

CHAPTER 3: LEGISLATIVE PERSPECTIVE ON THE CRITICAL CROSS-FIELD OUTCOMES

3.1 INTRODUCTION



This chapter explores the legislative perspective of CCFOs. This chapter forms part of the “action” step in the action research process. An investigation on the policy documents as prescribed by the South African Qualifications Authority (SAQA) on the CCFOs is conducted. The explanation of the origin of the CCFOs is stated before the investigation is initiated.

3.2 ETIOLOGY OF THE CRITICAL CROSS-FIELD OUTCOMES IN THE CONTEXT OF THE SOUTH AFRICAN QUALIFICATIONS AUTHORITY

Documentation on the etiology of CCFOs is scarce. Discussions with stakeholders, like Mr Samuel Isaacs (Chief Executive Officer: SAQA), Christoph Vorwerk (Xasa Facilitating and consulting), Mrs Shirley Steenekamp: ETQA manager INSETA, Mr Joe Samuels (Deputy Director: SAQA), Mr Dugmore Mputing (Director: Standards Generating: SAQA) and Dr William Spady led to the understanding of the CCFOs. CCFOs are – according to the stakeholders – one of the transformational tools utilised by SAQA to ensure access, portability and lifelong learning.

The main theme derived from these discussions is that CCFOs underpin education, training and development initiatives. Any person undergoing education, training or development should demonstrate these qualities at the end of any education, training and development initiative, as the stakeholders refer to the CCFOs. In other words, after completion of any education, training and development initiative, a person should be a good communicator, be able to solve problems efficiently, work

effectively with others in a team and be organised and able to manage him-or herself effectively, amongst other competencies. Evidently these stakeholders know legislation by heart - hence the congruence in their opinion and legislation regarding SAQA and the NQF.

Bellis (2002) documented the evolution of the etiology of the SAQA. Though his explanation encompasses the etiology of SAQA and the NQF and not that of CCFOs per se, it is of importance to understand where CCFOs reside in terms of the Competencies Development initiatives of South Africa. Bellis (2002) was utilised as a main resource in this study, as no other documentation could be found that describes the etiology of SAQA and the NQF. Relevant documentation is cited as and where possible.

The origin of the NQF could be traced back to the labour movement of the early 1970s (SAQA 2000(b):3). The Black trade unions had job specific demands that employers rejected on the grounds that the workers were unskilled and therefore the demands were unjustified. Shortly after that – during the crisis in the country, in the late 80s and the early 90s, according to Bellis (2002:21) a forum was formed to discuss and find ways out of the chaos in education and specifically Black education. Certain institutions were privileged above others, because of the policy of unequal allocation of resources to learning institutions, based on race (South Africa 2001:3).

A body, the National Education Forum (NEF) was formed as a result of great pressure by the business community to bring the then government and the education community to the table. The then Minister of Education, according to Bellis (2002:21), announced the restructuring of education in an Education Renewal Strategy. Predominantly administrative structures were discussed and very little with regards to the real and urgent problems in the broad system of education, training and development was dealt with. The strong reaction that this move evoked fuelled the flames of determination to bring about change.

The National Training Strategy (NTS) was then compiled, but was never seriously debated and excluded important sections of the community; for this reason the Congress of South African Trade Unions (COSATU), in very clear terms, refused even to comment on the distributed document (Bellis 2002:21).

In the same year as the Education Renewal Strategy (ERS), namely 1992, a research project, mainly under an African National Congress (ANC) umbrella, but also involving a wide range of knowledgeable and active persons, resulted in a series of publications that became known as the National Educational Policy Investigation (NEPI). This work, according to Bellis (2002:22), was important as it discusses and makes proposals that proved seminal in many respects by covering the entire spectrum of education, training and development that brought about restructuring of the formal education system (SAQA 2000(b) :4).

The ANC published, via their education department, a Policy Framework for education, training and development in January 1994, followed by their Centre for Education Policy Development (CEPD), producing an Implementation Plan for education, training and development (IPET). In these documents the National Qualification Framework (NQF) was proposed. Initiated in 1992, with work more intensively done in 1993, a major project was in progress under the auspices of the then Minister of Manpower and the National Training Board (NTB). This consisted of a Task Team to whom eight committees reported, each responsible for researching an aspect of Education, training and development (South Africa 2000(c):5). Working Committee 2 of this project had proposed and developed the notion of an integrated National Qualification Framework (NQF) and communicated this in its Committee Report of November 1993. The final edited document of the Task Team *Discussion Document on a National Training Strategy Initiative* (NTSI) was published in April 1994. The result of this effort was the White Paper on Education, training and development, a number of Draft Bills and finally legislation regarding Education, a South African Qualification Authority and a National Qualifications Framework. These, according to Bellis (2002:21), subsequently constituted the basis of delivery structures and quality structures linked to the Competencies Development Act.

CCFOs reside in the structures provided by the South African Qualifications Authority (SAQA).

The etiology of SAQA, the NQF and The White Paper on Education, training and development are set out in the preceding text. The origin of the CCFOs is not clear from the above mentioned, though the assumption can be made that CCFOs serve the transformational attempts SAQA progressively initiates. The CCFOs are incorporated in the new Education, training and development system under the unit standards of the qualifications as registered at SAQA. Olivier (2003:21) states that qualifications are nationally agreed and internationally comparable statements of learning achievements, which are supported by the achievements of unit standards. The CCFOs are listed under the Notes section of a unit standard. See Addendum A for an example of a unit standard. Not all CCFOs need be addressed in a unit standard but, all CCFOs must be addressed in a qualification.

The South African Qualifications Authority and related documentation merely refer to the CCFOs, but provide no original purpose or etiology of the CCFOs. During discussion with SAQA it was indicated that the South African Qualifications Authority itself does not have a document that describes and explains the CCFOs per se and is in need of such a document.

The term CCFOs is analysed in the ensuing text in terms of the words from which the terms have been derived.

3.3 AN ANALYSIS OF THE TERM *CRITICAL CROSS-FIELD OUTCOME*

What follows is an analysis of the term CCFOs. This precedes a crystallisation of the definitions and terms found in the text as discussed.

Critical in the term Critical Cross-Field Outcome

According to The Concise Oxford Dictionary the term “critical” refers to: something of great importance, significant, essential, meaningful, imperative, and momentous.

Cross-Field in the term Critical Cross-Field Outcome

The word “Cross-Field” in the term Critical Cross-Field Outcomes indicates that these outcomes are applicable across industries, irrespective of the nature. For organisational purposes, the National Qualifications Framework (NQF) divides all Education, training and development in South Africa into 12 organising fields (SAQA 2002:4). These fields are not based on a traditional discipline or subject area, nor are they based on economic sectors. They are a convenient mixture of the two, representing nothing more than organisational necessity. Below are the proposed sub-fields that the National Standards Bodies (NSB) recommended to the Authorities for recognition. The term Cross-Field in CCFOs refers to the fields mentioned below.

Fields

The fields are listed alphabetically with an indication of the abbreviations that are used for each:

Table 4 Industry sub-fields

NSB Number	Sub- field	Abbreviation
NSB 01	Agriculture and nature conservation	Agric & Nature
NSB 02	Culture and arts	C & A
NSB 03	Business, commerce and management studies	BCM
NSB 04	Communication studies and language	C & L
NSB 05	Education, training and development	ETD
NSB 06	Manufacturing, engineering and technology	MET
NSB 07	Human and social studies	HSS
NSB 08	Law, military science and security	LMS
NSB 09	Health science and social services	HS & SS
NSB 010	Physical, mathematical, computer and life sciences	PMCL
NSB 011	Services	Serv
NSB 012	Physical planning and construction	Plan & C

Outcomes in the term Critical Cross-Field Outcome

Following the discussions that took place in the Committee of the National Training Board (NTB) during 1993, it was decided to use the word “outcomes” partly to avoid using the term “competence” (Bellis 2002:23). The experience of many workers of competence-based training according to the mentioned author had been of very narrow, task-related, mechanistic, do-this-do-that type of training. This training excluded any understanding of what they were to do and why. Such training, according to Bellis (2002:23), certainly did not contribute to personal development. The experience of educationalists, on the other hand, was such that they viewed competence as competencies, which, in their vocabulary and understanding, were associated with low-level manual competencies or low-level cognitive (memorising) competencies. Consequently, the term “outcome” came to be used. The term

“competence” will be favoured in this research as the CCFOs are perceived as outcomes and the intention is to identify their underpinning competencies.

In South Africa the term “outcomes” are being favoured in the formal education systems whereas both “outcome” and “competence” are being used interchangeably in the training of human resource development system (South Africa 1998(b):24). It tends to be the case that in education the word “outcome” is very widely used because of the launching of Curriculum 2005 and Outcomes-Based Education since 1998.

Various definitions of outcomes are presently in use. An outcomes-base approach implies something different from a largely content-based approach to teaching and learning; it connects the idea of learners’ ability as a result of learning (Olivier 2003:46). SAQA (SQAQ 1996:24) states in this regard that an outcome is a culminating demonstration of the entire range of learning experiences and capabilities that underlie it and that occurs in a performance context that directly influences what it is and how it is carried out. Bellis (2002:25) refers to the National Training Bureau Committee 2 Working Paper that states the following:

“Outcomes are represented in a statement of learner capability that reflects an appropriate integration of knowledge and skill. This capability consists of understanding, the ability to apply, the capacity to transfer to other contexts”.

Olivier (2002:46) explains outcomes in a slightly different wording from the above mentioned, in that outcomes are described as neither knowledge nor competencies or competencies, but are unique terminology such as a verb, an object (noun) and when necessary a qualifier (modifier). Olivier’s view of outcomes complements the Unit standard Based Education, training and development Practice that is progressively implemented in the South African context and therefore all the above descriptions of outcomes are the same, but the interpretation differs. Outcomes in this research refer to the demonstrated end results of training and education within a specific context.

Since the terms “outcome” and “competence” are being used interchangeably in the training of the human resource development system (SAQA 1998(a):36), it is necessary to explore the term “competence” as well. Further more, this research intends to identify the refined competencies of the CCFOs and the term needs to be clearly separated from outcomes. In this study, clusters of competencies result in education, training and development outcomes and the outcomes are specifically the CCFOs.

Many experts in the fields of sociology, education, philosophy, psychology and economics have tried to define the notion of competence (Eurydice 2002:13). The Eurydice Survey is an educational related survey used by stakeholders in the field to determine and explain related issues and definitions. According to the mentioned document, educational and cultural background as well as linguistic origins of the experts shaped the definitions of competence. Competence was originally used in the context of vocational training (Eurydice 2002:13). This term refers to the ability to perform a particular task. This complements this study’s view of competence and outcomes as explained previously.

To build competence means enabling individuals to mobilise, apply and integrate acquired knowledge in complex diverse and unpredictable situations, (Eurydice 2002:13). The Australian complement for CCFOs is known as the Key Competencies. The term “key competencies” is described in the ensuing text and is correlated with the CCFOs.

3.4 CRITICAL CROSS-FIELD OUTCOMES IN RELATION TO KEY COMPETENCIES AND MAYER COMPETENCIES

The Engineering and Manufacturing Processes Report (E & MP Report) (1996) is one of the maiden documents that describe the CCFOs in education, training and development environment in South Africa. This document was sourced by Chirs Vorwerk, one of the valued stakeholders in the environment of ETD according to SAQA. This report has not been published but is available at SAQA's research department.

The CCFOs are also related to the Mayer competencies (E&MP Report 1996: 10). The Mayer competencies' wording is exactly the same as the Key competencies (See table 4). *Key competencies* are the term used for describing generic competencies in Australia. Other countries have developed differing yet equivalent sets of generic competencies for use in education, training and development, but use different terms such as essential competencies (New Zealand), foundation competencies or workplace competencies (United States), and core competencies (England and Scotland) (E&MP Final Report, 1996: 10).

The Mayer Report (1992:7) defines key competencies as "...competencies essential for effective participation in the emerging patterns of work and work organisation". The focus is on the capacity to apply knowledge and competencies in an integrated way in work situations. Key competencies are generic in that they apply to work generally rather than being specific to work in specific occupations and industries. This characteristic means that the Key Competencies are not only essential for effective participation in work but are also essential for effective participation in further education and in adult life more generally (Mayer 1992:7).

The CCFOs relate closely to key competencies as well as the Mayer competencies. The CCFOs encompass more than the Mayer competencies or the key competencies; CCFOs also include the developmental outcomes.

Eurydice (2002:14) concluded from a large number of contributions in search of a definition on key competence, that there is no universal definition of the notion of key competence. The report states that despite differing conceptualisation and interpretation of the term in question, the majority of experts seem to agree that for a competence to deserve attributes such as key, core, essential or basic, it must be necessary and beneficial to any individual and to society at large. This complements the CCFOs, as their intention is to contribute to the full development of not only any individual learner but also the society at large.

Eurydice (2002:17) identifies selection criteria for the key competencies. The criteria are applicable as CCFOs and key competencies correlate.

The first criterion for selection is that it must be potentially beneficial to all members of society. It must be relevant to the whole of the population, irrespective of gender, class, race, culture, family background or mother tongue (Eurydice 2002:14).

The second criterion for selection is that it must comply with the ethical, economic and cultural values and conventions of the society concerned.

The third determining factor is the context in which Key Competencies are to be applied.

The CCFOs comply with the criteria mentioned above. CCFOs as stated by SAQA in relation to the key competence as provided by the South Australian Science Teachers Association (SASTA) and the so called Mayer competencies are as follows:

Table 5 Correlation between CCFOs, key competencies and Mayer competencies

Number	Critical Cross Field Outcome	Number	Key competency	Number	Mayer competencies
1	Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made	6	Solving problems	6	Solving problems
2	Work effectively with others as a member of a team, group organisation community	4	Working with others in teams	4	Working with others and in teams
3	Organise and manage oneself and one's activities responsibly and effectively	3	Planning and organising activities	3	Planning and organising activities
4	Collect, analyse, organise and critically evaluate information	1	Collecting, analysing and organising information	1	Collecting, analysing and organising information
5	Communicate effectively using visual, mathematical and/or language competencies in the modes of oral and /or written presentation	2 & 5	Communicating ideas and information and using mathematical ideas and techniques	2 & 5	Communicating ideas and information and using mathematical ideas and techniques

6	Use science and technology effectively and critically showing responsibility towards the environment and health of others	7	Using technology	6	Using technology
7	Demonstrate an understanding of the work as a set of related systems by recognising that problem-solving contexts do not exist in isolation	0	No complement	0	No complement

Developmental outcomes					
1	Reflecting on and exploring a variety of strategies to learn more effectively	0	No complement	0	No complement
2	Participating as responsible citizens in the life of local, national and global communities	0	No complement	0	No complement
3	Being culturally and aesthetically sensitive across a range of social contexts	0	No complement	0	No complement
4	Exploring education and career opportunities	0	No complement	0	No complement
5	Developing entrepreneurial abilities	0	No complement	0	No complement

Evidently from the above table the first 7 CCFOs statements directly relate to the key competencies as well as Mayer competencies. There is no complement for the South African developmental outcomes to be found in the key competencies or the Mayer competencies. The (E&MP Report 1996:10) confirms the above correlation in that it refers to the CCFOs as follows:

These are the broad range of common abilities, which underpin all of human endeavour. They are developed through the interaction with a specific context into specific competencies and capability. They are variously known as Mayer competencies, generic competencies, fundamental abilities, essential outcomes and, now latterly, by SAQA as critical outcomes.

3.5 TERMINOLOGY DESCRIBING THE CRITICAL CROSS-FIELD OUTCOMES

With reference to the above-mentioned quote, SAQA has referred to CCFOs (SAQA: 7) exactly the same as the E&MP Report (1996:11) with the added descriptive statement of core competencies.

The seven CCFOs as stipulated by SAQA are examples of generic competencies. The South African Qualifications Authority (SAQA) initially referred to the CCFOs as Essential Outcomes (South Africa 1996:26). SAQA (South Africa 1997:6), states that the term Critical Cross-Field Education, training and development Outcomes (Short title: Critical Outcomes) would be adopted instead of Essential Outcomes. Industry is currently using the term CCFOs.

An international benchmarking exercise done by SAQA on the so-called essential outcomes has led to the following insights:

Table 6 Proposed Essential Outcomes

National Training Strategy Initiative Report: Generic Competencies	The Alverno College Abilities	Ontario Essential Outcomes	Proposed SA Essential Outcomes
Thinking about and using learning processes and strategies	Global perspectives	Use the competencies of learning to learn more effectively	Reflect on and use a variety of strategies to learn more effectively
Solving problems and making decisions	Problem solving	Solve problems and make responsible decisions using critical and creative thinking	Solve problems and make responsible decisions using critical and creative thinking
Planning, organising and evaluating activities	Valuing	None	None
Working with others as the member of a team/ group/organisation /community	Social interaction	Apply the competencies needed to work and get along with other people	Work with others as a member of a team/ group/ organisation/ community
Collecting, analysing, organising and critically evaluating information	Analysis	None	Collecting, analysing, organising and critically evaluating information

Communicating ideas and information	Communication	Communicate effectively	Communicate effectively using visual, mathematical, and language competencies
Participating in civil society and democratic processes through understanding and engaging with a range of interlocking systems (legal, economic, political, social)	Effective citizenship	Participate as responsible citizens in the life of the local, national and global communities	Participate as responsible citizens in the life of the local, national and global communities
Using science and technology critically to enhance control over the environment in a range of fields and context	None	Use technology effectively	Use science and technology critically, showing responsibility towards the environment and health of others
Applying mathematical concepts and tools	None	Demonstrate an understanding of the world as a set of related systems	None

Understanding and using the core competencies; concepts and procedures that underlie the domains of social and human sciences, natural sciences, art, language and literature	Aesthetic response	Apply aesthetic judgement in everyday life	Demonstrate cultural and aesthetic sensitivity across a range of social contexts
None	None	Make wise and safe choices for healthy living	Make wise and safe choices for healthy living
None	None	Explore education and career opportunities	Explore education and career opportunities

As indicated in the above-mentioned table, the CCFOs appear to be different from the initial Essential Outcomes, but it is evident that the CCFOs are derived from the Essential outcomes. CCFOs as known today are in correlation with international trends and South Africa is competing internationally regarding the CCFOs.

As mentioned, CCFOs are referred to as generic competencies. Breier (1998:80) states that employers and higher education providers are aware that conceptions of generic competencies are really concerned about the attributes required at work. Generic competencies are employability competencies and mentions that employers consider these competencies as essential. Research, (Breier 1998:80) has shown that employers prefer generic competencies requirements to knowledge or qualifications. This situation is of crucial importance to the term under discussion: CCFOs.

CCFOs relate to generic competencies, and generic competencies are perceived more important than knowledge or qualifications, which means that CCFOs deserve greater in-depth understanding and conceptualisation.

Generic competencies are also known as subject-independent or transversal competencies; they are not limited to any specific discipline, but can be applied to a whole range of subject areas and settings (Eurydice 2002:15). This complements the CCFOs as the CCFOs are cross-curricula, implemented on all NQF levels and not context specific.

Breier (1996:86) discusses generic competencies and their transferable nature. Quoting several studies that address the content dependent vs. content independent nature of generic competencies and arguing the transfer of knowledge and competencies. “The transferability of flexibility or generic competencies makes them invaluable tools for successful action...” (Eurydice 2002:15). Breier (1996:86) distinguishes transferable or core competencies, which can be deployed with little or no adaptation in a variety of social settings. Breier (1996:86) refers to transferring competencies as meta-competencies, the second order competencies: these

competencies enable one to select, adapt, and apply one's other competencies to different situations across different social contexts and perhaps similarly across different cognitive domains. Eurydice (2002:16) refers to meta-cognitive competence as the capacity to understand and control one's own thinking and learning processes. These learning processes are self-initiated, self-regulated, intentional learning at all stages of life. This - according to the survey (Eurydice 2002:16) - implies that people will be able to identify suitable places of learning and are sufficiently motivated to invest time and effort to continue learning. Therefore, knowledge and competencies will be maintained and updated in accordance with profound economic, political and social changes. This explanation is rather cognitive-orientated and does not necessarily cater for the social/emotional domain. The CCFOs encapsulate more than cognitive competencies and abilities; they include the social/emotional development of the learner in all contexts.

Breier (1996:73) differentiates between CCFOs and generic competencies and mentions that CCFOs are examples of generic competencies. She provides the following examples of generic competencies: writing competencies, oral competencies, interpersonal competencies, communication competencies and problem solving competencies.

The Eurydice Survey (2002:15) provides the following examples of prominent generic competencies: motivation, creativity, leadership, communication, problem solving, reasoning, teamwork and the ability to learn. Clearly these examples do include some of the CCFOs, but not all. CCFOs are more than only generic competencies.

Important to note is that generic competencies provide a bridge between certain areas of:

- education and the workplace
- informal and formal modes of learning

Generic competencies are regarded as one of the key elements of education in that they support lifelong learning. The ability to learn, (Eurydice 2002:18) has elicited much interest in recent years within the context of lifelong learning. The curriculum is impacted in two ways: firstly, more responsibility is being placed on the learner and secondly, curricula are emphasising the development of learners' personal competencies. This situation supports both the Outcomes-Based Education practice progressively implemented in South Africa, as well as the characteristics of the CCFOs.

CCFOs should guide curriculum planning across all levels of the education, training and development system according to Jansen (2001:555). They are not generated in one sector of education, training and development, but across sectors in a process of consultation among stakeholders (South Africa 2005(b):28). SAQA (1997:7) refers to the CCFOs as the qualities the NQF wishes to promote regardless of the specific area or content of learning (SAQA 1997:7). CCFOs should direct teaching, education, training and development practices, as well as the design and development of learning programmes and learning materials.

Table 7 summarises the above-mentioned text. A discussion of the table follows thereafter.

Table 7 CCFOs concept analysis

Author	General comments and reference														Policy reference										Context						
	Generic skills	Essential outcomes	Core skills	Life skills	Thinking skills	Transferable skills	Intangible outcomes	Personal skills	Abilities needed to be responsible	Provide means to build a career	Abilities needed to be successful member of society	Critical thinking	Lateral thinking	Problem solving	Skills necessary to assimilate knowledge	Ability to interact	Education and Training outcomes	Drive all learning processes	Achieve coherence in NQF system	Describe qualities NQF wishes to develop in learners	Critical for development of life-long learning	Transforming nature	Facilitative role in nationhood and solidarity	Release person's potential	Enhance quality of education and training	Acceleration of redress of past unfair discrimination	Cross Cultural outcomes	Contribute to full personal development	Cross Curricular	Guide curriculum planning	
Oliver (2002:32)	x						x	x	x	x	x	x	x	x	x		x												x	x	
Bellis (2002:33)	x																														
SAQA document (May/June 1997:7)	x	x	x																			x									
NQF and Curriculum Development (2000:18)																	x		x	x	x										
Curriculum 2005:27																						x	x	x							
SAQA: Office of Executive Officer: (1997:6)																			x	x	x				x	x			x	x	
Oliver (2003:32)				x				x					x				x														
White Paper on Education and Training (1996:26)	x	x																													
Jansen (2001:555)																														x	x
SAQA Bulletin (February 2000:4)	x																												x	x	
National Qualifications Framework: an overview (2000:10)																			x	x	x									x	

Observe



The above table is a representation of the crystallisation of the term CCFOs. It also form result in the “reflection” and “observation” steps of action research as it summarises and indicate important essential concepts of the CCFOs.

Reflect



The table supports the notion that the term CCFOs is diverse and that even knowledgeable stakeholders in the NQF are not consistent in terms of the description. It is clear from the table that the resources are of opinion that CCFOs are an essential concept in the transforming nature of SAQA and the NQF. CCFOs are critical in the development of lifelong learning and they describe the qualities SAQA envisages for the development of learners. The fact that several authors describe CCFOs diversely indicates that their implementation could be problematic. It is therefore necessary to investigate the competencies underpinning the CCFOs as prescribed by SAQA as well as related documentation and legislation.

3.6 THE NATURE OF THE CRITICAL CROSS-FIELD OUTCOMES

The Department of Education’s documents, according to Bellis (2002:28), define Critical Outcomes as broad, generic cross-curricular outcomes, which ensure that learners gain the competencies, knowledge, and values that will allow them to contribute to their own successes, as well as to the successes of their family, community and nation as a whole. SAQA describes the CCFOs as intangible outcomes (Olivier 2002:32). Critical and lateral thinking, problem solving and the ability to interact with others are but a few related issues. These competencies, according to Olivier (2002:32), are critically important to drive all learning processes. The CCFOs contribute to the full development of all learners at all levels and in all contexts.

SAQA initially prescribed seven CCFOs and five Developmental Outcomes (South Africa 1997:6). The latter were initially not compulsory, but nonetheless regarded as important. CCFOs, including the Developmental Outcomes, are described and explored in this research.

The CCFOs is education, training and development outcomes and are an additional mechanism through which coherence is achieved in the framework. These CCFOs describe the qualities that the National Qualifications Framework identifies for development in learners within the education, training and development system, regardless of the specific area or content of learning. These are the outcomes that are deemed critical for the development of the capacity for lifelong learning. (SAQA 2000(c):18).

As stated in the preceding text, the CCFOs in South Africa are underpinned by transformational mechanisms, (SAQA 1997:7) which are driven by the following instruments and vested in the Constitution of the Republic of South Africa: judicial, political, economic and social instruments. Important instruments that strongly relate to the focus of this study are transformational and developmental instruments, and knowledge production instruments. Each is briefly described.

Transformational and developmental instruments

These instruments change the character or condition of a society, especially in relation to empowering previously marginalised groups and equally marginalising or eliminating irrelevant practices, responding positively to the needs of a repressed group or an underclass.

Knowledge production instruments

These instruments address the need of a new society through the creation of new learning structures and processes, or by addressing issues for more social and personal relevance and contextual impact.

The role of CCFOs (South Africa 2005(b):27) in the context of an integrated South African education, training and development system include the following:

Bolstering the spirit and letter of the Constitution by focusing on transforming the South African society from one based on major inequities to one which is fundamentally egalitarian

Acting as a conduit and playing a facilitative role in generating a sense of South African nationhood and solidarity within a Pan-African and international dynamic society.

Individuating the person within learning collectives and releasing the person's potential. Education, training and development should therefore serve in a pre-figurative and strategic way to release human resources potential in South Africa, in order to redress the imbalances created by the apartheid system.

3.7 MILIEU OF THE CRITICAL CROSS-FIELD OUTCOMES

It is mandatory for standards setters to incorporate at least some CCFOs in the standards that they recommend (SAQA 2000(d):11 and E& MP Report 1996:9). Proposers of qualifications should ensure that all CCFOs have been addressed appropriately at the level concerned within the qualification being proposed. A discussion of the qualification and how the CCFOs ought to be integrated in the qualification follows in figure 6 in this chapter.

SAQA requires that all qualifications, learning programmes and unit standards be given attention with regard to the CCFOs, trying to incorporate them where possible. The five Developmental Outcomes have acquired the same status as the seven Critical Cross Field Outcomes, as indicated in latest legislation (South Africa 1998(a):45).

SAQA is currently proceeding with the implementation of the NQF to facilitate the democratic transformation of the national education, training and development system into one that serves the needs and interests of all the people of South Africa. SAQA trusts that the CCFOs will:

...ensure the enhancement of the quality of education and training, the acceleration of redress of past unfair discrimination in education training and employment opportunities, thereby contributing to the full personal development of each learner and the social and economic development of the nation at large (South Africa 1997:6).

CCFOs cannot be ignored when designing and implementing learning programmes. As previously mentioned it is required of designers and qualifications proposers to incorporate CCFOs in the learning programme. SAQA describes the impact that a qualification will have on learning programme development in the document on the National Qualifications Framework and Curriculum Development (SAQA 2000 (c):14). In this document SAQA prescribes the following:

A qualification shall have both specific and CCFOs that promote lifelong learning, (p14) and

When a qualification is registered, there is a requirement for the critical outcomes to be articulated (p19).

Policy documents and related documentation state that level descriptors determine the level of the qualification and that CCFOs ought to be implemented accordingly. CCFOs should not be implemented only in terms of the fundamental component of a qualification, but comprehensively within the whole qualification. CCFOs ought to be implemented in such a way that the learner will utilise it in work-related outcomes. In other words, CCFOs should be embedded within the learners' capabilities in order to execute a job-related task successfully. It is therefore the responsibility of the education, training and development practitioner to facilitate the mastery of learning outcomes in such a way that the learner will utilise the CCFOs in executing a task.

SAQA states that the CCFOs are problematic for learning programme developers. “The impossibility of de-contextualising statements about core competencies with any meaning” (SAQA (d) 2000:20). The difficulty with such out-of-context descriptions is that they are too poorly defined to ensure comparability and the more precisely defined they become the more rooted in context they become (SAQA 2000(c):20). The need for this research is embedded in this statement as the CCFOs need to be defined more clearly in order to be understood and conceptualised by Education, training and development Practitioners.

The ensuing text explains how the CCFOs are entrenched in a qualification within the NQF. The explanation is required to understand the relation between a qualification, unit standard, specific outcomes and the CCFOs.

3.8 CRITICAL CROSS-FIELD OUTCOMES AS EMBEDDED IN QUALIFICATIONS WITHIN THE NQF

The White Paper on Education, training and development (Department of Education 1995(b):9) states that an integrated approach to education, training and development will link one level of learning to another and enable successful learners to progress to higher levels without restriction from any starting point in the education, training and development system. The NQF embodies all nationally recognised qualifications opposed to traditional frameworks that intend to organise qualifications within isolated levels, sectors or according to providers of education, training and development endeavours (Olivier 2002:8). The SAQA Act (South Africa 1995) sets up ways of ensuring that the quality of Education, training and development in South Africa is of a good standard and that it provides many different entry, exit and re-entry points.

The NQF structures education, training and development very differently from the vertical divisions of the past. The NQF constitutes eight levels of learning and pathways for learning specialisations, such as communications or engineering (Department of Labour 2001:18). Different qualifications fit into the framework according to their focus and how difficult they are. Figure 8 depicts a compacted representation of the NQF

Table 8 Structure of the National Qualifications Framework

Higher Education and Training Band	
8	Doctorates and Further Research Degrees
7	Higher Degrees and Professional Qualifications
6	First Degrees and Higher Diplomas
5	Diplomas and Occupational Certificates
Further Education and Training Band	
4 (Gr 12)	Further Education and Training Certificate
3	
2	
General Education and Training Band	
1 (Gr 9)	General Education and Training Certificate
Senior Phase Grades 7-9	ABET Level 4
Intermediate Phase Grades 4-6	ABET Level 3
Foundation Phase Grades 1-3	ABET Level 2
Pre-School Phase	ABET Level 1

The NQF is a horizontal structure; therefore the governance of each band is across the particular band.

The level of a qualification is based on the exit level – on what a person will know and can do when he/she completes a qualification. This new way of recognising learners' achievements applies to all qualifications, giving education, training and development the same status. It measures what a person knows and can do, rather where and how the person gained that knowledge. The framework is also, according to Bellis (2002:15), outcomes/competence-based.

Level 1 of the NQF is achieved at the end of ordinary, compulsory schooling up to Grade 9 (Standard 7). It can also be reached through Adult Basic Education and Training (ABET) for adults who did not have the opportunity to complete their schooling. Level 1 marks the end of the first band of the NQF. This first band is known as the General Education and Training (GET) Band.

The NQF covers further education, training and development – schooling and technical certificates up to the equivalent of Grade 12, or matrix (Further Education and Training FET Band). Levels 5, 6, 7 and 8 are known as band 3. Band 3 covers Higher Education and Training (HET).

Learners can progress through these levels, no matter what age they are through lifelong learning.

The levels of the NQF measure the complexity of the subject matter for different qualifications rather than the duration of studies. The levels allow comparison between different courses, e.g. between education, training and development received in different ways and at different institutions. A person can thus use the credits from one institution to qualify at another institution for a different but related course. This promotes, according to Olivier (2002:10), the fundamental goal of the NQF, namely to create a mechanism to enable and promote lifelong learning. The levels also allow comparison between South African education, training and development and the education, training and development people receive in other countries.

The level of a qualification refers to a level on the NQF of which there are currently eight. The level of the qualification is determined by level descriptors as prescribed by SAQA and mentioned in the preceding text. SAQA (2000) provides guidelines and frameworks for determining level descriptors and this benchmarks the South African level descriptors against international standards.

SAQA is currently investigating the possibility of adding yet another level to the framework. These discussions about the levels are still ongoing and relevant information is not yet available. Level descriptors are employed to determine the level of a qualification or unit standard on the NQF.

The levels of the NQF will only be referred to, as the focus of the research is on CCFOs and not the levels *per se*. It is important, though, to take cognisance of the level descriptors, as they serve as indicators to the achievement of NQF levels. When

analysing the qualifications as per set standard prescribed by SAQA, one will find that it is of critical importance to take into account the following:

- Level of the qualification
- Purpose of the qualification
- Level of CCFOs per qualification

The level of complexity in respect of the CCFOs is seen as one way of comparing qualifications and allocating qualifications and standards to levels (SAQA (d) 2000:20). The CCFOs are diffusely addressed in the qualifications; they are merely listed in the rationale of qualifications.

This is a problematic situation, as no cumulative defined understanding of the CCFOs exists and therefore the assumption can be made that the CCFOs are not effectively addressed per qualification. The focus of this study is to define the underpinning competencies of the CCFOs although the levels of the CCFOs are acknowledged but not addressed in this research. Further study ought to be conducted in this regard.

A qualification, as indicated in the above-mentioned text, is pitched on an NQF level. A qualification consists of a compilation of two types of outcomes namely specific outcomes and CCFOs.

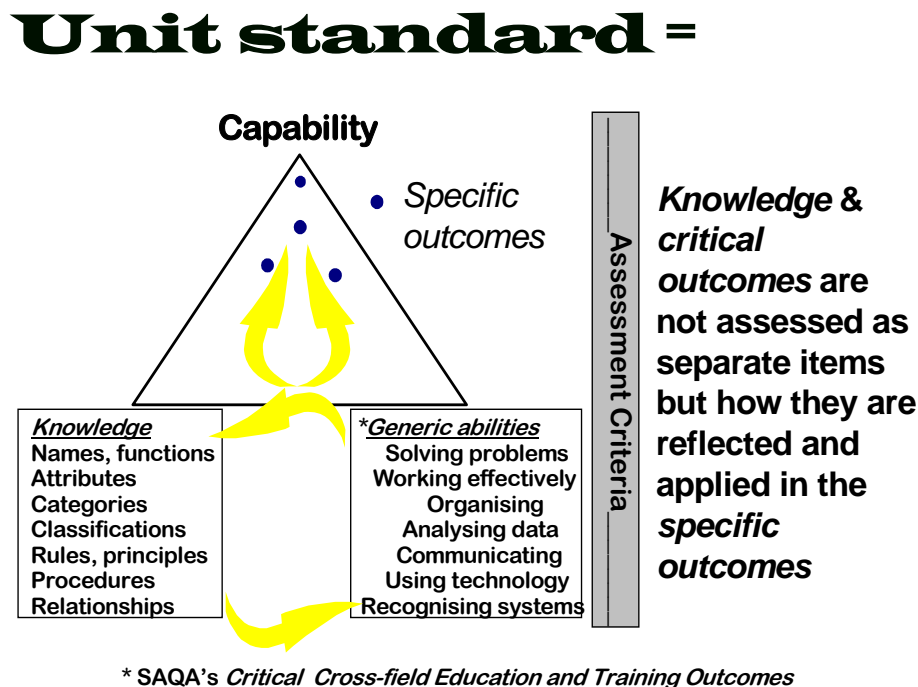
Following is a discussion of the CCFOs in relation to specific outcomes.

3.9 CRITICAL CROSS-FIELD OUTCOMES IN RELATION TO SPECIFIC OUTCOMES

A qualification has two types of outcomes, one being specific outcomes and the other the CCFOs. These differ in breadth of the context to which they apply (South Africa 1995(a):27).

The E & MP Report (1996:13) mentioned earlier is one of the very first proposals for a National Qualifications Framework. In this report the methodology of constructing qualifications and unit standards and suggestions on incorporating the CCFOs are addressed. The ensuing model addresses the methodology of constructing a unit standard and not the CCFOs *per se*, but successfully contextualises the CCFOs. A model as proposed by the E & MP Report (1996:13) follows.

Figure 9 SAQA’s Critical Cross-Field Education, training and development Outcomes (E & MP Report 1996:13)



Activities and tasks that comprise a capability are formulated in the form of outcomes, combining the generic abilities and knowledge acquisition results in the development of the new capability. These so-called generic competencies refer to the CCFOs.

Spady states (Spady 2004) that any demonstration of what he calls performance is three-dimensional. The mentioned dimensions are content, context and competence and this strongly relates to the E & EM Report model. The CCFOs generic abilities/competences are woven into the specific outcomes at the capacity/performance level, from whence they find their context. The knowledge component determines the content in which the CCFOs are to be integrated. The three dimensions reflexively determine the nature and degree of difficulty.

The CCFOs or so-called *generic abilities* according to the mentioned report cannot be assessed or addressed as separate items. If the CCFOs were to be assessed or addressed separately, they would become specific outcomes. Following is a discussion on the specific outcomes.

Figure 10 Outcomes as resided in a qualification

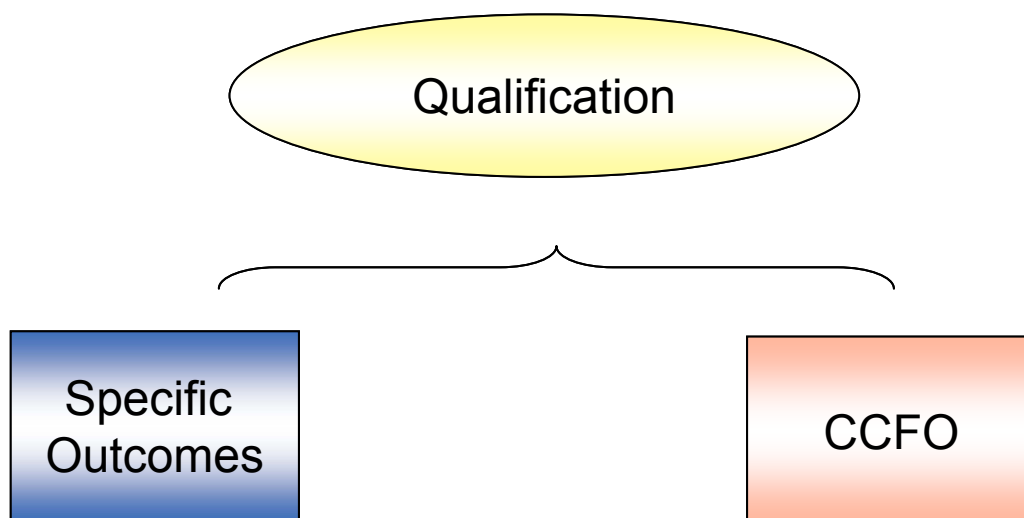


Figure 10 represents the types of outcome embedded in a qualification: specific outcomes and the CCFOs. A qualification must always consist of both outcomes with an indication of the expected level and assessment. Specific outcomes refer to the specification of what learners are able to do at the end of a learning experience. This, according to Bellis (2002:28) includes competencies, knowledge and values, which inform the demonstration of the achievement of an outcome or a set of outcomes. Olivier's (2002, 32) description is congruent to that of Bellis (2002) in that he refers to the specific outcomes as knowledge, competencies and values within a specific context.

Specific outcomes express the more narrowly defined aspects of the learning process. Specific outcomes are context-specific, informed by the CCFOs and formulated within the context in which they are to be demonstrated. These outcomes relate to the competence that learners should be able to demonstrate in specific contexts and particular areas of learning at certain levels.

Specific outcomes can be assessed by an assessor and a learner could be declared by such a party as *competent* or not *yet competent* for the sake of progression of the learner, indirectly assessing the effectiveness of learning processes and learning programmes.

Levels of complexity, scope and learning context are therefore crucial in the formulation of specific outcomes if assessment is to be transparent, fair and effective.

Assessment policy and procedures as well as related legislation and processes will not be discussed in this study, as they do not corroborate the focus of this research report. Specific outcomes are the knowledge, competencies and values embedded in the areas of learning. According to Olivier (2002:32), specific outcomes are the basis for selecting cognitive learning objectives and technical competencies that will enable learners to achieve end-product outcomes. Assessment criteria together with specific outcomes support the achievement of unit standards, credits and qualifications.

The argument is not whether knowledge, competencies and values should be mastered, but how, when and to what extent these should be obtained, understood and applied to achieve outcomes.

SAQA ensures the implementation of CCFOs in that the Authority prescribes the format of qualifications and unit standards. The format of a unit standard ensures that the CCFOs are addressed; CCFOs resort under the NOTES sub-heading of the unit standard, and the service provider ought to give an indication of where and how the CCFOs are covered. It often occurs that proposers of unit standards and qualifications as well as service providers only list the CCFOs, but do not actually implement the CCFOs. See Addendum A for an example of a unit standard and an indication of how the CCFOs are listed in the unit standards and qualifications. When identifying unit standards and qualifications analysis I decided to use the same competency namely communication in different fields such as agriculture, numeracy and mathematics, security, project management and early childhood development. The CCFOs were merely listed in all the mentioned documents. CCFOs then do not add any value to learning experiences.

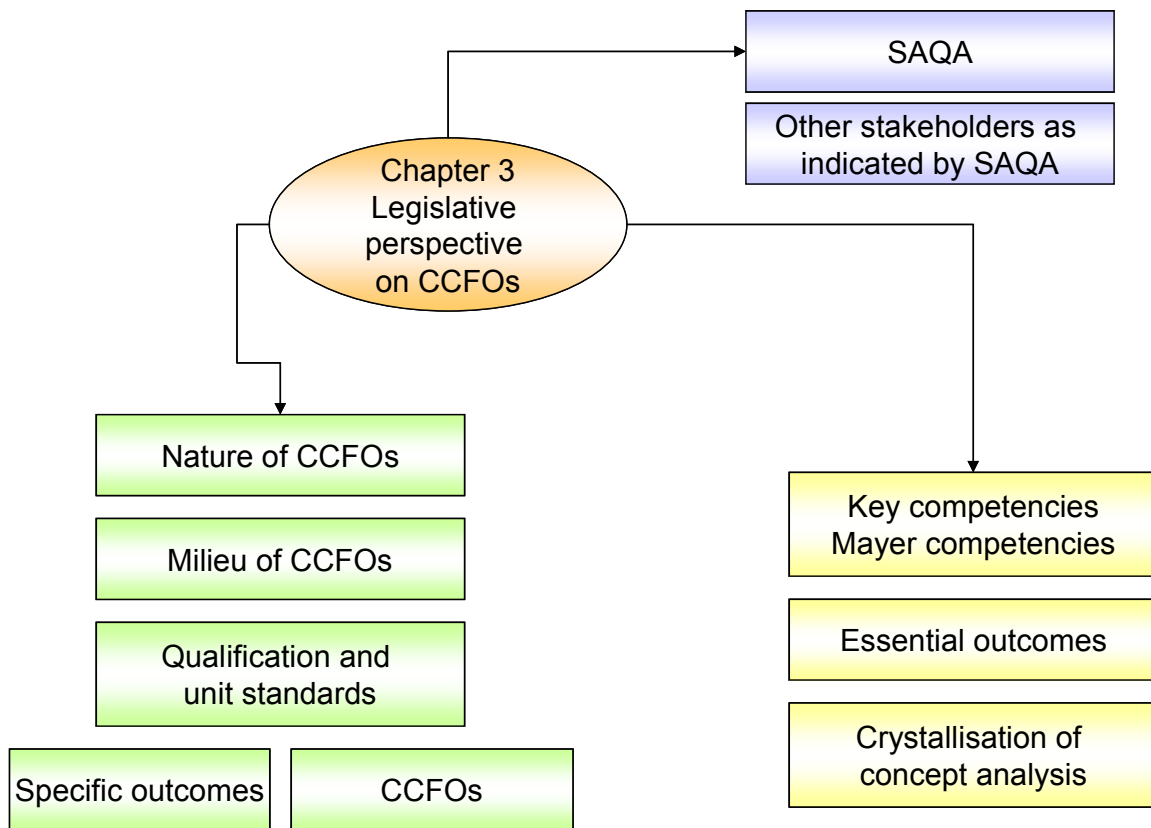
The following table depicts a correlation between the specific outcomes and CCFOs to highlight the differences between the mentioned terminologies as discussed in the preceding text. This summarises and concludes the correlation between the CCFOs and Specific outcomes.

Table 9 Correlation between specific outcomes and CCFOs

Specific outcomes	Critical Cross-Field Outcomes
Context specific	Cross-curricular
Informed by Critical Cross-Field Outcomes	Informed by formulation of Specific outcomes in individual areas of learning
Formulated within the context in which they are to be demonstrated	Underpin learning process in all facets
Describe competence which learner should be able to demonstrate	Identify qualities the NQF wishes to promote
Have specific contexts	Are not restricted to any specific learning context
Particular areas of learning	All areas of learning
Are pitched at certain levels	Include all levels of National Qualifications Framework

3.10 CONCLUSION

Figure 11 Summary of chapter 3



The table above summarises chapter 3. Interviews were held with Mr Samuel Isaacs (CEO to SAQA) to gain insight into how SAQA related documentation describes the CCFOs. SAQA made references to appropriate stakeholders that initially assisted in determining the CCFOs.

The specific words that compile the terms CCFOs are listed and then analysed to determine their specific meaning.

- Critical
- Cross-Field
- Outcomes

The CCFOs are then investigated in relation with the key competencies, Mayer competencies and the essential outcomes. A crystallisation of the concept analysis is then provided to triangulate a meaning thereof.

The nature of and the milieu that the CCFOs reside in are determined and the embeddedness within a qualification and unit standard is discussed. Specific outcomes and the CCFOs are then correlated to understand their relation.

In consonance to the summary of this chapter, I would like to provide an example of how I incorporated the CCFOs in practice. Addendum A pages 28 and 31 has reference:

The CCFO are addressed on the unit standard level under the essential embedded knowledge section as follow:

“Critical Cross Field Outcomes

UNIT STANDARD CCFO WORKING

Working effectively with others as a member of a team, group, organisation or community (relates to both outcomes)

UNIT STANDARD CCFO COMMUNICATING

Communicate effectively (relates to both outcomes)

UNIT STANDARD CCFO CONTRIBUTING

Personal development (relates to both outcomes)”

An example of how the CCFOs are addressed on a qualification level can be seen in addendum A page 31-32. An extract of one of the CCFOs follows:

“Collaborate, consult and work effectively within various professional contexts as a member of a team, group and organisation based on knowledge of group work, consultation and collaboration, and be able to reflect on their own and other’s collaborative practices.”

Above-mentioned are stated to ensure that the CCFOs are address on the unit standard level as well as qualification level.

In designing and developing the training material, I use to ensure that all the specific outcomes are address, same as the assessment tools. At the end of the training material as well as the assessment tool, I use to further incorporate the CCFOs by explaining how I integrated them. For example:

CCFO Identify and solve problems

The learners must identify possibilities for collaborative practice. If a conflicting problem arises, they must identify a proper technique to solve it that suit the situation.

CCFO Working in teams

Classroom discussion is one the main methods to facilitate this competency, by take part in groups.

By incorporating the CCFOs in this way, was merely a discussion and rationalisation of the CCFO.

With this much said, I would like to teas out the meaning of the CCFO statements as well as the competencies underpinning them.



Dr Spady (2004) states that proof of demonstration is found in the action verbs or so-called demonstration verbs. The CCFOs are therefore analysed in terms of the action verbs they contain

This not only demonstrates the complexity of the statements, but also provides a point of departure for the next chapter.

Table 10 An analysis of the CCFOs' statements according to the embedded required actions

CCFO statement	Analysis on CCFOs
Identifying and solving problems in which responses display that responsible decisions using critical and creative thinking have been made	Identify problems Solve problems Responsible decision-making Critical thinking Creative thinking
Working effectively with others as a member of a team, group, organisation or community	Work effectively with others
Organising and managing oneself and one's activities responsibly and effectively	Organise oneself Organise activities Manage oneself Manage activities
Collecting, analysing organising and critically evaluating information	Collect information Analyse information Organise information Critically evaluate information
Communicating effectively using visual, mathematical and/or language competencies in the modes of oral and/or written presentation	Communicate effectively using language Communicate effectively using visual competencies Communicate effectively using mathematical competencies Use oral mode of communication Use written communication
Using science and technology effectively and critically to evaluate information	Use science effectively Use technology effectively Critically evaluate information
Demonstrating an understanding of	Demonstrate and understand the world as

the world as a set of related systems by recognising that problem solving contexts do not exist in isolation	related systems Demonstrate and understand problem solving context
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The aim of the CCFOs is to direct educational and training activities towards developing learners to fit within social and economic environments. When learners accomplish CCFOs, they are able to execute the developmental outcomes.

Table 11 An analysis of the developmental outcomes according to the embedded required actions

Developmental outcomes	Embedded actions required
Reflecting on and exploring a variety of strategies to learn more effectively	Reflect on variety of learning strategies Explore variety of learning strategies Learn more effectively
Participating as responsible citizens in the life of local, national and global communities	Participate as citizen Participate as responsible citizen Intra-personal competencies
Being culturally and aesthetically sensitive across a range of social contexts	Culturally sensitive Aesthetically sensitive Range of social context
Exploring education and career opportunities	Explore education opportunities Explore career opportunities
Developing entrepreneurial abilities	Entrepreneurial abilities

The above-mentioned table provides an analysis of the action verbs or demonstration verbs of the CCFOs as derived from the statements. The CCFOs are diffused statements and are compiled from a variety of different concepts resulting from the confusion regarding their conceptualisation.

The preceding chapter explores legislation and relevant documentation that describe CCFOs. These action verbs serve as guidelines to initiate the investigation. Table 9 and

table 10 serve as points of departure for the next chapter that explores the practical underpinning competencies that describe the CCFOs.