2012).

I made sure that information given by participants, accurately reflected their perspectives by listening attentively, being non-judgmental, using quality recording equipment and respecting the dignity of participants. The estimated time taken to interview one individual participant was on average 45 minutes.

Boyce and Neale (2006) suggest that interviews “... provide much more detailed information than what is available through other data collection methods, such as surveys. They also may provide a more relaxed atmosphere in which to collect information” (p. 3). Boyce and Neale (2006) recognise that interviews do have limitations as it could be ‘prone to bias’, ‘time - intensive’ and that untrained interviewers can make an interviewee uncomfortable (p. 4). Throughout the interaction between myself and the interviewee I tried to make them feel as comfortable as possible and demonstrated an

appreciation for their willingness to be interviewed.

Research Site

The workplace that I have selected for my investigation was the City of Cape Town, (Metro Police Department) where a number of students, who completed the NCV programme at TVET colleges, are employed.

I approached the site managers, where the participants were stationed, to identify a suitable venue for the interview to take place. Bryman (2012) suggests that an interviewer familiarises him/herself with the participants' geographical setting as this will allow for a better understanding of responses. Added to that Bryman (2012) reveals that an interviewer should ensure that the setting for an interview is not too noisy and the participant should be assured of privacy when answering questions. As different venues were used for interviews, the settings were of a mixed bag kind. The Metro Police officers were interviewed in their respective operational areas which included the Bonteheuwel Precinct, Phillippi East Precinct, Khayalitsha Precinct as well as the Metro Police Head Quarters in Cape Town.

Research participants and selection

The participants I identified for interview purposes are past students who have completed level 4 in Safety in Society in the NCV stream of two TVET colleges situated in the Southern Suburbs and Northern Suburbs of Cape Town and who have acquired jobs as Metro Police officers at the Cape Town local Municipality. I made approaches to the City of Cape Town for assistance with the selection of participants.

The target selection for the study was twenty but only thirteen of the total participants from the 2012 college cohort agreed to be part of the research project. This cohort was the first to receive employment with the City of Cape Town as Metro Police officers. The number of students, who initially received employment, was twenty-four. I had to choose from this limited population range and thirteen students was a number that could minimize sampling error and ensure 'likely precision'. Bryman (2012) argues that a large size does not guarantee precision but it does increase the "likely precision of the sample" (p. 198).

The participants were of a diverse range as far as their culture, language, race, gender, age and socio-economic status were concerned. I did not discriminate on the basis of gender, race or socio-economic status when I approached the officers to volunteer as participants. My initial idea was to

ensure an equal representation in gender when selecting my participants for the research project. However, I found female participants to be unwilling to participate in this study; hence the majority of participants were male.

Research Instrument

I used a semi-structured interview guide (Appendix 1) to collect the required data. The interview guide was set to investigate how or if participants had used their acquired skills to negotiate social and individual processes to negotiate obstacles, particularly in relation to adapting to their work as Metro Police officers. This method of data collection allowed for greater flexibility but could still be considered as being methodical in its approach, as suggested by Bryman (2012). He states that, “What is crucial is that the questioning allows interviewers to glean the ways in which research participants view their social world and that there is flexibility in the conduct of the interviews” (Bryman, 2012, p. 473). Similar questions were asked to all participants but the flexible nature of the interview guide allowed participants to enjoy a certain degree of freedom to express themselves in a spontaneous manner while being interviewed. The interview guide allowed me greater freedom to clarify questions and to ask additional ones as provision has been made for this within its structure.

I heeded the advice of Turner (2010) who warns against inconsistency when using a semi-structured instrument when interviewing participants as they, “... may not consistently answer the same question(s) based on how they were posed by the interviewer” (p. 755).

I have taken the time to ensure that questions set in this particular instrument, were clear, unambiguous and did not invade the privacy of participants. I used language which made the questions understandable to the participants. I have taken care to set the questions within the parameters of their experience and knowledge. In order to contextualize the answers of the participants, I have included ‘facesheet information’ of a general and specific kind in the interview guide, as suggested by Bryman (2012).

The questions in the interview guide have been grouped to facilitate the transcribing of information into various themes.

Methods of data capturing

The total number of potential participants given to me by the Human Resources Head official of the organisation, was 24. Of the total population, I interviewed 13 participants by making use of an

informal interview schedule.

I have recorded the interviews with the use of a good voice recorder. Bryman (2012) suggests that a good quality recording machine should be used when interviewing to ensure clarity when capturing information. I then transferred the recording to my hard drive on my personal computer and then transferred it onto my USB flash drive for save storage. I have made notes as participants responded to my set of questions, especially when they spoke softly. I personally conducted the interviews.

Data analysis

Bryman (2012) speaks about a ‘thematic analysis’ whereby data gets examined “... to extract core themes that could be distinguished both between and within transcripts” (p. 13). To simplify the identification of themes, the coding of each transcript was suggested. Data were grouped according to component parts and labeled (Bryman, 2012).

The thematic content analysis I used to analyse my qualitative data, allowed me to study social processes which explain human behaviour and experiences such as the practical application of generic employability skills within a work situation. Braun and Clark (2006) agree with Bryman (2012) when he proposes that the thematic analysis is an ideal method for identifying and analysing themes within the collected data. Braun and Clark (2006) acknowledge that identifying themes requires a great deal of judgement from the individual researcher.

I arranged the data in ways that enabled me to identify different common themes. The questions in the interview guide were numbered to facilitate the encoding of themes.

I encoded each transcript and grouped and labelled component parts as suggested by Bryman (2012) and Braun and Clark (2006). I used pseudonyms when referring or quoting the research participants to ensure that their identity will be protected.

I used an Excel worksheet to facilitate the categorisation of various themes that could be extracted from the transcripts. I gave careful consideration when transcribing recorded transcripts, as to reflect the accurate responses of participants by comparing my notes and what is recorded on the voice recorder. I transformed data gathered into evidence that supported the credibility of the research question, as suggested by Marton (1986).

Ethical Considerations

Bound and Campbell (2012) argue that “Social scientist working within the methodology of qualitative research have specific duties to the profession, discipline and participants of research projects” (p. 1). They further argue that fundamentally ethical guidelines must be adhered to, in order to protect the most important element of the research project, the participant. The code of ethics is necessitated because researchers have different life experience which lead to diverse morals and ethical standards.

Sture (2010) , Hammersley and Traimanou (2012) and Bryman (2012) view the ethical principles of ‘minimizing harm’, ‘respecting autonomy’, ‘protecting privacy’, ‘offering reciprocity’, ‘treating people equitably’ and ‘beneficence’ as important issues when conducting research. All of these principles were relevant to me while I was conducting my research. Adherence to these principles was important so as not to impede the dignity of participants.

My research took into account that confidentiality for Metro Police officers was an imperative and steps have to be taken to assure them that no person’s position would be compromised and that records obtained during my data collection period, would be held in the strictest of confidence. I informed them that pseudonyms would be used to protect their identities and that no one will be able to identify them, as suggested by Sture (2010), Hammersley and Traianou (2012) and other research and ethical committees of various institutions of higher learning.

The primary data gathered (interview schedules and voice recorders), were safely stored on a hard drive and a backup was stored on a USB flash drive. The analysed information was captured on a computer file and saved on a computer hard drive and additionally backed – up on a USB flash drive. After ownership of the information has been established, the records will be safely stored for 5 years preferable at a site identified by the University of the Western Cape. Thereafter, saved files and scanned copies of interview guides on the hard drive will be deleted to ensure confidentiality for participants.

Keeping an open mind while conducting my research and respecting the cultural and social diversities I may encounter, are research imperatives to which I adhered. I was mindful to use the correct procedures and practices; adhered to the appropriate regulations and policies related to my research; ensured that research records were appropriately stored and endured to share my findings as soon as I established ownership status, as advised by the Singapore Statement on Research

Integrity (2010). I undertook to practice the principles of: ‘honesty, accountability, professional courtesy, fairness and good stewardship’, as espoused in the said document that was developed at the 2nd World Conference on Research Integrity 21-24 July 2010 and supported by Sture (2010), who refer to these principles as ‘scholarship issues’.

I accepted responsibility not to fabricate, falsify, plagiarise, and partake in dishonest practices and to declare my interest in my investigation as suggested in policy documents on research ethics by the University of the Western Cape, (Western Cape Policy on Research Ethics). I applied for consent to conduct the research at the City of Cape Town (See Appendix 3).

In addition I made sure that participants were informed of the research topic and its value to educators, researchers, government and others in general. An information sheet (Appendix 2), detailing the study, was attached to the consent form to ensure that participants were fully aware of the nature of the study, and what were expected of them. I had designed a consent form (Appendix 4) which, in detail, explained the study in which they partook and I gave them time to consider their consent.

I was, in general, mindful that the ethics applied when conducting my investigation, were beyond reproach and were consistent with principles and responsibilities as adopted in the Singapore Statement on Research Integrity, (as summarized by Mayer and Steneck, 2010) and the research ethics policy of the University of the Western Cape where this research project is registered.

SECTION 4 – Data Analysis

I chose to investigate whether the relatively newly appointed Law Enforcement officers, who all completed the Life Skills course at TVET colleges, gained value from it by becoming more employable. The interviews took place at various Law Enforcement precincts within the Cape Peninsula. These included places like Bonteheuwel, Parow, Mitchell's Plain, Ottery and Bothasig. What complicated my schedule of interviews is the fact that some participants were working a 24 hour shift. Apart from gaining the approval of the head of Human Resources, Law Enforcement, I had to negotiate with various precinct principal inspectors, to use their venues and to interview the prospective participants.

On more than one occasion, a venue was not available and I had to be creative in establishing one. With Lindiwe, I had to use my car as an interview setting. With Sarah, I had to use a stoep (staircase) overlooking a busy taxi rank as an interview venue. Most venues were unfamiliar to me and after using Google maps and getting directions from potential participants I had to go in search for the venue. On occasion I had to go into sub-economic areas, known for its gang warfare (Bonteheuwel and Mitchell's Plain). In Mitchell's Plain the venue was on the Town Centre and after struggling to find the venue I had to ask a car guard to direct me to the venue.

Demographic information about participants

TVET College attended and course completed

The participants are all law enforcement officers who studied the three year Life Skills course through the, NCV, Safety in Society course at TVET colleges. All participants registered in the year 2010 and completed the course in 2012 except for one participant who started in 2009 and completed the certificate course in 2011. All of the participants matriculated at various high schools with the exception of one who passed his grade 10. All of the participants completed the Life Skills course after studying at the college for three years.

Current employment status of participants

All of the participants interviewed identified their job title as 'Law Enforcement Officer'. They serve in various units with diverse responsibilities, e.g. Rapid Response Unit, Administration, Crime prevention, Traffic Unit, Problem Buildings Unit, Informal Trading Unit and Court Section. Their skills requirement is generally similar but could vary from unit to unit as their responsibility changes. All of them identified their duties to include enforcing the bylaws of the City of Cape Town.

Herman was responsible for mainly enforcing traffic, street and public bylaws.

Sarah responsibilities were mainly enforcing general public bylaws.

Monray and Bongani were responsible for the protection of council property apart from their duties to protect people of the municipality and enforcing general public bylaws.

Mandisi's duties included ensuring peace and ensuring the smooth flow of the traffic.

Ethan's role was that of investigating problem buildings. He inspects it to see if they are not in contravention of a municipal bylaw. He checks on derelict, abandoned buildings and houses that are selling illegal drugs.

Tembalani enforced general bylaws of the City and sees to it that no illegal land invasions occur.

Melany is what they identify as being office bound and sees to all administration work, deals with statistics and monitors the work ethics of officers, e.g. punctuality and attendance.

Peter's role was that of investigating problem buildings, upholding the City's bylaws and in general safeguards the community he serves.

Sunette and Lincoln saw their role as generally enforcing all of the City's bylaws to the community they served.

Lindiwe identified her role as, apart from enforcing bylaws, crime prevention and ensuring that traffic laws are applied by motorists.

Brandon, apart from enforcing all City bylaws, was mainly responsible for responding to all alarms of City council buildings and protects the staff of the council.

All of them were employed within three to six months of receiving their NCV certificates except for one participant who had alternate employment before entering the Law Enforcement department and entered one year later.

The range of their employment status was between three months and two years and 3 months.

Gender, age, race and marital status

Of the 13 interviewed, 4 were females and 9 were male. 13 were between the ages of 20 to 29 years while only one was in the age range of 30 to 39 years. 9 participants identified themselves as being coloured while 4 identified themselves as being black. Of all the participants, 12 were of single status, while one them was married.

The National Certificate Vocational (NCV) and generic employability skills

There are a variety of skills that an individual needs to become completely employable. Barrie (2006), states that a “bewildering array of terms has emerged...” (p. 217), to define generic employability skills. He underlines the fact that there is no common understanding of what generic employability skills is among academics and appeals for a common understanding. There is globally no consensus on which generic skills should be taught to ensure that students become employable. In South Africa TVET colleges (NCV stream) a multitude of generic skills are taught to ensure employability and good citizenship. I have chosen to focus on mainly five generic employability skills namely: communication skills; teamwork skills; leadership skills; problem solving skills and critical thinking skills as these skills generally get emphasised when discussed by researchers. These skills I have chosen to investigate proved to be crucial in their area of employment

Communication skills

As previously debated during my literature review, the skill of communicating effectively with others, is seen as crucial by employers in creating employable workers for a ‘new knowledge economy’ and thereby increasing their productiveness. Academics, investigating the impact of generic employability skills on employability would very rarely neglect to identify communication skills as a fundamental skill to possess in the ‘new knowledge economy’. Barrie (2006), Singh and Singh (2008) and Gamble (2013) and others highlight this specific skill as they emphasise the need to develop ‘well adjusted’ and productive individuals for the workplace.

Communication learning outcomes in the Life Skills course:

Communication skills are included in the NCV Life Orientation curriculum. The subject guidelines for NCV, Life Orientation (2007), in TVET colleges of South Africa, do not specifically identify communication as a topic. Instead it gets mentioned when the link between Life Orientation learning outcomes and the Critical and Developmental outcomes is discussed. It states that, “The student is able to communicate effectively in presenting relevant information by investigating different types of work environments and discussing available training opportunities” (NCV, Life Orientation Subject Guidelines, 2007, p. 1). Communication as a topic however, is inserted as a sub - topic of the topic ‘Good relationship’ and forms part of the learning outcomes in the Life Orientation Subject Guidelines (2007). The importance of communication skills is contained in the learning outcome (LO) which discusses the importance of a positive relationship. “The student should be able to: discuss the characteristics of a positive relationship (respect for opinions, empathy, sharing,

listening, and inclusion)” (NCV, Life Orientation Subject Guidelines, NQF level 2, 2007. p. 5).

As already suggested, communication skills proved to be an invaluable asset to all participants. All of them were required to interact with members of the community and found that approaching people, understanding their language, listening and being aware of their diverse backgrounds, are important fundamental skills to have in dealing with people of different cultures, class and backgrounds. Communication is a basic skill to have to build upon other generic skills as reflected later in my study. Being diverse in their approach to others is similarly fundamental in their success in interacting with people of different cultures, as proposed by Nam (2009). He states that, “One must have the capacity to interact and engage effectively with others in heterogeneous groups.” (p. 6)

Communication skills learnt during the Life Skills course

The outcome, referring specifically to communication, is reflected upon by participants as they answer questions relating to what they have learnt in the Life Skills course, relating the need for it in their place of work and how they apply in in work situations.

“The student should be able to: discuss the characteristics of a positive relationship (respect for opinions, empathy, sharing, listening, and inclusion)” (NCV, Life Orientation Subject Guidelines, NQF level 2, 2007, p. 5).

Participants indicated that they learnt the following communication skills in the Life Skills course:

“Listen to others when communicating” (Mandisi)

“You must be clear when speaking” (Melany)

“There are two sides to each story. Analyse information and don’t make assumptions” (Monray)

“About discipline, keeping eye contact and how to approach someone.” (Ethan)

“In LO Skills class I learnt how to communicate better.” (Sarah)

“Whilst doing Life skills at college. Presentations was part of our assignments.(sic)” (Monray)

“Speaking in front of the class prepared you for your job. I find it easier now to communicate with individuals and more than one person.” (Monray)

The need for communication skills in the workplace

Reflecting on the need for communication skills, participants revealed that verbal and written communication skills are essential for performing their tasks effectively. The need 'to explain' and the need to 'educate' were frequently mentioned.

Those who thought that writing skills were important when communicating are listed below:

"Yes, while doing complaints. Paperwork is required when giving feedback in writing or by telephone." (Herman)

"Yes every day writing fines." (Sarah)

Melany related the need for e-mail communication skills

"Yes, email owners of buildings." (Melany)

Several participants used their verbal communications skills when having to communicate with members of the public

"I give verbal warnings or else fines." (Tembalani)

"Yes, we speak English the whole day. I am becoming fluent." (Sunette)

"Yes, you have to liaise with complainant and defendant." (Lincoln)

"Yes, when we tend to complaints and feedback to the control room." (Brandon)

Several participants linked communication with 'the need to explain'.

"Yes, every day writing fines. I have to explain what they did wrong and communicate a lot." (Sarah)

"Yes, while giving fines you have to explain why." (Mandisi)

"Yes, while interviewing people you have to explain how to remedy the situation." (Ethan)

Several participants linked communication with the need to educate people:

"Yes, I must educate people about bylaws. Courtesy and a great attitude are required. I apply the principles of Batho Pele." (Bongani)

"Yes, I give notices. When doing inspection, we explain why we are doing so and explain why we have to come onto their property. I communicate and educate." (Peter)

"Yes, you can't issue a fine without informing and educating the public first. They have to know why they are being punished." (Monray)

"Yes, a lot. You communicate with people you deal with. When people do wrong, first try to educate

them. Not all of them are aware of the laws. Give verbal warning before punishing.” (Lindiwe)

Communication skills were found by participants to be valuable when engaging in conflict situations; when having to share information and when developing plans to maximise operational strategies. The Life Skills course was thus acknowledged as an important cog in them developing their communication skills.

The application in the workplace of communication skills learnt during the Life Skills course

As a backdrop to analyzing participants’ responses in relation to the application thereof, one must take into account the stated outcomes and the communication skills learned in the Life Skills course. Several participants said that they applied the communication skills while carrying out their duties. Bongani, Ethan and Sunette said that communication skills help them to solve problems in conflict situations:

“Yes, to avoid conflict. It’s important to communicate with members of the public. Using the radio demands good communication skills.” (Bongani)

“Yes, in violent situations you have to raise your voice to take control.” (Ethan)

“Yes, ask questions when you are not clear.” (Melany)

During operations. You have to be more effective to deal with situations.” (Sunette)

“Not so intensely, I do my job, I am professional. The college prepares you for communication.” (Mandisi)

Diouf (1994) argues that the ability to communicate effectively helps to build collective and strategic visions among people and thereby ensuring efficiency in their respective organisations or institutions. Participants echoed this requisite as they had to be strategic in their approach to a diverse range of issues and people. Next I will look at the generic employability skill ‘teamwork’.

Teamwork skills

Wickramasinghe and Perera (2012) contend that teamwork skills are a capacity skill that needs to be prioritised for human capital development. It is seen as a fundamental human capital generic skill enabling employees to be effective in their work environment. Research participants echoed Wickramasinghe and Perera’s (2012) contentions when they expressed that teamwork skills were

crucial to them being productive in performing their duties in their ‘new knowledge’ workplace.

As with Wickramasinghe and Perera (2012), Ghorbanhosseini (2013) sees teamwork as an essential element to ensure commitment from workers and thereby ensuring better productivity which is consistent with the principles of HCT. Ghorbanhosseini’s (2013) argues that,

“... teamwork had direct and significant impact on human capital and organizational commitment. Its implication is that mobilization of actions, knowledge, skills and expertise of all employees in the form of team activities is very crucial in the organizations” (2013, p. 1024).

Teamwork Learning outcomes in the Life Skills course

The NQF level 3 NCV, Life Orientation Subject Guidelines (2007) emphasises the importance of teamwork as a generic skill by focusing on it as a topic. There are four subject outcomes and multiple learning outcomes which fundamentally demonstrate or emphasise the importance of participating in a team. Below are listed the different subject and learning outcomes:

“Subject Outcome (SO) 1: Identify with examples advantages and disadvantages of working in a team.

Learning Outcomes:

The student should be able to:

- Define a team.
- Describe the different types of teams, e.g. groups, working groups, task groups, informal vs. formal groups.
- Identify and explain with examples advantages of working in a team.
- Identify and explain with examples disadvantages of working in a team.

Subject Outcome 2: Identify, using relevant examples, the characteristics of an effective team or group.

Learning Outcomes:

The student should be able to:

- Define an effective team or group.
- Identify and explain the characteristics of an effective team or group.
- Identify and explain the formation of teams or groups and how this impacts on effectiveness.

Subject Outcome 3: Identify, using relevant examples, behaviours and attitudes that affect positive relationships within a group.

Learning Outcomes:

The student should be able to:

- Define behaviours and attitudes.
- Identify and explain, using relevant examples, how behaviours and attitudes can contribute positively to the working of a group.

Subject Outcome 4: Identify the responsibilities of each member or team in relation to the purpose and goals of the group.

Learning Outcomes:

The student should be able to:

- Describe the different roles and responsibilities required for a group to achieve its purpose and goals (leader, secretary, vice – leader, treasurer, portfolio members).
- Identify and explain how the identification of roles and responsibilities within a group enables the group to reach identified goals” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p 5 and p. 6).

While King and Palmer (2007) and Okorafor and Okorafor, 2013, speak about teamwork contributing to economic growth, the idea can be supplanted to teamwork showing its value in insuring that there will be progress in service delivery institutions as with the case of my participants. Tikly (2013) and Ghorbanhosseini’s (2013) theoretical analysis of teamwork is validated by participants as they are compelled to work in teams to be successful in their workplace. While it practically impossible for participants to have identified all the stated outcomes in their responses to what they have learned during their Life Skills lesson, there is a juncture in some instances between the two. The types of teams, the characteristics of an effective team, and the advantages of working in a team and the behaviours and attitudes that contribute positively towards the working of a group are seen as essential by participants.

Teamwork skills learnt during the Life Skills course

Some responses from participants, related to learning teamwork skills in the Life Skills course, correspond to certain learning outcomes included in the broader subject outcome 1 statement which

generally refers to the advantages and disadvantages of teamwork. Bongani referred to one such outcome as specified below:

“Describe the different types of teams, e.g. groups, working groups, task groups, informal vs. formal groups” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 5).

“There are different types of teams, task teams, working teams. Teams have different functions and everyone participate.” (Bongani)

Subject Outcome 4 identifies ‘the responsibilities of each member or team in relation to the purpose and goals of the group’. The data reflect that certain participants’ responses matched to the following Learning Outcomes:

“Describe the different roles and responsibilities required for a group to achieve its purpose and goals (leader, secretary, vice – leader, treasurer, portfolio members” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6).

“Different tasks get performed by different people during the course.” (Herman)

“I learnt that you need to participate and bring your part.” (Ethan)

“It is better if you prepared your task at first. Then you decide on duties then the team work will be effective.” (Melany)

“Outdoor activities were where I learned the most about teamwork. Breaking the chain can cause problems. If you don’t communicate it can cause problems. Team planning takes place.”(Sunette)

“Team – planning and being strategic is important.” (Lincoln)

Another learning outcome, that forms part of the broader Subject outcome 4, was recognised when data from the participants were collated. Listed below is the learning outcome that Tembalani and Peter responses represented:

“Identify and explain how the identification of roles and responsibilities within a group enables the group to reach identified goals”

“When presenting tasks you support one another.” (Tembalani)

“Teamwork is important to get certain jobs done.” (Peter)

Other participants looked differently at the impact of teamwork and its implementation.

“Be positive, Different views get shared.” (Lindiwe)

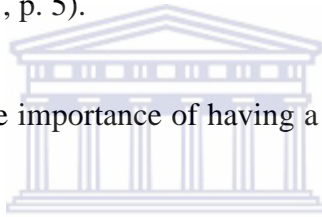
“Yes. A team is more than one person. No ‘one’ in team.” (Brandon)

The need for teamwork skills in the workplace

When asked about the significance of teamwork in their workplace, all participants agreed that teamwork is compulsory for all during security operations. Tikly (2013) and Ghorbanhosseini’s (2013) theoretical analysis of teamwork is validated by participants as they are compelled to work in teams to be successful in their workplace. In subject outcome 1 of the Life Orientation Subject Guidelines (2007), data collected from participants, pointed to the learning outcome:

“Identify and explain with examples advantages of working in a team” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 5).

Participants responded by affirming the importance of having a good teamwork for their own safety and efficiency.



WESTERN CAPE

“Yes, during backup operations with different units. When land invasions occur, you must work in a team for protection.” (Tembalani)

Yes. Law Enforcement you can’t work one on one. You to protect each other’s back.” (Peter)

“Yes, for the past 2 months we had a Vagrant Operation that was split into 2 groups which required teamwork. We found it to be more effective.” (Herman)

“On a daily basis yes. Because you are only as strong as the weakest link. We have to cover one another's back. Have to be sure about your partner.” (Monray)

“Yes, when on operations, you have to bet on one another. Each has a task to complete. We depend on each other.” (Melany)

Some participants responded that teamwork made it easier to carry out their operational tasks.

“Yes. We work in teams with people from different backgrounds I have learnt not to personalize

arguments.”(Bongani)

*“Yes, you and your partner work hand in hand. The older guys are helpful. They assist you.”
(Mandisi)*

Subject outcome 2, of the NCV, Life Orientation Subject Guidelines (2007), which focuses on the ‘characteristics of an effective team or group’ was given consideration by participants by way of emphasis on the following learning outcome:

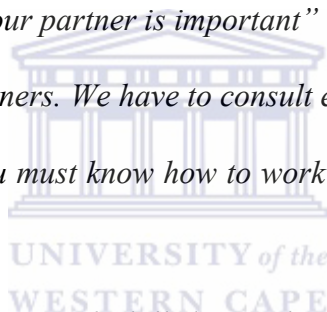
“Identify and explain the characteristics of an effective team or group” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 5).

Sunette, Lincoln and Brandon found that working in teams require your communication skills to be of a high standard.

“Yes, communicating information to your partner is important” (Sunette)

“Yes information sharing between partners. We have to consult each other” (Brandon)

*“Yes every day. During operations you must know how to work in group or you and your partner.”
(Lincoln)*



The application in the workplace of teamwork skills learnt during the Life Skills course

When asked to indicate if they used any of the teamwork skills learnt during their Life Skills course in their workplace, most of the participants agreed that teamwork skills assisted them in carrying out their duties in their workplaces.

Participants referred to subject outcome 3 which speaks about ‘ behaviours and attitudes that affect positive relationships within a group’ in relation to the following learning outcome:

“Identify and explain, using relevant examples, how behaviours and attitudes can contribute positively to the working of a group” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6).

Participants indicated that communication is an imperative when working in teams in their workplace. Listed below are their responses:

“Yes, communicating information to your partner is important.” (Sunette)

“Yes, communicating in groups is challenging. Some do not participate. They find it difficult to listen.” (Lincoln)

“Yes, when sharing information between partners. We have to consult each other.” (Brandon)

“How to work with people, as mentioned before.” (Mandisi)

“Yes, forgive one another and working together. It’s important to solve conflict” (Tembalani)

Planning and operational requirements were also indicated as an important factor when working in teams

“Yes, in the vagrant operation as already mentioned” (Herman)

“Yes. During planning we use teamwork.” (Ethan)

“Yes, in operations. Police and other role players depend on one another.” (Melany)

“Yes, teamwork is important especially when doing mind maps and spider diagrams.” (Peter)

“Yes, we work in different areas. More manpower gets added. Team gets together to be more effective. (Lindiwe)

Monray could not recall using teamwork skills at work that was taught in Life Skills. Other participants emphasised the importance of teamwork in their job environment.

“Can’t remember” (Monray)

“Yes, I must. If you don’t work in teams, they call in people for a counselling session” (Bongani)

“Yes, every day we practice teamwork. You have to work with your partner and within groups.” (Sunette)

“Yes, it is policy to work with a partner and there should be 2/3 officers in a vehicle.” (Brandon)

“Yes, we work with partners so we have to work in teams.” (Sarah)

Even though communication is not seen as an exclusive subject or learning outcome, participants saw this as crucial for good teamwork. Team planning which is emphasised as an application they have learned from Life Skills could be questioned/raise a few eyebrows as ‘team planning’ is not identified as an exclusive outcome. Here, as in communication skills, they could have projected skills they have learned during their workplace experience, onto what they have learned in the Life Skills course.

Leadership skills

Leadership skills appear to be similar to communication and teamwork skills, as it is viewed as a fundamental skill that needs to be prioritized to ensure worker employability and productivity. Canwell et al (2014) claim that ‘leadership’ has to be viewed in a different light as to how we have viewed it in the previous decades. They propose that it is essential for modern-day leadership to be prepared to face new challenges and must possess the necessary skills to deal with diverse demands in the new knowledge economy. They have to deal with critical thinkers, be problem solvers, be prepared to adapt to new innovation and be diverse in their approach to managing human capital (Canwell et al, 2014).

Learning outcomes in the Life Skills course: Leadership

As with teamwork, leadership gets to be learnt as a topic within the Life Orientation Subject Guidelines (2007) of the level 3 course. It gets discussed and analysed with the use of two subject outcomes and multiple learning outcomes to create an understanding of the importance of leadership as a generic skill.

When analysing the different categories of responses and the stated outcomes, it is evident that there is a match among what they have learned in the Life Skills course, the stated outcomes and what they have applied during their workplace practices. The different leadership styles, behaviours and characteristics of leaders, as contained within the Subject and Learning outcomes in the Subject Guidelines (2007), feature prominently when participants responded to set questions. Listed below are the relevant subject and learning outcomes for the development of leadership skills:

“Subject Outcome 1: Describe the different leadership styles with reference to interaction between a leader and a team.

Learning Outcomes:

The student should be able to:

- Define leadership.
- Describe the different leadership styles (authoritarian, democratic, laissez - faire, humanistic)
- Discuss each leadership style in relation to the associated behaviour.
- Describe principles of leadership as formal measure of performance of a group effort.

Subject Outcome 2: Analyse the relationship between the follower and the leader within different contexts.

Learning Outcomes:

The student should be able to:

- Describe the relationship between the leader and follower for different contexts.
- Identify how the role of leader impacts on the relationship between the leader and other members” (Life Orientation NCV Subject Guidelines, NQF Level 3, 2007, p. 6).

Leadership skills learnt during the Life Skills course

When questioned on what they can remember about leadership skills learnt during their life skills course, they responded as follows: Their responses corresponded with subject outcome 1 of the topic ‘Leadership skills’ which reads: “Describe the different leadership styles with reference to interaction between a leader and a team” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6), and specifically to its adjoining learning outcome which is specified below:

“Describe the different leadership styles (authoritarian, democratic, laissez - faire, humanistic)” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6).

Participants recalled the different leadership styles learnt during the Life Skills course

“I remember learning about democratic leadership style. Different leadership styles including autocratic etc.” (Herman)

“How to distinguish among leadership styles. We had to do an assignment to research various types of leadership including Nelson Mandela (democratic) & Mugabe (autocratic). I chose democratic.” (Bongani)

“Different kind of leaders. Different types of leadership styles” (Mandisi)

Other participants focussed on another learning outcome contained in the subject outcome 1 of the topic ‘leadership’ which broadly focus on the various attributes of leaders: Below listed are the leaning outcomes together with responses from selected participants:

“Discuss each leadership style in relation to the associated behaviour” (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6).

“The qualities of troop leaders and class leaders. Leadership by example. I had to study it.” (Tembalani)

“Leaders should influence positively. Be confident and bold.”(Peter)

“Set an example in the way you present yourself. The way you dress and in your approach and in the way you conduct yourself.”(Sunette)

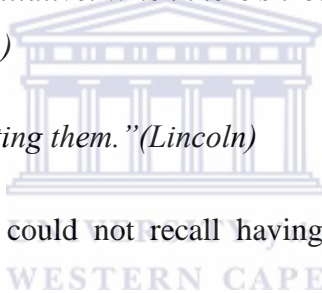
“The way to behave.”(Ethan)

“Being a leader does not mean you have full control. You must listen to others. Lead them by example in the right direction.”(Lindiwe)

“When a real leader speaks, people listen. You must not be scared to take risk. Lead by example.”(Brandon)

“Yes sometimes you have to take the initiative. When there's trouble in the taxi rank even though it's not our work, we try to solve it.”(Sarah)

“Yes, you can inspire others by motivating them.”(Lincoln)



Sarah, Monray, Melany and Lincoln could not recall having learned anything about leadership during their Life Skills lessons

“Can't remember” (Monray)

“Can't remember.”(Melany)

“Can't remember” (Lincoln)

“I know it was a topic we did” (Sarah)

Canwell et al (2014) emphasise the importance of having leaders that would inspire others, are flexible in their approach, are innovative and have the skills to adapt to a dynamic technological knowledge economy.

From answers received, it could be inferred that participants do meet with the criteria, espoused by Canwell et al (2014), as they appear to be inspirational, flexible, innovative and good at motivating

others.

The need for leadership skills in the workplace

On questioning participants of this research to establish if leadership skills are required while carrying out their duties, they responded as follows:

Leadership in being supportive of other less experienced officers and being mentors to them.

“Yes, currently I am one of the more senior guys. New guys - I show them the ropes and how to go about complaints” (Herman)

“

Yes, I am in charge of the new guys in the caravan. When they need stuff they come to me. I teach them how to write in log book. I am responsible for Station Rd.”(Bongani)

“Yes, in operations. When giving directions, others will follow. In communities we teach about bylaws to avoid fines. Getting your fellow officers’ respect at the workplace is important.”(Tembalani)

“Yes at times when people from other areas join for operations in my area, Gatesville, I will take the lead as it is considered to be my area. I know where the hotspots are.”(Lindiwe)



Some participation found it to be natural selection process.

“Yes, Most of the time we don’t work with senior officers around and has to show leadership if required. On the day someone must take the step. I am one of them.” (sic) (Monray)

“Yes, contractors assign leaders as team captain. They asked me a couple of times. It is based on a rotating basis.”(Ethan)

“Sometimes when leaders are not here, I have to step in.”(Melany)

“Yes, ensure smooth flow of traffic. You must take command.”(Mandisi)

“Yes, if you are the driver, you choose the route you’re going. Who has the keys and are able to reset the alarm is important.”(Brandon)

Application of the leadership skills they learnt during the Life Skills course

On the question if they applied the leadership skills they acquired during their Life Skills course in their work environment, Moray, Melany and Lincoln said that they don't have any recollection of having studied it.

Herman and Bongani emphasised the democratic style of leadership when involved in solving problems e.g.

"Yes, democratic style of leadership is effective" (Herman)

How to distinguish among leadership styles. Assignment to do research on various types of leadership including Nelson Mandela (democratic) & Mugabe (autocratic). I chose democratic." (Bongani)

Here again participants' responses corresponded with subject outcome 1 of the topic leadership in the Subject Guidelines (2007) and its attached learning outcome which reads, "Describe the different leadership styles (authoritarian, democratic, laissez - faire, humanistic)" (NCV, Life Orientation Subject Guidelines, NQF Level 3, 2007, p. 6).

Participants additionally applied communication skills that are essential to fulfil their leadership roles. Communication, as with the previous generic skill, features relatively prominently even though it is not identified exclusively as an outcome. Communication, as part of an outcome, only gets discussed as far as it is an essential for a specific leadership style. Listed below are the responses relevant to the need for communication skills in the development of their leadership skills.

"Yes, like I said before, listening to others view. Allow them to express their views" (Lindiwe);

"Yes, communicate even if you enforce. Communicate in a democratic way." (Mandisi);

Lindiwe emphasised the fact that,

"Being a leader does not mean you have full control. You must listen to others. Lead them by example in the right direction".

Some participants felt that problem solving is an imperative when having to show leadership.

Mandisi further stated that he needed it to

"...ensure smooth flow of traffic. You must take command."

"Yes, e.g. solving taxi rank problems." (Sarah);

Ethan felt that you need to apply certain characteristics when showing leadership

“Yes, I must set an example and be a role model.” (Ethan)

The next generic skill I will study will be that of problem solving.

Problem solving skills

As discussed before, the Asian Development Bank (2009), in their report, ‘Good Practice in Technical and Vocational Education and Training’ advocates that in the ‘new knowledge economy’, new forms of work organisation require greater responsibility and different skills from its workforce which include the generation of problem solving skills. This, according to them would lead to greater productivity and reduce poverty.

Bhuwanee (2012) argues that the generic skill ‘problem solving’ is crucial when workers have to apply accrued knowledge and skills when facing challenging tasks. Most of the participants indicated that solving problems are integral to their work situation.

Problem solving Learning Outcomes in the Life Skills course

The NCV, Subject Guidelines (2007) within the Life Orientation course emphasise the generic skill of problem solving by focusing on it as a topic. It gets taught at the NQF level 4 of the NCV programme. It gets taught within the context of five subject outcomes and through the use of multiple of learning outcomes which seek to transfer knowledge about solving problems creatively and to enable students to make informed decisions. The difference among problems and challenges are distinguished with examples. The influence of one’s approach on problems and challenges is defined in terms of its influence on individuals and relationships. Different techniques for solving problems are explained with reference to particular problems or issues. Listed below are the five subject outcomes for the topic ‘Problem Solving’ and their respective learning outcomes:

“Subject Outcome 1: Distinguish between problems and challenges and provide relevant examples.

Learning Outcomes

The student should be able to:

- Define the problem.
- Define the challenge.

- Use the above definitions to distinguish between the concepts.
- Provide examples to illustrate the above.

Subject Outcome 2, 3: Demonstrate an understanding of positive and negative attitudes. Describe the impact of the above on individuals and relationships

Learning Outcomes

The student should be able to:

- Demonstrate an understanding of positive attitudes through the provision of relevant examples.
- Demonstrate an understanding of negative attitudes through the provision of relevant examples.
- Describe, using relevant examples, how each of the above impacts on individual and social relationships

Subject Outcome 4: Explain the different problem solving methods and identify different contexts of usage

Learning Outcome

The student should be able to:

- Review the different problem solving methods.
- Explain them with the use of relevant examples.

Subject Outcome 5: Demonstrate an understanding of problem source, origin and extent by linking these to a real life issue.

Learning Outcome

The student should be able to:

- Review definitions of problem source, extent and origin.
- Demonstrate an understanding of above through the provision of relevant examples.
- Identify a real life situation to contextualize above understanding” (NCV, Life Orientation Subject Guidelines, NQF level 4, 2007, p. 8).

When viewing responses on ‘problem solving skills’, of participants, it was evident that there is a substantive match between what is taught in the Life Skills course, the stated outcomes and how it is

applied during their work tasks.

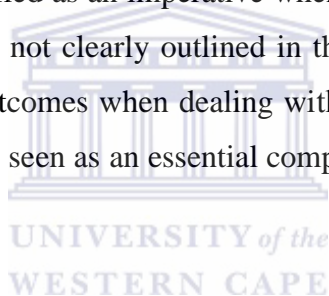
It would be unreasonable to expect participants to have identified all of the stated outcomes in their responses. From what was articulated, one could grasp that they generally referred to outcomes that were relevant to their work experiences. From their approach to solving problems, it is evident that participants have internalised skills that allow them to deal with it in a positive manner.

Problem solving skills participants learnt in the Life Skills course

With participants having received their education and training at a TVET college, they were asked to identify what specifically they can remember about ‘problem solving’ in their Life Skills course. They indicated that most important was to identify the problem and to listen to both sides. Problem solving skills they learnt in the Life Skills course include listening attentively, solving conflicts and having the ability to reason when doing planning.

Communication once again was identified as an imperative when having to solve problems. As with other generic skills, communication is not clearly outlined in the outcomes that deal with problem solving skills and is covered in the outcomes when dealing with ‘attitudes’. Listed below are those who indicated that communication was seen as an essential component in the Life skills course when having to solve problems.

“Listening is a skill” (Herman)



“College, LO, conflict resolution. I have to listen to both sides of the story. Be unbiased.” (Bongani)

The ‘identification of the problem’ runs like a thread through the collected data on the topic ‘Problem Solving’. The ‘identification of the problem’ is an outcome on its own and forms part of Subject Outcome 1 which states, “Distinguish between problems and challenges and provide relevant examples” (NCV, Life Orientation Subject Guidelines, 2007). The specific Learning Outcome reads:

“Define the problem” (NCV, Life Orientation NCV Subject Guidelines, NQF level 4, 2007, p. 8).

“Yes. Identify problem first before solving. Few steps. I can’t remember them all.” (Melany)

“Find out what the problem is.” (Lincoln)

“Identify problem first before solving it.” (Lindiwe)

“Understand the problem first before coming with solutions ...” (Brandon)

Some participants identified its importance when engaging in strategic planning practices. This gets mentioned in Subject Outcome 4 which states, “Explain the different problem solving methods and identify different contexts of usage (NCV, LO Subject Guidelines, 2007). The learning outcomes reads:

“Review the different problem solving methods” (NCV, Life Orientation Subject Guidelines, NQF level 4, 2007, p. 8).

“In LO, problem solving makes you think about the detail and basics.” (Melany)

“Yes, in planning and commitment” (Ethan)

The need for problem solving skills in the workplace

‘Problem-solving’, as a generic skills, is recognised as one of the most important skills to have as all, except for one participant, acknowledged encountering problems while carrying out their duties as Law Enforcement officers. Most participants responded that conflict arises between members of the public and themselves because the public is ignorant of the City’s bylaws. Communication was identified as a problem by Melany, Sunette, Brandon and Bongani. Bongani’s problem stems from his inability to understand the Afrikaans language. He argues that not understanding the language spoken by certain communities, can be life threatening.

“Yes, in terms of language, I am Xhosa and English. Colleagues and community speaks Afrikaans.” (Bongani)

“Lack of communication can be a problem” (Sunette)

“Yes, miscommunication. Next person might not bring across the message clearly.” (Melany)

“Yes, I deal with difficult complainants (Vagrants that do not listen) (Brandon)

The application of problem solving skills by research participants

Subject Outcomes 2 and 3 of the topic ‘Problem Solving’ state respectively that, “Demonstrate an understanding of positive and negative attitudes. Describe the impact of the above on individuals and relationships” (NCV, Life Orientation Subject Guidelines, NQF level 4, 2007, p. 8). This SO’s form a tread throughout all given LO’s.

The question put to research participants (which resonates with said SO’s), on whether they applied

their problem solving techniques in their workplace, elicited the following responses:

Monray stated,

“On a daily basis. Mostly with coloured people not familiar with bylaws. They trade without permits. They are difficult because they are ignorant of the bylaws and feel you are punishing them unnecessarily. Educate them – That’s the key. They will then comply with what is expected of them.”

Their communication skills were applied to solve relational problems amongst others

“Yes, we first talk and resolve at the bottom before approaching management.” (Melany)

“Yes. Some of the complainants are vague. After listening you get a broader knowledge of the complaint.” (Herman)

“Yes, Vagrants sleep on streets. When you are removing them, talk to them, and encourage them. Recommend shelters to them.” (Brandon)

Peter indicated that,

“Communicating while being proactive and using reactive measures” can solve problems.

Bongani indicated that he started learning the language that is foreign to him.

‘Learning to speak Afrikaans’

Ethan emphasised that he uses his problem solving skills when he is in a planning session. Lindiwe spoke about her reflection practice when dealing with specific problems.

“Yes, when planning.”(Ethan)

“Yes if someone complains, e.g. about loud music or illegal dumping, first see if this is true before giving compliance notice.” (Lindiwe)

Other participants could not recall at all how they applied the skills they learned during their Life Skills course or could not recall an example.

“No” (Tembalani)

“Can’t remember.” (Lincoln)

“Yes, just can’t think of an example now.”(Sunette)

“Yes, can’t be specific, inside. Can’t exactly say.” (Mandisi)

“At home through my parents’ guidance.”(Sunette)

Participants refer to planning in both ‘having learnt it in the Life Skills course’ and ‘applying it in workplace’ categories. Planning however, does not feature as a stated outcome. It stands to reason however that problem solving skills can be utilised when having to be strategic about your planning methods or the participants have incorrectly credited the Life Skills course for their ability to do planning while they should have credited their work place for its development. Other outcomes such as ‘looking at the problem source, extend and origin’ is partially covered as they speak about the lack of education of the public’ as an origin of the problem. Next I will look at the generic employability skill “critical thinking”.

Critical thinking skills

Brotherton (2011) asserts that within the new knowledge economy, and its accompanying technological changes, critical thinkers are needed to deal with uncertainties and complexities at expansive organisations.

As stated before, critical thinking skills is not specifically identified as an outcome in the Life Skills course curricula (2007). While critical thinking skills have subsequently been included into the Life Skills’ curriculum during the year 2015, these research participants did not engage with critical thinking skills as part of their Life Skills curriculum. However, viewed from responses received from participants (while administering the informal interview schedule on the question of ‘critical thinking’), most of them were prepared to use their critical thinking skills to find solutions to problems.

Similar questions, as asked for the previous generic skills, were set to ascertain their readiness to apply this skill.

Critical Thinking skills learnt during the Life Skills course

When asked to recall what they have learned about critical thinking skills in the Life Skills course, Peter, Sunette and Brandon had no recollection while other participants identified ‘considering different ways of looking at situations’ and solving problems as in need of critical thinking abilities.

“If you consider different ways, it gives you more insight.” (Monray)

A few respondents felt that critical think was essential when having to solve problems.

“How to solve problems and to learn from your experience”. (Bongani)

“Working in groups and how to solve the problem of conflict” (Tembalani)

“Break it into pieces and then come up with way to solve it.” (Brandon)

“Male and female fights can be resolved. There are better ways.” (Melany)

The ability to make critical decisions in life threatening situations was emphasised.

“The ability to make split decisions, especially with regard to firearms in life threatening situations.” (Herman)

Sarah felt certain she had been taught about critical thinking but could not recollect what she was taught

“A lot but I can’t recall right now.” (Sarah)

The need for critical thinking skills in the workplace

When asked if it is necessary to have these skills while carrying out their workplace duties, respondents had mixed responses. The greatest number of participants replied positively while other participants felt that they did not have much room for critical thinking and that issuing a fine and explaining it, did not require critical thinking.

“No need, I work within a chain of command. If you can’t fix problem then follow the chain of command”. (Peter)

“Not too much room. Need to issue fine. I need to explain fine.” (Mandisi)

Those who felt that critical thinking skills were important while on duty, pointed to certain complexities and situations as suggested by Brotherton (2011). They refer to the interpretation of bylaws; being active in court procedures; having to issue fines and having to justify it to transgressors; dealing with feuding neighbours and when dealing with people of diverse backgrounds.

Critical thinking skills were found to be important when having to make quick critical decisions.

“Yes, in court cases we use our own discession in different situations” (Ethan)

“Yes, you must know what you are doing wrong as you have to answer in court” (Tembalani)

“Yes, vagrants and complainants are difficult. When enforcing the laws.” (Brandon)

“Yes, especially in public. If I come across a bylaw that someone is contravening, I have to interpret it immediately in order to take action.” (Herman)

“Yes. At times neighbours use you to fight their battles. You must be aware of this and find other ways of dealing with this.” (Lindiwe)

Participants indicated that critical thinking skills are helpful when dealing with a diversified people

“Yes at DPU I worked with vagrants. I learnt to treat them differently to others.” (Sarah)

“Yes, sometimes people come from different backgrounds and act differently to others’ Give your cooperation and explain to others how to understand them.”(Monray)

“There is a need. Different people think differently. I need to put myself in the shoes of others when I explain to them. E.g. A house was burning down. The owner of the burning house tied his dog to a railway fence outside of the house. The dog bit a girl (13 years old). The mother complained. I listened to both sides and it turned out that the owner of the burning house was in his right to tie his dog to the railway fence.” (Bongani)

The application of critical thinking skills learnt during Life Skills

The transfer of knowledge is indeed a debate with many and varied opinions and theories from diverse participants. My research basically investigates whether lessons learned during the NCV Life Skills course impacted on the effective carrying out of their workplace duties

When faced with the question of how they used their critical thinking skills they have learnt in the Life Skills course to complement their workplace practices, Lincoln, Brandon, Monray and Sarah pointed to using ‘decision making strategies’ while busy with operational requirements. Lincoln uses ‘higher order skills of reasoning’ as suggested in his response to the question put to him.

“Complainants force you to think critically and you must be continually aware of the motive of their complaint”. (Lincoln)

“The ability to make split decisions” (Herman)

“Yes, when explaining greed for overtime.” (Tembalani)

“Learn from problems/experience. Know your procedures to follow.” (Bongani)

“Yes, in court cases.”(Ethan)

Sunette’s response emphasised the need for officers to possess this skill when she says that

“... during operational requirements, you have to think out of the box.” (Sunette)

Peter, Melany and Brandon did not value the use of critical skills and indicated that using it was not a job imperative to them. They instead chose to follow established protocols and procedures when faced with tough decision making processes.

Many participants however, identified critical thinking skills as being crucial in their working

environment. Participants identified ‘solving problems’ and ‘considering different ways of doing things’ as part of the learning matter of the Life Skills course. They however identified ‘diversity’ and ‘making quick critical decisions’ as skills they have applied in their workplace after they have learnt it during the Life Skills course. There is therefore a disjuncture between what they have learned and what they have applied when it comes to critical thinking skills.

Prior experiences that developed participants’ generic skills

Although this investigation focuses on the generic employability skills that participants developed while completing the NCV programme, it is important to note that, they developed generic employability skills in several different contexts. I will focus on the five generic employability skills under investigation. The personal responses demonstrates as follows:

Experiences that developed communication skills

“At home, school, church and college” (Brandon)

“At home and more in-depth at college.” (Ethan)

“Church, college, friends. Everywhere I’ve been added to my life skills.” (Sarah)

“At church. Dealing with lots of problems and different people. The workplace helped a lot.” (Mandisi)

“Communication at workplace in form of jokes. It shows your character.” (Lincoln)

“Mostly in the military. I was forced to communicate because I was on my own. I was 18 years old when I left for the army.” (Peter)

“At school and most properly in workplace. You have to communicate by giving feedback.” (Sunette)

Experiences that developed participants’ teamwork skills

When questioned on identifying experiences that contributed towards them developing teamwork skills, specific areas were acknowledged. The majority of participants ascribed their ability to work in teams to college while other participants credited it respectively to sports and school. Participants Herman, Lincoln, Monray, Melany, Sunette and Lindiwe indicated that college played a vital role in developing team responsibility. Listed below are other areas besides college and the Life Skills course that impacted their development of teamwork skills:

Teamwork developed through doing sports

“Rugby. Sports prepare you. You can’t plan alone. Military work- you have to work as a team to work out strategies to be successful at what you do.” (Peter)

“Sports, family, church, choir and youth.” (Brandon)

Teamwork developed at school

“Since grade 7 when we started with LO -- Leaning how to work in groups. All the group activities.” (Sarah)

“School and playing rugby.” (Ethan)

“At primary school. A teacher told me ‘teamwork is good.’” (Tembalani)

Experiences that developed participants’ leadership skills

When participants were questioned on the factors (other than college and the Life Skills course) that contributed towards them having leadership abilities, various places were mentioned. Listed below are their responses:

Leadership Skills developed doing sports:

“College and sports helped a lot in leadership abilities.” (Herman)

“I was the captain of the rugby and pool team. I was the Bungalow bully (captain) in army.” (Peter)

Leadership abilities developed at home/family/community

“My family situation encouraged leadership. Circumstances dictate your leadership potential.” (Sunette)

“My friends in community I grew up had influence on me.” (Lincoln)

Leadership developed at the workplace

“Volunteering here at Law Enforcement taught me a lot about leadership.” (Monray)

Leadership skills developed at school

“School – I was the team leader for athletics and volleyball. I was chosen to be group leader at college.” (Brandon)

Experiences that developed participants’ problem solving skills

The experiences that prepared them to solve problems include a wide spectrum within various

communities of practices. LO skills and college were favoured as participants respectively identified them.

Listed below are their responses (excluding college and the Life Skills course) when questioned on where they gained the aforementioned generic employability skills from. The different areas are categorised into *sports* and *home and community*.

Problem solving skills developed though making use of sports

“I developed it at Sports & College.” (Herman)

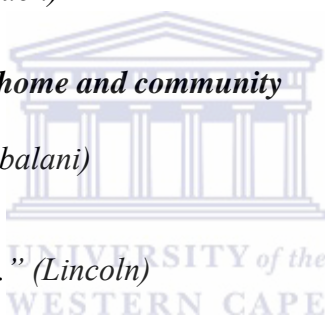
“Rugby & Military were the places where I learnt it. I had to work on commands and instructions.” (Peter)

“At Sports, college and church.” (Brandon)

Problem solving skills developed with home and community

“I learned it at home & college.” (Tembalani)

“At home, parents and priest at church.” (Lincoln)



Experiences that developed participants' critical thinking skills

When faced with explaining which life experience contributed towards them being critical, I was met with a plethora of responses. Here again most respondents elected to have more than one area which instilled this skill. Most participants pointed to college as being partly or exclusively responsible while Tembalani, Sunette and Lincoln responded that experiences right through their life contributed.

“Right through life you learn from your experiences. (Lincoln)

“Right through life and through other different experiences.” (Sunette)

“Mom and all my life experiences.” (Tembalani)

Other areas that contributed to the development of critical thinking skills, include family and community; church; military; school and sports.

Critical thinking developed with family and community

“My mom and all my life experiences.” (Tembalani)

“College, church, and family. Being involved with a diverse group of people helps you to attain critical thinking skills.” (Sarah)

Critical thinking developed at church

“College and church. Scenarios were given to solve. Debates in class.” (Mandisi)

Critical thinking developed in military

“My time in the Military helped.” (Peter)

Critical thinking developed at school

“During my education - from primary school until my completion of my NCV certificate.” (Monray)

“At school and at college.” (Ethan)

Critical thinking developed at sports

“College and Sports, especially rugby.” (Herman)

As understood from responses of participants, the Life Skills course cannot be viewed as being exclusively responsible for inculcating generic skills into participants. Life Skills however, do account for a significant part in developing the required skills for employability. Next I will focus on participants' critique of acquiring generic employability skills

Participant critique of acquiring generic employability skills

When asked to articulate what they found most useful about the Life Skills course, they responded by listing an array of topics. E.g. time management, planning strategies, communication skills, morals and values, dealing with stress, conflict resolution skills, study methods, teamwork and diversity training. One of the participants says that LO skills,

“... guides him like a bible” (Bongani)

Three participants responded that they are completely satisfied with what the Life Skills curriculum had to offer. ,

“The LO subjects meet our requirements. It taught us to solve problems at work and nothing is personal. I do not wish to add anything.” (Lindiwe)

“Happy with what was taught.” (Tembalani)

“The skills I have acquired made me ready to take on the world and it equipped me to do the job.”

(Sarah)

When participants were asked what they would like to add to their generic employability skills base now they know what is required of them within their workplace, a host of suggestions were made. Listed below are some of the responses that were received from participants:

“More time should be spend on ‘communication’ How to approach people was emphasised by participants” (Ethan and Lincoln)

“Stress control or stress coping strategies should be given more prominence within the course.” (Ethan and Sunette)

“More time on computer skills. E.g. spending more time on a typing tutor to speed up report typing skills.” (Herman)

“Communication between different cultures. The need to learn about diverse cultures and to learn their languages.” (Monray, Sunette and Bongani)

“More emphasis on conflict management.” (Melany)

“Self-defence skills.” (Peter)

“Healthy living and the importance of physical fitness.” (Sunette)

“The strengthening of an individual’s spirituality.” (Sunette)

“Problem solving strategies should be emphasised.” (Mandisi)

Piecing the various responses together proved to be a complex process as generic employability skills have different or diverse meanings to different people, hence the wide array of answers to various questions during their interviews.

In the next section, I will summarise my investigation, look at the findings, propose further investigations and make specific recommendations.

SECTION 5: Summary, Findings and Recommendations

SUMMARY

Looking through the theoretical lens of Human Capital theory, I sought to access the inner world of participants within the Law Enforcement field to generate meaning from their interactive social processes which occur in their work situations. I used an interview schedule to gather data and categorised information by coding participants and their answers given in an Excel spread sheet.

The stated aim of the research was to investigate the extent to which the Life Skills programme offered, in the NCV stream of the TVET colleges, contributes to 'work readiness' and to generate theoretical insights about its contributions..

This investigation into the impact of generic employability skills, learned during the Life Skills course, on employees in 'new knowledge' working environments, was intricate as generic skills is a complex construct, which has diverse meanings for a variety of people. The questions given through the interviewing process were met by diverse answers and examples by the respective participants.

When interviewed, respondents were not very detailed in their answers and frequently provided brief, concise and sometimes vague answers. This can be contributed to their lack of life experience as the average age of participants was twenty one. The divergent and sometimes contradictory views and examples expressed by research participants, suggest a wide interpretation of how they view their life skills base and how they differ when applying it in real life situations. A few participants could not recollect any knowledge of having learnt anything about certain generic skills during their Life Skills lessons. They could simply have forgotten or did not place much value on what was taught as they felt they had the required skills to deal with various situations that they may encounter.

Contemporary HCT protagonists advocate that vocational and generic employability skills contribute significantly to the employability levels of people and are responsible for an increase in productivity and profits in the 'new knowledge' economy. This idea can be supplanted to other sectors of society where productivity for workers working within government service delivery sectors mean improved service delivery and the improvements of standards.

Findings

The Life Skills programme in the NCV course in TVET colleges offers the following generic employability skills: communication, teamwork, leadership and problem solving among others.

- The Life Skills course was responsible to a large extent for them developing their communication skills. Communication skills helped them to be more efficient at their workplace and therefore saved on time and person power. Communication skills allowed them to share crucial information and to develop strategies that are important for their development and for the efficient delivery of the services they provide.
- Communication is a key generic employability skill that underpins other generic employability skills. The need for effective communication is visible among participants as they have to engage with people with diverse backgrounds. Participants additionally identified the need to understand all of the regional languages to facilitate communication.
- Teamwork skills were crucial when active in their workplace settings. It was compulsory for participants to work in teams. Developing teamwork skills added to their employability and made it easier for them to adapt to their working conditions. Participants were ready to engage with diverse challenges and used their different generic employability skills to complement their leadership abilities. It was found that the Life Skills programme contributed in a fair extent to them developing their teamwork skills.
- Participants found it necessary to show leadership while engaging with the public in operational requirements. College was acknowledged as having made a significant contribution towards developing their leadership skills. The Life Skills course was recognised as having made a fair contribution to them gaining leadership skills. After two years in their workplace, some participants could take the lead to assist new recruits.
- Problem solving was another skill where participants felt they gained significantly from the Life Skills programme. The art of identifying the problem and listening was emphasised by a few participants as essential to solving problems. Participants identified this skill as essential to ensure their employability. They have to be innovative and diverse in solving problems among themselves and in various communities. Here problems stems mostly from

conflict situations between themselves and the general public.

- There were mixed responses from participants when having to gauge the value of critical thinking in their work setting. For the majority of participants it was an essential skill while for others it was not crucial as they could revert to standard operational procedures to solve problems they might encounter. Critical thinking skills were found to be essential when having to face the legal fraternity in court matters. Being able to critically interpret bylaws was mentioned as a necessity. The Life Skills course was acknowledged as having a significant impact on them developing critical thinking skills even though critical thinking was not included in the curricula as a topic.
- The Life Skills course was acknowledged by participants for providing them with general generic employability skills. The workplace, sports, church, college and school additionally contributed to their development of generic employability skills, hence it was found that generic employability skills were not isolated to formal instruction but can be done in informal settings as well.
- From responses received via participants I argue that the Life Skills Programme was partially framed within a human capital perspective. I can't conclusively claim that HCT was their only frame of reference when designing the curricula. This is viewed from the perspective that other civilly orientated generic skills were not part of my scope of study.
- I found that the female members of the study population were more receptive towards the Life Skills course. From their enthusiastic and comprehensive responses I could deduce that they appreciated the course more and were applying the skills learned more conscientiously than their male counterparts.

Theoretical Insights

The Human Capital value of the Life Skills course

The framework used for this research was to some extent successful. I emphasise 'partially successful' as other civilly orientated generic skills, which form part of the Life Skills curricula, were not part of the scope of this investigation. I consequently cannot conclusively state that the curricula for the Life Skills course were designed with the human capital framework in mind.

Generic Employability Course Structure

I am not in complete agreement with Barrie (2006) that the learning of generic skills should be ‘explicit but embedded’ into their courses. This I argue even though participants indicated that it would benefit them to place more emphasis (weighting) on certain aspects of the Life Skills course e.g. communication and conflict resolution skills and introduce others like ‘self-defence course’.

The difficulty I have with this approach is that it would further enhance the human capital nature of the programme as it would concentrate exclusively on what would be required to succeed in the ‘new knowledge’ economy. Inculcating values and attitudes that contributes to a responsible citizenry would be neglected, as previously stated by Bloch (2012).

I agree with Moutsios (2010), Block (1990), Hea – Jung (2012) and Gewer (2009) who state that social justice and civic issues should be part of a general profile template of generic skills but would further argue that different weightings should be given to specific generic skills topics that are more relevant to students within a specific vocational course. The general profile template should thus be course sensitive in its design, which in the case of my specific research study, would mean that more emphasis should be placed on certain generic skills in the Safety in Society course, as mentioned before, e.g. more emphasis on conflict management.

Employability for a ‘new knowledge’ economy

Even though it is acknowledged that the Life Skills course contributed substantially to inculcating generic employability skills into participants, it cannot claim to be absolutely effective in transferring the generic employability skills necessary in the working environments. With the ‘face’ of education changing from an ‘instructivist’ to a constructivist pedagogy, the need to apply various teaching methodologies becomes more apparent. Educators can contribute by ensuring that the Life Skills course gets taught in situational environments to further enhance the transfer of knowledge and that students become more employable for a ‘new knowledge’ economy. Learning strategies such as problem-based and project-based approaches could be encouraged to instil the required attributes demanded by a ‘new knowledge’ economy.

Further investigations

During my research I found that there is a need to investigate further to additionally substantiate the Human Capital influence when instilling generic employability skills into learners. I would thus suggest the following for further investigation:

1. Investigate students employability in other sectors of industry
2. Research views of supervisors and managers on the employability of TVET college students

3. Seek evidence to ascertain whether the Life Skills course contributes towards enabling student to lead an active civic life.

Recommendations

1. Workplaces, as in this specific research, the City of Cape Town, should start an Education Task Team with the dual task of upgrading the generic skills of all workers and to educate the public on bylaws.
2. The Life Skills course should be adapted to facilitate those skills known to be essential for different courses e.g. the Safety in Society course. The weighting on certain topics should be different to other courses. E.g. conflict resolutions and diversity training.
3. The Life Skills course should introduce more ‘authentic settings’ in their learning environment in order prepare students more efficiently for their work place settings.
4. Explore ‘navigationalism’, problem-based and project-based approaches as alternative teaching methodologies.
5. Integrate critical thinking skills into the NCV, LO, Life Skills curriculum.

Conclusion

Bilderici (2005) argues that in cases where education research focuses on the relationship between education and work, the principles of human capital features largely. This was largely true as life skills inculcated into participants contributed towards them being effective during their operational tasks in their working environments.

My research revealed that the NCV, LO Life Skills curriculum was skilfully designed to identify the necessary generic employability skills needed to enable students to become employable and to adapt to a ‘new knowledge economy. Additionally my investigation revealed that students benefited significantly from studying the NCV, LO Life Skills course. I was not in a position to measure if elements of social justice and citizenry skills learnt, had any impact on the participants, as my scope of investigation was not designed to consider that.

The research further advocates that different weightings should be placed on different generic skills for different courses in the NCV stream of the TVET colleges.

In a developing country like South Africa, where most people have been marginalized under the system of Apartheid, people battle to become employable and to enter the labour market. The South African educational authority’s recognition that generic employability skills need to be promoted to

ensure past inequalities are addressed and not reproduced could be viewed as being ground-breaking.

In conclusion I refer to Kavar (2011) who recognises the importance of developing human capital through the use of education and training strategies as contained in her report to the Doha Forum on Decent Work and Poverty Reduction. She skillfully summarises what needs to be done in order to make education in general more responsive to industrial demands. She states that,

“... the building blocks of any skills strategy must be: solid foundation for skills and stronger links between the worlds of education and work. This in turn requires: good quality in childhood education; good info on changes in skill demands; responsiveness of education and training system to structural changes; and recognition of skills and competencies. To be effective, policy initiatives in these areas will also need to be closely linked with economic and social policy agendas” (Kavar, 2011, p. 15).



List of References

- Acemoglu, D. & Autor, D. (2011). *Lectures in labour economics*. Retrieved September 11, 2014, from economics.mit.edu/files/4689
- African Union. (2012). *Report on the implementation of the Technical Vocational Education and Training*. Retrieved August 22, 2014, from www.au.int
- Allias, S. & Nathan, O. (2012). *Jobs? What jobs? Skills? What skills?* Retrieved 10 September, 2015, from www.lmip.org.za
- Andrews, J. & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher Education in Europe*, 33(4), 411-422.
- Archer, E. & Chetty, Y. (2013). Graduate employability: Conceptualisation and findings from the University of South Africa. *Progressio*, 35(1), 134 – 165.
- Asian Development Bank. (2009). *Good practice in technical and vocational education and training*. Retrieved 2 October 2015, from www.adb.org/sites/default/files/.../good-practice-education-training.pdf
- Association of Canadian Community Colleges. (2012). *Education for employment: A 40 year history of ACCC international partnership*. Retrieved August 01, 2014, from <http://www.collegesinstitutes.ca>
- Atkins, M. J. (1999). Oven-ready and self-basting: taking stock of employability skills. *Teaching in Higher Education*, 4(2), 267-280.
- Ballantine, J., & McCourt Larres, P. M. (2007). Cooperative learning: A pedagogy to improve students' generic skills. *Education & Training*, 49(2), 126-137.
- Barrie, S. C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51(2), 215-241.
- Becker, G.S. (1964). *Human capital*. New York: Columbia University Press
- Becker, G.S, Murphy, K.M & Tamura, R. (1994). Human capital fertility, and economic growth. *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*, Volume ISBN: 0-226-04119-0(3)
- Bhuwanee, T. (2012). Generic Work - Related skills in education for a sustainable development: a synthesis of UNESCO - UNEVOC and other publications. Retrieved 02 August, 2015, from www.adeanet.org/triennale
- Bildirici, M., Orcan, M., Sunal, S., & Aykac, E. (2005). Determinants of human capital theory, growth and brain drain: An econometric analysis for 77 countries. *Applied Econometrics and International Development*, 5(2), 109-140.
- Bloch, G. (2010). Basic education: Where are we going? *Focus*, 59 (1), 10-16.
- Block, F. (1990). *Post Industrial Possibilities: A critique of economic discourse*. Los Angeles, USA: California Press.

- Bound, M., & Campbell, J. (2012). *Ethical considerations with gatekeeping*. Retrieved October 13, 2014, from www.academia.edu/.../Ethics_in_Qualitative_Research_Gatekeepers
- Boyce, C. and Neale, P. (2006). *A guide for designing and conducting in-depth interviews for evaluation input*. Retrieved November 1, 2014, from www2.pathfinder.org/site
- Bowles, S., Gintis, H., & Osborne, H. (2001). The determinants of earnings: A Behavioural approach. *Journal of Economic Literature*, 39(4), 1137-1176.
- Brenton, T.R. (2012). *The role of education in economic development: Theory, History, and Current Returns*. Retrieved 8 November, 2015, from www.eafit.edu.co
- British Council. (2014). *South Asia and Higher Education: Revolution and realities in the new economic order*. Retrieved May 20, 2014, from www.britishcouncil.org/education/.../south-asia-higher-education-revolut
- Brotherton, P. (2011). *Critical thinking a top skill for future leaders*. Retrieved 12 July, 2015, from <https://www.td.org/.../Critical-Thinking-a-Top-Skill-for-Future-Leaders>
- Bryman, A. (2012). *Social research methods* (4th ed.). New York, United States: Oxford University Press. (Original work published 2001)
- Calma, A. (2013). Fixing holes where the rain gets in: Problem areas in the development of generic skills in business. *Journal of International Education in Business*, 6(1), 35-50.
- Candy, P. C. (1989). Alternative paradigms in educational research. *Australian Educational Researcher*, 16(3), 1-11.
- Canwell, A., Dongrie, V., Neveras, N., & Stockton, H. (2014). *Leaders at all levels: Close the gap between hype and readiness*. Retrieved 01 July, 2015, from dupress.com/articles/hc-trends-2014-leaders-at-all-levels
- Chandrakumara, D.P.S. (2014). *Employability of new graduates in Sri Lanka: Implications for Policy Development*. Retrieved August 5, 2014, from staff.sjp.ac.lk
- Commonwealth Secretariat, Education Section, Social Transformation Programmes Division. (2013). *Analysis of Technical Vocational Education and Training systems in five Commonwealth Countries*. Retrieved July 31 2014, from www.tda.edu.au
- Crebert, G., Bates, M., Patrick, C. -, & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: Graduates' perceptions. *Higher Education Research & Development*, 23(2), 1-21.
- Curtis, D., and McKenzie, P. (2002). *Employability skills for Australian Industry: Literature review and framework development*. Retrieved February 6, 2014, from www.voced.edu.au
- Dae-bong, K. (2009). *Human capital and its measurement*. Retrieved September 24, 2014, from <http://www.oecdworldforum2009.org>

- Daud, M. (2013). *How effective is the assessment of generic skills gained by Technical Vocational Education and Training (TVET) of engineering students engaged in Problem-Based Learning (PBL)? – A Literature Review*. Retrieved July 26, 2014, from tree.utm.
- Dawe, S. (2002). Focussing on general skills in training packages. *National Centre for Vocational Educational Research*, 1-139. Retrieved from www.ncver.edu.au
- Department of Higher Education and Training (2013). *White Paper for post-school education and Training*. Pretoria, South Africa
- Department of Higher Education and Training (2014). *National Certificates (Vocational), Subject Guidelines, Life Orientation*
- Dilts, R. (1996). *The Article of the Month: The New Leadership Paradigm*. Retrieved 05 June, 2015, from www.nlpu.com
- Diouf, P.S. (1994). *Communication, a key to a human development*. Retrieved 13 July, 2015, from www.fao.org
- Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The Career and Technical Education Perspective. *Journal of Vocational & Technical Education*, 16(1), 1. Retrieved from <http://scholar.lib.vt.edu>
- Dutschke, M. (2010). Reviewing the FET Landscape. *Focus*, 59 (1), 44-50.
- FET Colleges urged to tackle enormous challenge of growth. (2010, September 03). *The Skills Portal*. Retrieved from <http://www.skillsportal.co.za>
- Fitzsimons, P. (1999). Human capital theory and education. In *The Encyclopaedia of Educational Philosophy and Theory*, M. Peters, T. Besley, A. Gibbons, B. Žarnić, P. Ghirdelli (eds.)
- Fleischhauer, K. (2007). *A review of human capital theory: Microeconomics. Discussion Paper no 2007-01*, Retrieved from http://www1.vwa.unisg.ch/RePEc/usg/dp2007/DP01_Fl.pdf.
- Fallows, S., & Steven, C. (2000), 'Building employability skills into the higher education curriculum: a university wide initiative', *Education and Training*, 42(2), p 75–82.
- Gamble, J. (2013). *Why improved formal teaching and learning are important in technical and vocational education and training (TVET)*. Retrieved August 1, 2014, from www.unevoc.unesco.org
- Geldenhuys, D. (2007). *Human Capital Review: From problem solving to appreciation: The choice is yours!*. Retrieved 01 July, 2015, from www.humancapitalreview.org
- Gewer, A. (2009). *Features of social capital that enhance the employment outcomes of FET college learners*. Retrieved September 01, 2014, from wiredspace.wits.ac.za
- Ghorbanhosseini, M. (2013). The effect of organizational culture, teamwork and organizational development on organizational commitment: the mediating role of human capital. *Tehnički vjesnik*, 20(6), 1019-1025.

- Goode, R. B. (1959). Adding to the stock of physical and human capital. *The American Economic Review*, 49(2), 147-155. Retrieved from <http://www.jstor.org>
- Guison-Dowdy, A. (2012). *Skills for employability: Economic returns to education and skills*. Retrieved August 4, 2014, from r4d.org/
- Hager, P., Holland, S., & Beckett, D. (July 2002). Enhancing the learning and employability of graduates: The role of generic skills. *Business/Higher Education Round Table*, 1-16. Retrieved from www.bhert.com
- Hammersley, M. and Traianou, A. (2012). *Ethics and educational research, British Educational Research Association on -line resource*. Retrieved November 01, 2014, from <https://www.bera.ac.uk>
- Hea-Jung, C., & Ji-Hyun, S. (2012). *Critical review on human capital theory and its applicability on vocational education. KRIVET Conference Paper*, Retrieved from eng.krivet.re.kr/eu.
- Hyslop-Margison, E. J., & Graham, B. (2001). Principles for Democratic Learning in Career Education. *Canadian Journal of Education*, 26(3), 341-361. Retrieved from www.jstor.org/stable/1602212.
- Ismail, A & Abiddin, N.Z. (2014). Issues and challenges of technical and vocational education and training in Malaysia towards Human Capital development. *Middle-East Journal of Scientific Research*, 19(2), 7-11. Retrieved 14 September, 2015, from [doi10.5829/idosi.mejsr.2014.19.icmrp.2](https://doi.org/10.5829/idosi.mejsr.2014.19.icmrp.2)
- Iqbal, A., & Zenchenkov, M. (2014). Market tested business education: Corporate sector perceptions of Saudi graduates competencies. *Asia-Pacific Journal of Cooperative Education*, 15(2), 91-96. Retrieved from www.apjce.org/files/APJCE_15_2_91_106.pdf
- Jalaludin, M.A & Inkasan, M.N. (2014). Interpersonal Communication skills among the Master's Students in TVET. *Developing Countries Studies*, 4(16), 110 - 118.
- Kawar, M. (2011). *Skills development for job creation, economic*. Retrieved July 31. 2014, from www.ilo.org/wcmsp5/groups/public/---.../wcms_210671.pdf
- Khattak, H.R., Yaqoob, S., & Basri, R. (2003). *Communication Skills Module*. Retrieved 8 October, 2015, from www.hec.gov.pk
- Kenny, A., English, R., & Kilmartin, D. (2007). *Key skills framework: Enhancing employability within a lifelong learning paradigm*. Retrieved September 24. 2014, from <http://arrow.dit.ie/cserart/30>
- King, K., & Palmer, R. (2007). *Skills Development and Poverty Reduction: A state of the Art Review*. Retrieved 4 August, 2015, from www.etf.europa.eu/pubmgmt.nsf
- Khambayat, R & Majumdar, S. (2010). Preparing teachers of today for the learners of tomorrow. *Journal of Engineering, Science and Management Education* , 2(1), 9-16.
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2000). *Experiential learning theory: Previous research and new directions*. Retrieved May 05, 2014, from

www.d.umn.edu/~kgilbert/educ5165.../experiential-learning-theory.pdf

Kruss, G., Wildschut, A., van Rensburg, D.J., Visser, M., Haupt, G., & Roodt, J. (2012). *Developing skills and capabilities through the learnership and apprenticeship pathway systems*. Retrieved August 1, 2014, from www.hsrc.ac.za/en/research-data/ktree-doc/13800

Lees, D. (2002). *Graduate Employability - Literature Review*. Retrieved September 26, 2014, from www.qualityresearchinternational.com/esectools/.../leeslitreview.pdf

Levin, H. M., & Kelly, C. (1994). Can education do it alone? *Economics of Education Review*, 13(2), 97-108. Retrieved from pocketknowledge.tc.columbia.edu/home

Majumdar, S. (2009). *Emerging generic skills for employability in the knowledge society*. Retrieved July 31, 2014, from vital.new.voced.edu.au

Martin, R., Villeneuve-Smith, F., Marshal, L., & McKenzie, E. (2008). *Employability skills explored*. Retrieved January 16, 2014, from www.fetn.org.uk

Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought*, 21(3), 28 - 49.

McGrath, S., Needham, S., Papier, J., and Wedekind, V., Attwal, H., Calitz, M., & Van der Merwe, T. (2010). *Employability in the college sector: A comparative study of England and South Africa*. Retrieved August 01, 2014, from www.nottingham.ac.uk

Milana, M. (October 2012). Globalisation, transnational policies and adult education. *International Review of Education*, 58(6), 777-797.

Mohamad, H & De Graaff, E. (2013). The Effectiveness of problem-based learning approach on students' skills in Technical Vocational Education and Training (TVET) Specifically on programming course using a Computerized Control (CNC Simulator). *The 4th International Symposium on Problem-Based Learning (IRSPBL)*, 1(1), 126 - 130.

Moutsios, S. (2009). International organisations and transnational education. *Compare*, 39(4), 467-478.

Muslim, N., & Yunus, N. (2014). The direction of generic skills courses at national university of Malaysia (UKM) towards fulfilling Malaysian qualifications framework. *Asian Social Science*, 10(4), 195-202.

Mayer, T., & Steneck, N. (2010). *Singapore Statement on Research Integrity*. Retrieved October 24, 2014, from www.ias.ac.

Nam, Y.J.J. (2009). *Pre - Employment Skills Development Strategies in the OECD*. Retrieved 01 September, 2015, from siteresources.worldbank.org

NCV, Subject Guidelines, Life Orientation, NQF level 2. (2007). *Department of Basic Education*. Retrieved 15 January, 2015, from www.education.gov.za › ... › NC(Vocational) Subject Guidelines Level 2

NCV, Subject Guidelines, Life Orientation, NQF level 3. (2007). *Department of Basic Education*. Retrieved 15 January, 2015, from www.education.gov.za › ... › NC(Vocational) Subject

Guidelines Level 3

- NCV, Subject Guidelines, Life Orientation, NQF level 4. (2007). *Department of Basic Education*. Retrieved 15 January, 2015, from www.education.gov.za › ... › NC(Vocational) Subject Guidelines Level 4
- NCV, Subject Guidelines, Life Orientation, NQF level 3. (2014). *Department of Higher Education*. Retrieved 15 January, 2015, from [www.dhet.gov.za/National Certificates NQF Level 3/NCV...](http://www.dhet.gov.za/National%20Certificates%20NQF%20Level%203/NCV...)
- Okorafor, P & Okorafor, A. (2013). Technical, Vocational Education and Training (TVET) for Human Resource Development (HRD) in the emerging knowledge economy. *The Intuition*, 5(1), 1-12.
- Organisation for Economic Co-operation and Development (1997, April). *Thematic review of the first years of tertiary education, Paris*. Directorate for Education, Employment, Labour and Social Affairs, 1-37. Retrieved from <http://www.schev.edu>
- Paadi, K. (2014). Perceptions on employability skills necessary. *European Scientific Journal*, 1(1), 129-143.
- Papier, J., Needham, S., & McBride, T. (2012). *Contemporary Issues in Public FET colleges. LMIP working paper 17*. Retrieved from www.lmip.org.za
- Paryno, P., Rosa, E., Abdullah, N., Nawe, N., Othman, N. & Ebil, S. (2014). *Integration of Transferable Skills in TVET Curriculum, Teaching Learning, and Assessment*. Retrieved 16 July, 2015, from <http://www.voctech.org>.
- Ramirez, F.O. (2012). *The World Society Perspective Concepts Assumptions, and Strategies*. Retrieved 18 October, 2015, from FO Ramirez - webfiles.uci.edu
- Rasool, H. (2014). *Forging partnerships between FET colleges and stakeholders- implications for the post-school education and training system*. Retrieved July 18, 2014, from www.hrdcsa.org.za
- Rasul, M. S., Abdul Rauf, R.A., & Mansor, A.N. (2013). Employability skills indicator as perceived by manufacturing employers. *Asian Social Science*, 9(8), 42-46.
- Sandman, L.R & Vandenberg, L. (1995). A Framework for 21st Century leadership. *Journal of Extension*, 33(6).
- Schultz, T.W. (1961). Investment in Human Capital. *American Economic Review*, 51(1), 313-324.
- Schultz, T.W. (1972). *Economic Research: Retrospect and Prospect Vol 6: Human Resources*. Retrieved September 11, 2014, from www.nber.org
- Schultz, T. W. (1975). The value of the ability to deal with disequilibria. *Journal of Economic Literature*, 13(3), 827-846. <http://www.jstor.org>
- Singh, G.K.G., & Singh, S.K.G. (2008). Malaysian graduates' employability skills. *Unitar E- Journal*, 4(1), 15-41.

Smith, A. (1776). *An Inquiry Into the Nature and Causes of the Wealth of Nations*. Retrieved 04 February, 2015, from www.ifaarchive.com

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355-375.

Sture, J. (2010). *Ethics in research projects: Some guidance on recognising and addressing ethics issues*. Retrieved October 03, 2014, from: www.bradford.ac.uk

Sugahara, S., Suzuki, K., & Boland, G. (2008). Students' major choice in accounting and its effect on their self-efficacy towards generic skills: An Australian study. *Asian Review of Accounting*, 18(2), 131-147.

Thompson, C. (2011). Critical thinking across the curriculum: Process over output. *International Journal of Humanities and Social Science*, 1(9)

Tarricone, P. (2002). *Successful teamwork: A case study*. Retrieved 8 October, 2015, from www.unice.fr

Tikly, L. (2013). *Reconceptualizing TVET and development: a human capability and social justice approach*. Retrieved 09 August, 2015, from www.unevoc.unesco.org

Turner III, D.W., (2010). *Qualitative interview design: A practical guide for novice investigators*. Retrieved October 4, 2014, from www.nova.edu

UNESCO. (2012). *Transforming Technical and Vocational Education and Training building skills for work and life*. Retrieved August 18, 2014, from www.unesco.org

University of the Western Cape. (n d). *Policy on research ethics*. Retrieved October 24, 2014, from www.uwc.ac.za

Watson, A. (2014). Employability and responsiveness in post-school education and training institutions. A comparative literature review. Retrieved August 5, 2014, from www.lmip.org.za

Watty, K., Jackling, B., & Wilson, R. M. S. (2012). *Personal transferable skills in accounting education*. London: Routledge.

Wedekind, V. (2012). *Towards responsiveness and employability in the FET college sector*. Retrieved August 11, 2014, from www.researchgate.net

Wellman, N. (2010). The employability attributes required of new marketing graduates. *Marketing Intelligence & Planning*, 28 (7), 908-930.

Wenger, E. (2008). *Communities of Practice: Learning, Meaning and Identity* (18th ed.). New York, USA: Cambridge University Press.

West, J. (2000). Higher Education and employment: opportunities and limitations in the formation of skills in a mass higher education system. *Journal of Vocational Education and Training*, 52(4), 573-588.

Wickramasinghe, V. & Perera, L. (2010). Graduates', university lecturers' and employers'

perceptions towards employability skills. *Education & Training*, 52(3), 226-244.

Woodhall, M. (1967). The economics of education. *Review of Educational Research*, 37(4), 387-398.

Woodhall, M. (2004). *Cost benefit analysis in educational planning*. Retrieved 21 March, 2015, from unesdoc.unesco.org

Young, J. and Chapman, E. (2010). Generic competency frameworks: A brief historical overview. *Education Research and Perspectives*, 37(1), 1-24.

Zweimüller, J. (2000), Schumpeterian entrepreneurs meet Engel's law: The impact of inequality on innovation-driven growth. *Journal of Economic Growth*, 5 (2), 185-206.



Appendix 1 – INTERVIEW GUIDE

PERSONAL DETAILS:

1. Name: _____
2. Surname: _____
3. Gender: Male Female Other
4. Age: 20 – 29 30 – 39 40 – 49
5. Marital Status: Married Single
6. Race: Black White Coloured Other
7. Duration in occupation: _____
8. Highest grade passed at school: _____
9. Highest Qualifications: _____
10. Other Qualifications: _____

TVET COLLEGE ATTENDANCE:

11. What is the name of the FET College you attended?

12. Which programme were you registered for?

13. In which year did you register for the programme?

14. In which year did you complete the programme?

15. Did you complete the Life Orientation course for each year you were at college?

CURRENT EMPLOYMENT

16. Where are you currently employed?

17. When did you start working in your current workplace?

18. What is your job title?

19. What are your duties?

20. Did you start working immediately after completing your NCV course?

21. If not, give a reason.

LIFE SKILLS COURSE

22. What do you remember about the Life Skills course that was part of your Life Orientation course at college?

23. What did you find most useful about the course?

24. Is there anything that you found enjoyable about the course?



COMMUNICATION SKILLS

25. Are you required to communicate with people while carrying out your duties? If yes, give an example.

26. What kind of life experiences prepared you to communicate with people in your workplace?

27. What have you learnt about communication skills in your Life Skills course?

28. Do you use any of the communication skills that you have learnt in your workplace? If yes, give examples.

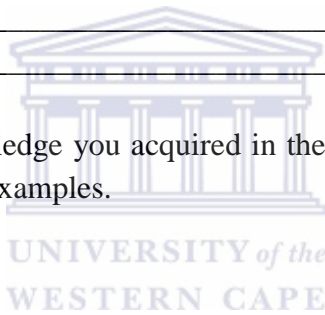
TEAMWORK SKILLS

29. Are you required to work as a team within your current job? If yes, give an example

30. What kind of life experiences prepared you to work in a team?

31. What did you learn about 'team work' in your Life Skills course?

32. Do you apply any of the knowledge you acquired in the LO course about teamwork in your current workplace? If so, give examples.



LEADERSHIP

33. Are you required to demonstrate leadership whilst carrying out your duties? If yes, give examples.

34. What kinds of life experiences prepared you for this kind of leadership?

35. What did you learn about 'leadership skills' in your Life Skills course?

36. Do you use any of your leadership skills you acquired in your LO course, in your workplace? If yes, give examples.

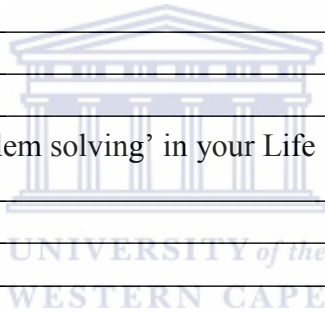
PROBLEM SOLVING SKILLS

37. Do you experience any problems while carrying out your duties? If so, give examples

38. How do you solve those problems?

39. What life experiences prepared you to solve these problems?

40. What did you learn about 'problem solving' in your Life Skills course?



41. Do you apply any of the problem solving techniques in your workplace? If so, give examples.

CRITICAL THINKING SKILLS

42. Is there a need to consider different ways of solving problems at your workplace? If so, give examples.

43. What kinds of life experiences prepared you for different ways of thinking about solving problems?

44. What did you learn about ‘considering different ways of solving a problem’ in your Life Skills course at college?

45. Have you used these skills in your workplace? If yes, give an example.

GENERAL QUESTION

46. What skills requirements do you have at the moment that was not catered for during the LO course?



Appendix 2

FACULTY OF EDUCATION

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (0) 21 959 2801
Fax: +27 (0) 21 959 2481
Website: www.uwc.ac.za
Email: zgroener@uwc.ac.za

Information sheet to participants

My name is Joseph Nefdt and I am currently enrolled in a Master's Programme in Adult Learning and Global Change.

One of the requirements of this master's programme is to conduct research and complete a research paper. I have chosen to investigate to what extent the NVC Life Skills course, offered at TVET Colleges, instills the required generic employability skills of communication; problem solving; teamwork; leadership and critical thinking into students.

I have selected the 2012 students for this study. As you have completed the NCV programme and are employed in the Metro Police department, I would like to interview you.

Please be assured that this process is entirely voluntary and you should feel free to decline my request for an interview. If you agree and later want to withdraw from the interview, no reasons will be required. Please be assured that all information will be dealt with in the strictest of confidence and you will in no way be compromised. Should you agree to partake in the study, I will arrange a meeting at your convenience.

If you have any questions for clarity, do not hesitate to contact me or my supervisor, Professor Zelda Groener, on the numbers and emails listed below.

Regards

Joseph Nefdt

Tel: 0722676362

Email: jnefdt7@gmail.com

Supervisor: Professor Zelda Groener

Tel: 021 9593880

Email: zgroener@uwc.ac.za



UNIVERSITY of the
WESTERN CAPE

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (0) 21 959 2801
Fax: +27 (0) 21 959 2481
Website: www.uwc.ac.za
Email: zgroener@uwc.ac.za

FACULTY OF EDUCATION

11 February 2015

Mr Barry Isaacs

Head: Resource Planning and General Administration
Department: Law Enforcement & Security (Support Services
City of Cape Town

Re: Permission to conduct research study

Dear Sir

I am currently registered as a student at the University of the Western Cape in the Master's programme in Adult Learning and Global Change.

My research investigates the extent to which the NCV, Safety in Society programme and in particular, the Life Skills course, contributes toward the work readiness of students.

I am thus requesting permission to interview 14 of your Law Enforcement officers, who have completed the NCV programme at TVET colleges in the year 2012. I will use an interview guide to interview the respective participants. All interviews held will be treated in the strictest of confidence.

All participants will be supplied with a detailed information letter about the purpose of the study. They will also be requested to sign a consent form.

Thanking you in anticipation

Joseph Nefdt

Tel: 0722676362

Email: jnefdt7@gmail.com



UNIVERSITY of the
WESTERN CAPE

Appendix 4 – Participant consent form

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (0) 21 959 2801
Fax: +27 (0) 21 959 2481
Website: www.uwc.ac.za
Email: zgroener@uwc.ac.za

FACULTY OF EDUCATION

Dear Participant

Thank you very much for agreeing to participate in this research project. Please be assured that information given will be held in the strictest of confidence and in no way will you be compromised.

By signing this consent form below, you agree that:

- You have read and understood the study sheet provided
- The researcher was available to answer questions
- You are willing to be interviewed by the researcher
- Your personal details will not be divulged to people outside of the research project
- You understand that your words may be quoted and used in publications, reports and in webpages but your name will not be used
- You understand that you can withdraw from the research project at any time and no question will be asked about the reasons why you no longer want to partake.



Please sign this form and return it to the researcher.

Name of Participant: _____

Participant Signature: _____

Date: _____

Researcher Signature _____

Date: _____



UNIVERSITY of the
WESTERN CAPE