

## CHAPTER 6: CONCLUSION

### 6.1 INTRODUCTION

Reflect



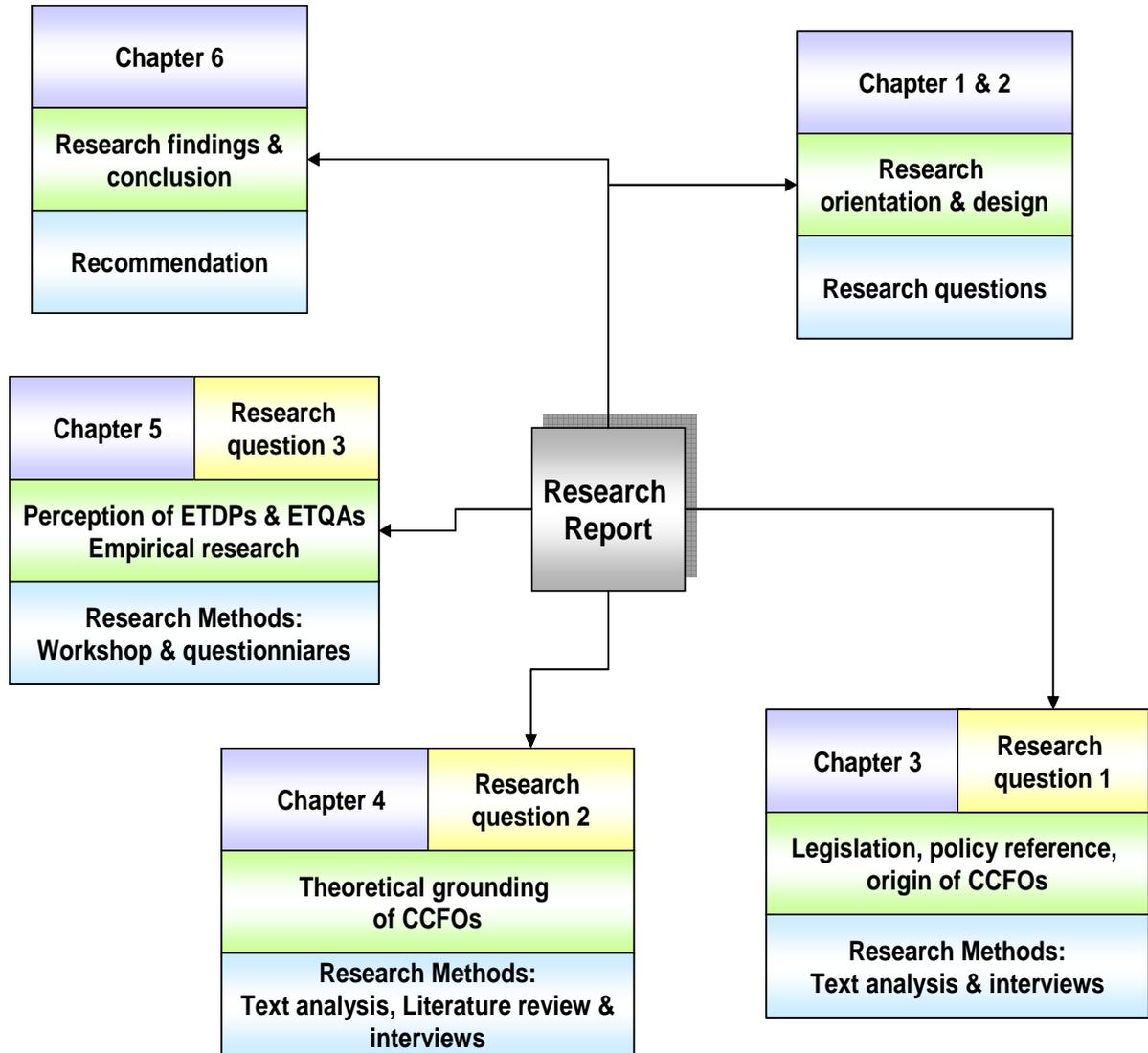
Chapter 6 reflects on the research conducted and discusses the main findings of the research by concluding with the results from the previous chapters.

Anomalies and surprising results are highlighted and variances and uncertainties that might require further scholarship are discussed. Suggestions for the implications of this study in terms of further research and the implementation of findings are discussed.

The purpose of this research is to report a concept analysis of the CCFOs within the context of the education, training and development environment, within the SAQA (SAQA) National Qualifications Framework (NQF).

The research report follows the research questions. The following is a visual representation of the research report findings and discussions are conducted accordingly:

Figure 15 Visual representation of research report



## 6.2 GENERAL RESEARCH FINDINGS

Chapter 1 discusses the research orientation. Chapter 2 provides an in-depth discussion of the research design. Figure 3 in chapter 2 is a representation of the scientific orientation. The epistemology of this research is anti-positivist in nature. This paradigm is led by the interpretation of the subjective world. In this research the interpretation is led by the researcher as part of the subjective world i.e the ETD practice. The world can only be partially communicated and understood, the CCFOs are interpreted and understood from the action researcher's perspective leading to the research recommendations that further research ought to be done in the fields as specified under the relevant heading.

The research is anti-positivist in nature and is a combined enquiry of critical theory and interpretivist research. The overarching research methodology is that of action research. Other research methods could be implemented as led by the action research cycle and findings because of the eclectic nature of this research methodology.

Qualitative research as well as quantitative research methodology is implemented and action research is the main method.

The objective of the research is to understand the significance of the CCFOs by deconstructing the statements in terms of the competencies underpinning the CCFOs. By framing the meaning of the CCFOs in context of the ETDP has consequential meaning to the emancipatory nature of this ground theory. The ETDPs and ETQAs are now able to incorporate the statements based on an informed uniform way.

The identified competencies are informed by the participating practitioners where the individuals, ETQAs and ETDPs have set out their interpretation of the CCFOs. The findings of this research is mere an approximation of the concept.

New thoughts about familiar experiences, which is the CCFOs, are expected research results. The research findings also lead to understanding of the concept of CCFOs and initiate the change in the ETD practice. The research is part of an ongoing research for better ways of incorporating the CCFOs in the ETD practice. The findings of this research are unlikely to be the same as those of future research, but as for now it will add value to the ETD practice as it contribute to understanding the concept of CCFOs.

Triangulation of this research study is table 90; List of competencies underpinning the CCFOs. Theoretical components such as literature review, text analysis and policy documents serve as one leg of the triangulation process. The second leg is the interviews and CCFO Workshop. The third leg derived from the first two legs and is that of the questionnaires. All three legs triangulated to table 90.

### **6.3 FIRST RESEARCH QUESTION**

How does SAQA and relevant legislation describe CCFOs?

How does the relevant documentation describe the origin of CCFOs?

In what terms do policy and related documents refer to the CCFOs?

How do the CCFOs contribute to curriculum design and development with reference to the legislation and relevant documentation?

Chapter 2 addresses the first research question and discusses the legislative concept analysis of CCFOs. Related documentation and discussion documents are analysed. This chapter is purely a text and policy analysis of the concept of CCFOs.

A crystallisation of the concept as derived from related text and policy analysis indicates that the concept is very broad and even knowledgeable stakeholders in the NQF are not consistent in its description.

The resources state that CCFOs are an essential concept in the transforming nature of the SAQA and the NQF and are utilised to ensure access, portability and lifelong learning. CCFOs are generic competencies that should be implemented in a cross-curricular function. CCFOs underpin education, training and development initiatives. CCFOs express the intended results of education, training and development and underpin all learning processes, thus enhancing the learning process and contributing to the full development of an individual.

CCFOs are critical for the development of lifelong learning and describe the qualities SAQA envisaged for the development of learners. Any person undergoing education, training or development should demonstrate these qualities at the end of education, training and development intervention. The fact that several authors describe CCFOs diversely indicates that there could be confusion amongst service providers and trainers regarding the conceptual understanding.

The interview results and legislative concept analysis as discussed in chapter 4 correlate in that both refer to the CCFOs as:

- Transformational tools
- Describing the qualities all learners should have at the end of any learning programme
- Supporting lifelong learning
- Should be integrated cross-curricular

The interview results and legislative concept analysis both lack in:

- Describing the CCFOs in terms of the underpinning competencies and competencies
- Providing guidelines for the conceptualisation of the CCFOs

The second research question covers the theoretical grounding of the CCFOs. The theoretical grounding is inspected to extract relevant competencies that describe the competencies underpinning the CCFOs.

#### **6.4 SECOND CLUSTER OF RESEARCH QUESTION**

Chapter 1 discusses the research orientation. Chapter 2 provides an in-depth discussion of the research design. Figure 3 in chapter 2 is a representation of the scientific orientation. The epistemology of this research is anti-positivist in nature. This paradigm is led by the interpretation of the subjective world. In this research the interpretation is led by the researcher as part of the subjective world i.e the ETD practice. The world can only be partially communicated and understood, the CCFOs are interpreted and understood from the action researcher's perspective leading to the research recommendations that further research ought to be done in the fields as specified under the relevant heading.

The research is anti-positivist in nature and is a combined enquiry of critical theory and interpretivist research. The overarching research design is that of action research. Other research methods could be implemented as led by the action research cycle and findings because of the eclectic nature of this research methodology.

Qualitative research as well as quantitative research methodology is therefore implemented as part of the research design.

The objective of the research is to understand the significance of the CCFOs by deconstructing the statements in terms of the competencies underpinning the CCFOs. By framing the meaning of the CCFOs in context of the ETDP has consequential meaning to the emancipatory nature of this ground theory. The ETDPs and ETQAs are now able to incorporate the statements based on an informed uniform way.

The identified competencies are informed by the participating practitioners where the individuals, ETQAs and ETDPs have set out their interpretation of the CCFOs. The findings of this research is mere an approximation of the concept. New thoughts about familiar experiences, which is the CCFOs, are expected research results. The research findings also lead to understanding of the concept of CCFOs and initiate the change in the ETD practice. The research is part of an ongoing research by me as practitioner, using action research, with the aim of finding better ways of incorporating the CCFOs in my ETD practice and other ETD practices in general. The findings of this research are

unlikely to be the same as those of future research, but as for now it will add value to the ETD practice as it contribute to understanding the concept of CCFOs.

The outcome of the triangulation of data for this research study is tabled in table 90 as a matrix of competencies underpinning the CCFOs. Theoretical components such as the literature review, text analysis and a study of policy documents serve as one leg of the triangulation process. The second leg is the qualitative data gathered from interviews and the CCFO Workshop. The third leg is derived from the first two legs and entails the quantitative data gathered by means of the questionnaires.

## **6.5 FIRST CLUSTER OF RESEARCH QUESTION**

The first cluster of research questions is linked to the problem identified regarding how the CCFOs are described and documented, in relation to curriculum design and development.

How does SAQA and relevant legislation describe CCFOs?

How does the relevant documentation describe the origin of CCFOs?

In what terms do policy and related documents refer to the CCFOs?

How do the CCFOs contribute to curriculum design and development with reference to the legislation and relevant documentation?

Chapter 2 addresses the first research question and discusses the legislative concept analysis of CCFOs. Related documentation and discussion documents are analysed. This chapter is purely a text and policy analysis of the concept of CCFOs.

A crystallisation of the concept as derived from related text and policy analysis indicates that the concept is very broad and even knowledgeable stakeholders in the NQF are not consistent in its description.

The resources state that CCFOs are an essential concept in the transforming nature of the SAQA and the NQF and are utilised to ensure access, portability and lifelong learning. CCFOs are generic competencies that should be implemented in a cross-curricular function. CCFOs underpin education, training and development initiatives. CCFOs express the intended results of education, training and development and underpin all learning processes, thus enhancing the learning process and contributing to the full development of an individual.

CCFOs are critical for the development of lifelong learning and describe the qualities SAQA envisaged for the development of learners. Any person undergoing education, training or development should demonstrate these qualities at the end of education, training and development intervention. The fact that several authors describe CCFOs diversely indicates that there could be confusion amongst service providers and trainers regarding the conceptual understanding.

The interview results and legislative concept analysis as discussed in chapter 4 correlate in that both refer to the CCFOs as:

- Transformational tools
- Describing the qualities all learners should have at the end of any learning programme
- Supporting lifelong learning
- Should be integrated cross-curricular

The interview results and legislative concept analysis both lack in:

- Describing the CCFOs in terms of the underpinning competencies and competencies
- Providing guidelines for the conceptualisation of the CCFOs

The second research question covers the theoretical grounding of the CCFOs. The theoretical grounding is inspected to extract relevant competencies that describe the competencies underpinning the CCFOs.

## 6.6 SECOND CLUSTER OF RESEARCH QUESTION

The second cluster of research questions entails the theoretical grounding of the CCFOs and is discussed in chapter 3.

What theoretical groundings describe CCFOs?

What theoretical groundings could describe the CCFOs?

How could CCFOs be described in terms of the above-mentioned?

What underpinning refined competencies/competencies describe CCFOs?

As indicated in chapter 3, the CCFOs are derived from the essential outcomes and correlate with the Mayer competencies as well as the key competencies. CCFOs however, differ from the specific outcomes. Specific outcomes are subject related and are pitched at a specific level of the NQF whereas the CCFOs are cross-curricular and apply to all learning areas at all the levels of the NQF. CCFOs are not restricted to any specific learning context, but inform the formulation of specific outcomes in the individual areas of learning for all learners at all levels on the NQF. A qualification contains both specific and CCFOs that promote lifelong learning.

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 learner's capabilities in order to execute a job-related task successfully.

The CCFOs can be differentiated but are inseparable. The theoretical resources were explored in order to find practical explanatory descriptions of the CCFOs. The intention of the research is not to describe the theoretical concepts *per se* but to identify the competencies underpinning the CCFOs. The catalogue of competencies that could describe the CCFO seems to be almost endless. This part of the chapter on the CCFOs intends to provide a comprehensive understanding of the concept with due understanding of the impossibility of listing every single competency by which it could be described.

The CCFO statements were analysed in terms of the verbs encapsulated in the statements. The verbs were clustered in two main areas: cognitive and affective domain specific characteristics. Emotional/social intelligence was explored to determine the competencies pertaining to this domain applicable to the CCFO statements. The cognitive domain specific characteristics were sourced from: Sternberg's triarchic model (Sternberg 2001:316) (Addendum D), Bloom's taxonomy of cognitive objectives (Addendum E) and Beyer's cognition and meta-cognition (Addendum F). These identified competencies of the CCFOs according to their theoretical grounding were verified in chapter 5.

The third and last research question determines the conceptualisation of the CCFOs as perceived by the ETQA managers as well as the ETDPs.

## **6.7 THIRD RESEARCH QUESTION**

What is the conceptualisation of the Education, Training and Development Quality Assurers regarding CCFOs?

Chapter 5 addresses the third research question and provides a description of the empirical study of this research project.

Most of the identified competencies are repeated in most of the CCFO statements. This supports the notion that the CCFOs can be differentiated but are inseparable. While demonstrating the capability or competency of one CCFO statement, it simultaneously results in developing the next.

The CCFOs contain 6 competency categories as represented in the spider cobweb model. These are:

- Functional competencies
- Investigative competencies
- Generative competencies
- Self-regulative competencies
- Relationship managerial competencies
- Social competencies

The competencies pertaining to the categories are applicable across the CCFO statements. This would imply that if a learner is able to demonstrate the mentioned competencies that s/he is competent in the CCFOs. This demonstrated capability can only be applied or performed in a specific content related knowledge basis where a new capability is formed or an existing capability is enforced.

Table 90 in chapter 5 concludes the conceptual analysis of the CCFOs. This table provides a list of the competencies that underpin the CCFOs.

The purpose of this study is to identify competencies that underpin the CCFOs. Table 90 provides a list of competencies that underpin the CCFOs. This research projected contributed to the ETDP environment in that it identified focal competencies underpinning the CCFOs instead of meaninglessly listing the CCFOs or providing an endless list of competencies per CCFO statement.

This indicates that an education and training provider is able to select from the competency list certain competencies applicable to the content and environment suitable for the facilitation of learning. These identified competencies can be used to implement the “design back” principle of OBE in education and training, ensuring that the CCFOs are incorporated in education and training. Not only will the education and training evolve around the CCFOs but also add value in meaningful way in that the CCFOs are not listed but integrated and intervened in education and training.

CCFOs are the tools that are utilised to enable the learner to use his/her knowledge to be able, to be competent, and to become an expert in a specific field achieving a purposeful objective. CCFOs are the key critical success factors in any education, training and development initiative.

Knowledge is of little value if it cannot be utilised in new situations or in a form very different from that in which it was originally encountered. Although knowledge is a necessary condition, it is not a sufficient condition for becoming an expert. What is needed is some evidence that the learners can do something with their knowledge; that they can apply the information to new situations and problems. The CCFOs are tools that the learner or facilitator can utilise to access knowledge and to develop new knowledge. The 31 identified competencies can now be utilised for this purpose.

## **6.8 RESEARCH IMPLICATIONS**

This research in its entirety serves the design component of the curriculum design process. The outcomes of this study are the end results in terms of identified underpinning competencies of the CCFOs, which any learner will have to achieve at the end of any learning programme at any level of the NQF. The designing back principle of OBE, coined by Spady, will be applied when integrating the outcomes of this study. The competencies underpinning the CCFOs as identified in this study serve as guidelines to Education, Training and Development Practitioners, policy makers with regard to leading practice in training in organisations, service providers, assessors, Education and Training Quality Assurors (ETQA) and training managers.

The CCFOs are not new to the ETDP. It is misunderstood. The CCFOs ought to lead the ETDPs in designing, implementing and developing education training and development initiatives. The CCFOs are the means of engaging with the specific outcomes in a specific context.

No one theory can be linked to one specific CCFO statement. The statements are too broad and indicate the development of learners in a holistic way. As an example, the theoretical underpinning of the CCFOs referring to team work, would not only include theories on co-operative learning, but also theories on independent learning, self-regulated

learning, communication, multiple intelligences, learning styles and many more. Though, one could argue that theories on co-operative learning would be the dominant focus. Furthermore, the CCFOs are differentiated but are inseparable.

Another example is the CCFOs that refer to language usage. Included is reference to visual language. Visual language implies visual intelligence as well as visual learning styles and related competencies. Language competencies per se are essential for any learning since language and cognition are interrelated. Language across the curriculum, therefore, is an essential part of all learning programmes.

Since the very nature of the CCFOs is holistic, a more holistic approach to ETDP and learning per se should be followed. Instead of unilateral viewpoint the ETD practitioner should hold a multi-dimensional viewpoint of the ETD practice. Holistic learning strategies should be employed to ensure holistic facilitating of learning.

What the study reveals, is that ETDPs have no understanding of the CCFOs, with the implication that they would not be in a position to implement the CCFOs in their practice. This identified gap in the professional development of ETDPs signals that all ETDP professional development programmes, being it a formal qualification, such as the Post Graduate Certificate in Higher Education and Training (PGCHET), offered at different universities, or being it informal programmes such as the training of assessors with the aim of registering as assessors, should include the understanding and implementation of the CCFOs as part of the training. ETDPs should become knowledgeable and skillful regarding the implementation of language across the curriculum, study competencies across the curriculum, interpersonal competencies across the curriculum (as implied by team work and co-operative learning) and all the other competencies that are related to the different CCFOs.

ETDPs should take responsibility for their own professional development. This could be promoted by introducing action research for workplace learning and for monitoring one's own understanding and way of implementing the CCFOs in practice by the ETD practitioner. In this way scholarly practitioners are developed. Institutions and private providers offering professional development programmes for ETDP should include action research as a tool for professional development.

Action research is emancipatory by nature. Conducting the action research reported in this document empowered me to become a scholarly practitioner. I am in a position to develop and improve my practice, and specifically my implementation of the CCFOs in a more critical way. Doing the study brought about significant professional development. I am more willing to act as agent of change and to be role model to other practitioners. The study also allows me to have a firm grounding of acting my leadership role as an ETD practitioner.

The competencies that underpin the CCFOs as identified in this research inform the formulation of the specific outcomes. The expected demonstration of competence is led by the competencies as listed in table 90. The specific outcomes are related to subject knowledge in a specific context (field or sub-field).

The CCFOs are not new to the ETDP. It is misunderstood. The CCFOs ought to lead the ETDPs in designing, implementing and developing education training and development initiatives. The CCFOs are the means of being engaging with the specific outcomes in a specific context.

No one theory can be linked to one specific CCFO statement. The statements are too broad and indicate the development of learners in a holistic way. And also, the CCFOs are differentiated but are inseparable

Concluding this research I would like to provide the following improved example of how I will implement the CCFOs after conducting this research:.

Referring to chapter 3.10 the “old” example:

Instead of listing the CCFOs or attempting to elaborate on the statements by incorporating descriptive statements within the CCFOs the following can be done:

Using the following competencies as identified in this research:

- Interact effectively
- Communicate facts, thoughts and feelings
- Separate important information from unimportant
- Assemble information or material together in a structure

The End user computing unit standard, “Collate, understand and communicate workplace data”, in Addendum A page 24: is applicable with reference to the specific outcome: “Use basic graphical techniques to understand and communicate information relating to work environment.’

The following assignment guidelines could be applicable as an example to incorporate the CCFOs:

As a team, prepare a presentation in the break away rooms, indicating the importance of the in depth analysis of the requirement received from an end user. Use the following as guidelines in the preparation:

- Confirm receipt of requirement
- Confirm completeness of requirement
- Confirm if additional approval is required according to delegation
- Verify request information
- Generate requisition
- Conduct preliminary budget check
- Reserve funds for the expenditure (soft commitment):
- Provide feedback to the requestor

The above example indicates that the CCFOs are not new to the ETDP environment. The CCFOs support the outcomes-based education and training principles. The CCFOs ultimately support learner development in that it stimulates thinking as well as social and cultural development.

The following closing interpretation is made, with reference to figure 9 (SAQA's Critical Cross-Field Education, Training and Development Outcomes) as presented by the E&MP Report (1996:13). The CCFO determine the learner's engagement with the content as determined by the context. The content is subject related within a specific industry field (context).

With regards to the unit standards; the specific outcomes determine the skills or knowledge necessary to be declared competent by an assessor, whereas the CCFOs are directly related to the action assigned to the specific outcome.

## **6.9 PROPOSED FURTHER RESEARCH**

The following research is proposed as a result of this study:

- A study of the offering of the Post-Graduate Certificate in Higher Education and Training (PGCHET) as professional qualification for ETDPs. The research question should focus on how such a programme respond to engaging students with the CCFOs. In this regard the focus should be on the curriculum and the extent to which the CCFOs are addressed, how the CCFOs are implemented across the curriculum during facilitating of learning, and how the CCFOs are assessed.
- The same study should be conducted for any informal programmes offered by private providers that are involved in the professional development of ETDPs.
- I would like to continue my action research project reported so far in this document. Since action research is a continuous process and this study only focussed on the abstract level of understanding the CCFOs, I would like to investigate my implementation of the CCFOs in my own practice. The essence of action research lies in planning to be innovative in my practice and to improve it.
- A study should be conducted on the professional development of the ETDPs.
- The latter could be complemented by a study on using action research as a tool for professional development.

- Studies with the following foci:
  - Implementation of methods of facilitating the mastering of the CCFOs according to the identified competencies underpinning the statements across the curriculum
  - Assessment of the CCFOs according to the identified underpinning competencies
  - Determining whether there is differentiation in the identification, implementation and assessment of CCFOs according to the levels of the NQF