EDUCATION AND TRAINING SYSTEM EVALUATION CONSTRUCTS AS ARCHETYPE FOR EXCELLENCE IN ORGANISATIONAL PERFORMANCE

by

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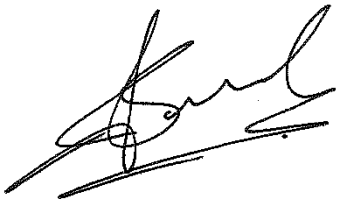
DECLARATION

I, Christiaan Gerhardus Joubert, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.



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ABSTRACT

Current system-based adult education and training (AET) models do not provide detailed descriptions of each process and process element of evaluation. This raises concerns about the practicality and effectiveness of present system-based evaluation models. In the existing literature, contemporary AET evaluation methods do not identify system-centred constructs which could be utilised to determine whether AET is assisting organisations to improve their performance and excellence. A sustainable approach to measure organisational results which will stimulate continuous improvement, is needed. From this vacuum arises a requirement to identify AET system evaluation constructs which are adaptable to different AET contexts. The purpose of this research was to describe and analyse considerations which can be drawn on by organisations offering AET to develop system evaluation constructs, with the intention of enhancing the quality of their provision. The research question which was used to guide this study was: "Which effective system evaluation constructs are appropriate for South Africa's AET organisations to enhance performance excellence?". The design adopted for this study was a qualitative approach, and the theory which informed this study was systems-thinking. Two data-collection methods were used. The first set of data was collected and analysed from thirty-six open-access documents which specifically detailed AET evaluation policies, procedures, processes and associated activities from South African higher education governing and professional entities. The second set was collected through seven open-ended, semi-structured interviews. Results revealed the specific system elements, namely organisational intent, enablers, drivers and results as well as learning culture as the best constructs which could be used to evaluate the performance and excellence of AET systems. In this study, it is recommended that leadership strategies and management activities have to direct and support context-specific AET intentions, process enablers, system-drivers and learning culture. Recommended AET system-constructs have to encourage systemic innovation, continuous improvement and organisational results. It is also recommended that these system-based results have to be presented as trustworthy and factual evidence of performance excellence in support of learning organisation structures and principles.

Keywords: adult education, excellence, learning culture, organisational performance, training system evaluation constructs

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GLOSSARY

APPETD	Association of Private Providers of Education, Training and Development
CHE	Council on Higher Education
CHEQC	Council on Higher Education Quality Committee
CIPP	Context, Input, Process, Product
CIRO	Context, Input, Reaction, Outcome
CPSI	Centre for Public Service Innovation
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
DLOQ	Dimensions of the Learning Organisation Questionnaire
DOL	Department of Labour
ECPE	Education Criteria for Performance Excellence Model
EFQM	European Foundation for Quality Management
ETDP SETA	Education, Training and Development Practices Sector Education and Training Authority
ETQA	Education and Training Quality Assurance/Assurer
FERF	Financial Executives Research Foundation
GTES	General Training Effectiveness Scale
HEQC	Higher Education Quality Committee
HR	Human Resource
HRD	Human Resource Development
IDEA	Individual Development and Evaluation Assessment
INQAAHE	International Network for Quality Assurance Agencies in Higher Education
IQMS	Integrated Quality Management System
IPO	Input, Process, Output
ISO	International Organisation for Standardisation
KPMT	Kearns, P. & Miller, T. Model
LPME	Learning Programme Management and Evaluation
LTSI	Learning Transfer System Inventory
M&E	Monitoring and Evaluation
MICT SETA	Media, Information and Communication Technologies Sector Education and Training Authority
MOU	Memorandum of understanding
NIOSH	National Institute for Occupational Safety and Health
NLRD	National Learners' Records Database
QCTO	Quality Council for Trades and Occupations
OQSF	Occupational Qualifications Sub-Framework
PFMA	Public Finance Management Act
ROI	Returns on investment
RPL	Recognition of Prior Learning
RRBM	Responsible Research in Business and Management
SABPP	South African Board for People Practices
SAEF	South African Business Excellence Foundation
SAQA	South African Qualifications Authority
SETAs	Sector Education and Training Authorities
TQM	Total Quality Management
TVS	Training Valuation System
UNESCO	United Nations Educational, Scientific and Cultural Organization
WEF	World Economic Forum
4P-Model	People, Partnership/Teams, Processes of Work, Products/Service Products Model

CHAPTER 1
BACKGROUND AND ORIENTATION

1.1. Introduction

An adult education and training (AET) evaluation makes use of a holistic and systematic analysis which considers the system components and their mutual relations. AET system evaluation information can thus be gathered and analysed by following a systematic monitoring and evaluation process of AET and learning. This is an important process which is used by AET organisations to reflect, analyse and improve the effectiveness and efficiency of AET. The objective of an AET system evaluation is to acquire knowledge concerning the degree to which an AET system accomplishes the purposes for which it was developed. In this respect, AET evaluation is considered inclusive of the systematic collection and analysis of context-specific data needed to make AET system decisions (MacBeath, Dempster, Frost, Johnson & Swaffield, 2018; Glas, Scheerens & Thomas, 2003; Muraskin, 1993).

The need for such AET system evaluation has grown in importance. Alvarez, Salas and Garofano (2004) and Torres and Preskill (2001) found that more research is needed to determine how specific aspects of organisational contexts influence AET results. Henry (2009); Lankester (2013); Moyer, Sinclair and Diduck (2014) and Wals and Rodela (2014) add that future AET system evaluation research efforts should also consider and empirically test the whole dynamism of the organisational learning process.

This study seeks to identify, describe and present AET system evaluation constructs which are supportive of organisational performance. These constructs are abstract theoretical formulations which are used to describe a domain of attributes that can be operationalised (Gioia, Corley & Hamilton, 2012: 16).

1.2. Background to the research project

According to the World Economic Forum (WEF), most education systems today are based on models put in place over a century ago (WEF, 2017: 7). Attempts at modification and transformation of these models have proven, in most cases, inadequate in addressing the growing gap between conventional education systems, the demands of modern life and new labour markets (WEF, 2017: 7). For this reason, AET organisations have to acknowledge the need for comprehensive change of their education systems in order to be prepared as the world enters the Fourth Industrial Revolution (WEF, 2017).

The Fourth Industrial Revolution refers to the introduction of new technologies and business models, such as e-commerce and artificial intelligence applications, which will change and create new opportunities for societies (Samans & Davis, 2017: 7). The objective of the Fourth Industrial Revolution is to manage economic and social change by ensuring that technological systems serve human beings in sustainable and inclusive ways (Samans & Davis, 2017: 7).

The Fourth Industrial Revolution requires a comprehensive "mental model" for understanding and influencing the way in which emerging technologies are changing how value is shaped, exchanged and distributed across economic and social systems (Samans & Davis, 2017: 5). The WEF (2018) acknowledges that to grasp this potential and avoid the pitfalls, systems leadership is required. In the case of AET systems, the WEF (2017) reports that although AET systems are highly context-specific, consensus is emerging on a need for key principles and core system features that can best meet the challenges and maximize the opportunities of the Fourth Industrial Revolution. This Fourth Industrial Revolution thus encourages organisations to fundamentally rethink all aspects of AET systems (WEF, 2017).

Organisational leaders have to sustainably transform their organisations by reconsidering established ways of work which transcend the boundaries of historically established norms and beliefs (Ismail, 2018). Key focus areas of transformation applicable to AET organisations include developing an integrated, high-quality system of education and training that responds to constantly evolving industry needs and fosters a lifelong learning culture (Ismail, 2018; WEF, 2017). This systemic integration requires an interconnectedness and interdependency of systems that were once relatively independent in order to comprehend and work across the entire system as a whole (WEF, 2018; CEPD, 2017).

Within an AET system, the question is: What are the key elements required for this type of system integration? This question requires an answer which looks at AET systems holistically, by creating a deep understanding of the systems dynamics and to determine how the dynamics may evolve over time. Organisational leaders seeking to optimise systems and manage change will have to learn what works and what does not work, in order to evolve timely systemic initiatives to have even greater impact on organisational performance (WEF, 2018; Shenge, 2014; Wischnevsky & Damanpour, 2006; Walker, 2001). Such understanding requires a thoughtful evaluation of AET systems.

Effective evaluation of a system requires managing the interactions of its parts (Bates, 2004). AET system evaluation relies upon a strategic framework which articulates ways to achieve coherence between its different constructs and to ensure improvement-oriented practices (Santiago, Gilmore, Nusche & Sammons, 2012). System evaluation is important, for it

encompasses a meticulous review of an organisation's operations in order to make sure that all functions direct their activities/efforts toward achieving optimal organisational performance (Lusthaus, Adrien, Anderson, Garden & Montalvan, 2002).

Despite the importance of system evaluation in support of organisational performance, there is increasing concern that AET system evaluation has not received considerable critical attention from AET organisations. In support of this statement, Swanson (2005) asserts that everything important in a business is evaluated, yet when it comes to AET there seems to be less enthusiasm to perform this critical function. Sahoo and Mishra (2017) found that there is a lack of awareness of training evaluation in AET communities. The United Nations Educational, Scientific and Cultural Organization (UNESCO) found that the lack of systematic monitoring and evaluation of AET reflects a clear need for a more coherent evaluation approach (UNESCO, 2014). Research by Griffin (2012), which addressed training evaluation approaches, revealed that most of the organisations do not evaluate the impact of training on organisational performance, even if the goal of the training programme was the improvement of organisational performance. Bates (2004) and Midgley (2000), add that the multifaceted network of factors that surround and interact with the training process is often ignored by established evaluation approaches. Furthermore, Khan (2016), Tshilongamulenzhe, Coetzee and Masenge (2013); Louw-Potgieter (2012); Dahiya and Jha (2011); Zinovieff (2008); Coetsee, Eiselen and Basson (2006); Kirkpatrick and Kirkpatrick (2006); Swanson (2005) and Duignan (2003) discovered that current training evaluation practices are limited to participants' immediate post-course reactions, and that these results are sometimes mistakenly viewed as AET system evaluation outcomes.

Research to date has thus tended to focus on programme evaluation rather than organisational system evaluation. One major drawback of this approach is that organisations cannot make correlations between training and organisational system performance (Anderson, 2014; Wankhede & Gujarathi, 2012). Another problem with this approach is that it fails to take account of organisational AET evaluation strategies, processes, goals and changes (Dahiya & Jha, 2011).

An AET evaluation strategy is essential, because AET practices have to be combined with specific organisational strategies, objectives and processes if they are to advance and enhance organisational performance (Úbeda-García, ClaverCortés, Marco-Lajara & Zaragoza-Sáez, 2014; Fairholm, 2009). However, AET evaluation strategy is one of the most neglected aspects of training (Dahiya & Jha, 2011). This negligence is a concern, because AET evaluation plays an important role when providing evidence of organisational goal

achievement (Khan, 2016; Agarwala, 2012; Preskill & Boyle, 2008a; Sessa & London, 2006; Glas et al., 2003).

AET evaluation is important to companies seeking to gain a competitive edge (Khan, 2016; Kruss, Wildschut, Janse Van Rensburg, Visser, Haupt & Roodt, 2012; Parumasur, 2012; Antic & Sekulic, 2007; Sessa & London, 2006; Johannessen & Olsen, 2003). Bryson (2018) and Boshyk (2000) assert that due to the pace of change in the business world, organisational and individual learning must be greater than the rate of organisational change. This provides an important incentive for continuous learning. In terms of organisational and individual learning, the fourth industrial revolution is compelling organisations to create, in a timely manner, the setting and systems to allow employees to continuously learn and relearn (Deloitte, 2017). In line with this assertion, Khan (2016) states that such a "learning organisation" is essential for survival in the current era of liberalisation, privatisation and globalisation. Organisations have to strive towards becoming learning organisations, where continuous learning is essential for business success (Deloitte, 2017; Collins & Porras, 2005).

An AET evaluation strategy, as part of a business strategy, has to provide processes which are used by the AET organisation to determine its performance and advancement towards becoming a learning organisation (Szelągowski, 2014). Therefore, providers of AET ought to have AET evaluation strategies in place which deliver and evaluate continuous, high quality and accelerated skills development in order to maintain a qualified, performance orientated and lifelong learning workforce (Passmore & Velez, 2012; Govender & Bisschoff, 2007; Chu, 2005; Reyes, 2005). Brinkerhoff (2006), advocates the design, development and implementation of a practical, simple, valid and actionable approach to AET evaluation.

Dahiya and Jha (2011) explored factors found to be influencing the design, development and implementation of AET system evaluation in their study of training evaluation. They recognised that there is a need for a unifying model for evaluation theory, research, and practice which need to consider the collaborative nature of and intricacies involved in the evaluation of training. They concluded that training evaluation has to be carried out in a systematic and structured manner to ensure that it is objective and credible. A key aspect of such an AET system-based evaluation is that it has to be designed according to standards which clearly define inputs, processes and outputs associated with organisational performance excellence (Venter & Bezuidenhout, 2008).

A system-based evaluation approach, and an understanding of the interaction and relationship between the various constructs of such a holistic system, is necessary in the South African AET context (Marock, Hazellcosta & Akoobhai, 2016; Meyer & Orpen, 2012; Noe, 2010;

Opperman & Meyer, 2008). The Department of Higher Education and Training (2010) has identified a need for an integrated and coherent approach to effectively manage South Africa's AET system. This approach has to ensure and evaluate the effectiveness, efficiency and relevance of AET services (DHET, 2011).

Entities responsible for this integrated and coherent approach in South Africa's AET system include the Council on Higher Education (CHE), the Department of Higher Education and Training (DHET), the Quality Council for Trades and Occupations (QCTO), the South African Qualifications Authority (SAQA), the Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA), the South African Board for Personnel Practice (SABPP) and the Association of Private Providers of Education, Training and Development (APPETD). The objectives, applications and responsibilities of South Africa's AET entities are entrenched in national legislation.

AET legislation, which was promulgated in South Africa during the post-apartheid period (the period after 1994 which signified the end of segregation or discrimination based on race in South Africa), was aimed at delivering quality life-long learning and development opportunities for all South Africans (DHET, 2011; SAQA, 2014). The National Qualifications Framework (NQF) Act (Act 67 of 2008) is an example of such legislation. This Act provides a formal national structure which records the credits assigned to each level of learning. This ensures that the skills and knowledge that have been learnt are recognised throughout South Africa. This Act recognises that advancement of learning is essential for the development of all South African citizens. Another example of AET legislation is the Adult Education and Training Act (Act 52 of 2000). This Act governs education services for adults and provides support for the establishment of a system that provides programme-based education and training. A further example is the Higher Education and Training Laws Amendment Act (Act 25 of 2010), which aims to advance learning by ensuring collaboration, co-ordination or collaboration and co-ordination between higher education institutions and national institutes. This act highlights the need for the monitoring and evaluation of the quality of AET, however, no specific methods and models to perform these tasks are proposed.

Entrenched in national AET legislation is a need for education entities/organisations to comply and meet the requirements of nationally agreed outcomes and performance criteria. Clay-Williams, Hounsgaard and Hollnagel (2015) and Marzano, Lubkina and Usca (2014) call for the validation of AET by illustrating a level of compliance with legislation and accepted levels of service quality. Satterlund, Lee, Moore and Antin (2009) and Glas et al. (2003) suggest that organisational efforts aimed at validating legislative compliance and quality of AET performance may benefit from a systemic AET monitoring and evaluation approach. However,

specific detailed management systems and processes which have to be implemented to meet these outcomes are not advanced in AET legislation.

AET organisations have to introduce a process management system which aims to ensure alignment between regulatory intentions and actual implementation activities (DHET, 2015b). Such alignment is necessary because legislative compliance is not complete once legislation and a new system or procedure is put into place (Clay-Williams et al., 2015). Legislative compliance relies upon effective implementation, monitoring and evaluation actions (Jaafreh & Al-abedallat, 2013; Badat, 2010 & 2015; Satterlund et al., 2009).

The purpose of such process management system is to ensure a radical improvement in the quality of AET in order to contribute to the lives of individuals, the developmental needs of the economy and to the broader society (DHET, 2015b). In response to the DHET's efforts, AET organisations have a responsibility for identifying existing and emerging legislation frameworks relevant to their business and ensure compliance.

A concern is that legislative implementation may be difficult due to ineffective administrative systems, enforcement problems, lack of funding, insufficient resources and/or negligible non-compliance penalties (Satterlund et al., 2009). Legislation which is viewed as a low priority by organisations may receive less attention, resulting in weak implementation efforts (Satterlund et al., 2009). The problem is that should legislation be issued without considering the practical aspects of implementation, discrepancies which cannot easily be resolved in the workplace may occur (Clay-Williams et al., 2015). Ball (2008) adds that regulations do not always translate directly into organisational practice.

It is important to establish whether a real comparison between the intention of the legislation and understanding of how to implement the subsequent new systems/procedures exists. Hollnagel (2014) and Hollnagel, Leonhardt, Licu and Shorrock (2013) identify this anomaly between regulatory intent and practical execution as the difference between "work-as-imagined" (regulatory descriptions of how work should be done) and "work-as-done" (various assumptions, explicit or implicit about how work is done). In order to address this anomaly, system performance feedback is essential to ensure that systems and procedures can be enhanced to reflect the test of intended reality (Hollnagel, 2014; Hollnagel et al., 2013). Within the South African AET context, this anomaly is present, when considering that the vision and pathways for the AET system do not consistently ensure articulation, collaboration and coordination between the different system components (SAQA, 2014; DHET, 2013). When considering the South African AET landscape, it is evident that AET system performance has

to be evaluated in order to provide evidence that alignment exists between the regulatory intentions and actual organisational implementation actions (SAQA, 2001a, 2014).

Evaluating AET system performance is an important management responsibility (Dave & Singh, 2014; Agarawla, 2012; Opperman & Meyer, 2008). In studies addressing innovative learning and development needs, conducted by Deloitte (2015), the Centre for Public Service Innovation (2007) and the South African Management Development Institute (Centre for Public Service Innovation, 2007), one of the identified shortcomings of education and training management in South Africa is the limited systematic gathering and analysis of data on the quantity, quality and performance of human capital development. According to the Deloitte's 2017 Global Human Capital Trends Report, this problem is aggravated by only 28 percent of employers in South Africa investing in delivering learning and development opportunities (Deloitte, 2017). In response to this limited systematic gathering and analysis of data, the SAQA (2001b) and CHE (2012, 2006b, 2004f, 2003) suggest the use of Excellence Models/Systems which will allow for the evaluation of AET accomplishments and organisational performance.

Excellence Models/Systems stimulate systematic organisational improvement, promote quality awareness and competitiveness (Dahlgaard-Park & Dahlgaard, 2008; Dahlgaard & Dahlgaard-Park, 2004). Use of these models/systems are suggested by the CHE and SAQA to consider when AET services have to be managed; however, evaluation constructs, criteria and standards are not prescribed by the SAQA (2001b) and CHE (2012, 2006b, 2004f, 2003).

Current literature does not specify a specific excellence model/system for the evaluation of an AET system. According to Glas et al. (2003), AET evaluation objects, criteria and standards should be defined, developed and introduced. These aspects have to incorporate performance excellence in order to promote the implementation of best practices and tools which allow for quality assurance, benchmarking of best practices and continuous improvement (Sampaio, Saraiva & Monteiro, 2012). It is therefore important to have a comprehensive AET system evaluation in terms of performance excellence which can be used by organisations within the South African context to ensure legislative compliance, promote best practices, introduce quality assurance, and advance continuous improvement.

1.3. Statement of the problem

Eseryel (2002) states that existing training system evaluation models which address education enterprises are lacking in comprehensiveness and fail to offer tools which guide organisational evaluations, systems and procedures. A problem with current system-based models is that

they do not provide detailed descriptions of each process and process elements of evaluation (Dahiya & Jha, 2011). This raises concerns about the practicality and effectiveness of current system-based evaluation models (Jasson & Govender, 2017; Marzano et al., 2014; Erasmus, Loedolff, Mda & Nel, 2011; Rogers, 2004; Stufflebeam, 2000). A response is offered by Vijay, Narayana and Vidya (2012), who found that only a few organisations evaluate AET in depth due to the difficulty involved and the unavailability of valid instruments and practical models.

Ritzmann, Hagemann and Kluge (2014) stress the importance of AET system evaluation from a pragmatic perspective. They suggest that it is necessary for researchers to offer AET organisations a practical, systematic and credible evaluation method which can be flexible (Ritzmann et al., 2014). Holton and Baldwin (2000) and Coetsee et al. (2006) found that most researchers have stopped at the point of identifying, describing or measuring factors which may influence learning transfer, without investigating in which way these dynamics might be successfully managed. The problem is that AET evaluation then only considers the satisfaction of trainees, as a final evaluation tool (Prasad, Vaidya & Kumar, 2016; Ritzmann et al., 2014).

This limited focus has been strongly criticized in the past by several researchers (Prasad et al., 2016; Ritzmann et al., 2014) for it neglects the evaluation needs of all the other stakeholders involved in the training process (Guerci, Bartezzaghi & Solari, 2010). Swanson (2005: 18) takes a bolder stance by arguing that the essential question to be posed to AET providers is: “Where is the proof of results achieved and added value?”

Aguinis and Kraiger (2009) acknowledge that training activities provide benefits for individuals, teams, organisations and societies, but note that evaluation of organisational-level factors have not received consistent support as important training system enablers. This expansion of the research focus, to include a pragmatic perspective, highlights a requirement to determine causalities, to map system dynamics and to reverse-engineer the future within AET systems (Viljoen, 2015). The National Institute for Occupational Safety and Health (NIOSH) stresses that training intervention effectiveness research is needed to (1) identify major variables which influence the learning process and (2) optimise resources available for training interventions (NIOSH, 1999).

Another matter of uncertainty in AET system evaluation research is agreement about which specific evaluation constructs, requirements and measures within the South African context are considered necessary (CHE, 2012, 2006b, 2004f, 2003b). The DHET (2015a) supports the use of a monitoring and evaluation (M&E) framework, which is a more mutual, holistic, systematic, thematic, standardised and all-inclusive approach to monitoring and evaluation. Within this framework monitoring and evaluation activities have to be conducted in terms of

five themes, namely (1) governance and management, (2) growth, expansion and access, (3) system efficiency, (4) academic quality and success and (5) partnerships (DHET, 2015a). The benefit of an M&E framework is that it may assist in the development of monitoring and evaluation which deals with various functionality areas. These areas include governance, financial and human resources management, corporate services, curriculum delivery, professional development of academic staff, student support services, partnerships, infrastructure, facilities and equipment management (DHET, 2015a).

Although "monitoring" is described as an on-going process which is attentive to the assessment of projects, programmes and daily activities and deliverables required for achievement and performance (DHET, 2015a), it does not specifically refer to all organisational enablers and drivers which may contribute towards overall performance. "Evaluation" is expressed as being externally focused and allows for a stakeholder-driven emphasis on the effectiveness of projects or programmes (DHET, 2015a) – not explicitly attending to all organisational performance aspects. While the DHET (2015a) supports the construction of a M&E framework, a specific logical framework which details specific evaluation constructs, requirements and measures are not proposed for AET organisations.

Within an AET context, a logical framework may be described as a tool of clarification that enables evaluators (and programme managers) to see the actual objectives, activities and impact of a programme (Loots, 2008: 1220). Such a logical framework can serve as a planning tool and may consist of a matrix which provides a synopsis of a project's goal, activities and projected results (Team Technologies, 2005). Although a logical framework may be perceived as fundamentally project-oriented tools, it can potentially result in a framework for monitoring and evaluation where planned and actual results may be compared (Team Technologies, 2005).

Using a logical framework for AET programme evaluation is aimed at the systematic collection and analysis of information to improve student learning. A logical framework is also used to evaluate the effectiveness of an intervention (Hamasu & Kelly, 2017). Both M&E and logical frameworks highlight the importance of a systemic approach in dealing with AET performance monitoring and evaluation. However, Lahey (2015) reports that M&E and logical frameworks limit the ability to measure and report on organisational results. This limitation has implications for both ongoing management, decision-making and the overall evaluation of an organisational system's performance (Lahey, 2015). Furthermore, key elements which should be incorporated in M&E and logical frameworks within complex systems are often neglected (Mthethwa & Jili, 2016).

The intricacies and uniqueness found within South Africa's organisational contexts and their impact on AET performance may warrant a more comprehensive descriptive understanding regarding systemic monitoring and evaluation constructs. Jasson and Govender (2017) stress that a customised AET system evaluation model which considers organisational performance within the South African workplace situation has to be considered.

In South Africa, dynamics such as national government priorities, political changes and the resultant transformation requirements (Venter & Bezuidenhout, 2008) influence how AET organisations approach system evaluation and performance measurement (Loots, 2008). MacBeath et al. (2018); Moyer et al. (2014); Wals and Rodela (2014); Razalia and Jamilb (2016); Lankester (2013) and Henry (2009) also highlight the importance of contextual factors when studying sustainable organisational performance results and processes.

In order to gain relevance in South Africa's AET sector, fundamental ideas of current business models and systems in terms of concepts, criteria, constructs and evaluation processes have to be conceptualised (Viljoen, 2015). However, there is no evidence to date of an existing valid and reliable measure of the effectiveness of management and evaluation of AET in the South African context (Tshilongamulenzhe et al., 2013).

A holistic process which can be used to interpret evaluation findings to understand the organisation, functioning, interrelationships and results of an AET system is needed. Holistic processes are complex and concerned with the assumptions, knowledge, methods and implications of all system elements and thus favour a systematic approach (Pourbohloul & Kieny, 2011). Asif and Gouthier (2014) claim that systematic approaches are repeatable and endorse maturity, learning and perfection in organisations. Martin (2008) states that an organisation's performance is directly related to the operational effectiveness and efficiency of its systems. These systems have to maximise the value of products and services in order to ensure organisational excellence (Martin, 2008).

Excellence can be defined by the unique properties of the activity it describes (Anninos, 2007). Excellence has meaning only by reference to the intrinsic qualities of an activity and can be evaluated only in relation to the means it serve and the function it performs (Anninos, 2007). Such a context-specific notion of excellence can be explained by means of an archetype of excellence, which is an inspiration towards performance, perfection and a constant quest of innovation (Anninos, 2007). Excellence is thus a systems-based approach to building a high-performance workplace (Russell & Koch, 2009). However, existing business excellence models are incapable of providing all possible structures, features and constructs which are universally applicable to any organisational system (Asif & Gouthier, 2014). Enquist, Johnson

and Rönnbäck (2015) stress that existing business excellence models from an organisational perspective do not holistically take into account all the requirements of prevalent business realities.

Introducing “excellence” creates an adaptable organisational culture (Stubblefield, 2005), within which systems and practices allow organisations to grow, innovate and build capability for the short and long term are nurtured (Russell & Koch, 2009). Nash (2013) states that excellence is not just an outcome but also a managerial practice or system that impacts on every aspect of AET. By creating systems that support excellence activities, and integrating them into the fabric of daily operations, organisations may be able to manage and evaluate their AET more effectively. According to Nash (2013), performance excellence initiatives create and sustain an essentially competitive framework for AET organisations. This statement implies that a system design to support the objectives of AET organisations’ objectives is required. This said system has to provide evaluation data and information which are required and ready for organisational analysis and decision-making.

The problem is that such an AET system evaluation, which considers South Africa’s AET context, is not described in the literature. According to Enquist et al. (2015), such an evaluation system enables quality management/assurance research and education research to come together to develop new business excellence models which incorporate current realities. A need to identify and describe AET system evaluation constructs which are adaptable to different organisational contexts (within South Africa’s AET context) and aimed at performance excellence is presented as a problem and indicates the necessity for this research assignment.

1.4. Purpose of the research

The purpose of this research was to identify, describe and present AET system evaluation constructs which are supportive of organisational performance. Training evaluation is used by an AET organisation to reflect, analyse and improve its effectiveness and efficiency (Iftikhar & Sirajud, 2009). This inquiry was driven by the knowledge that AET systems have to be evaluated in an effective and efficient manner. Currently, AET evaluation processes are not rigorous or extensive enough to answer questions related to returns on training investment and benefits to the organisation (Iftikhar & Sirajud, 2009; Tamkin, Yarnall & Kerrinmany, 2002). Tamkin et al. (2002) assert that organisations are not satisfied with training evaluation methods. Topno (2012) and Griffin (2010) state that there is a mismatch between organisations’ desires to evaluate training and the extent and effectiveness of actual evaluation. The main reason for this disjuncture, is the inadequacy of current evaluation

methods which can be used to determine returns on training investment (Topno, 2012; Griffin, 2010).

Returns on training investment may be found in many forms, including higher levels of value-added activities as a result of greater levels of employee skills, reduced overhead costs to the organisation and greater ability to innovate (Dawe, 2003). Training may also provide benefits without direct financial benefits, for example, providing a safer workplace, increasing staff morale and confidence or achieving a quality assurance rating (Dawe, 2003). Blanchard, Thacker and Way (2000) found that relatively few organisations attempt to justify training expenditures by means of training evaluation, despite expressing a requirement to measure its impact on business results. It is imperative to identify and describe the fundamental factors which direct and influence education, training and learning in order to determine appropriate advances required by educational and organisational leaders, to transform organisational processes and to evaluate organisational performance (Phipps, Prieto & Ndinguri, 2013). Training evaluation deserves attention as an important function within an AET system (Iftikhar & Sirajud, 2009).

Louw-Potgieter (2012: 5) states that training evaluation seems to be limited to the number of delegates and their reaction to the training, when considering current AET evaluation strategies and practices within South Africa. Evaluation in this sense is conceivably restricted to training/learning programme evaluation.

There is clearly a need for research to investigate systematic evaluation of AET. Zinovieff (2008) and Rossi, Lipsey and Freeman (2004) state that a systematic evaluation of AET is required to provide the information needed for continuous improvement of education systems. Education research which is guided by systems-thinking tends to focus on identifying feedback mechanisms and making models (Evagorou, Korfiatis, Nicolaou & Constantinou, 2009; Meadows, 2008; Booth Sweeney & Sterman, 2007; Davidsen, Bjurklo & Wikström, 2006). Furst-Bowe (2011) found that the value in such systems-thinking in higher education is that it transcends institutional silos and provides an organisation with the ability to achieve institutional goals and sustain consistent performance improvements. Such a systemic approach to AET evaluation has to provide evidence of how AET organisations can use core AET evaluation constructs to ensure performance excellence.

Given the views expressed above, a need to identify and describe AET system evaluation constructs as an archetype for performance excellence within the South African context is required. A theoretical model of how AET should be evaluated may also be helpful. In this

case, a model refers to a specific implementation of a more general theoretical view (Bordens & Abbott, 2014).

Use of a model is helpful when it involves a careful simplification of a phenomenon or a specific aspect of a phenomenon (Nilsen, 2015). Models need not be completely accurate representations of research-based knowledge to have value in various settings. (Nilsen, 2015). Models can be used to offer practical guidance of implementation endeavours and/or implementation strategies (Nilsen, 2015). A suitable model will need to illustrate compliance with current legislation in order to be considered valid, reliable and useful to organisations. The implementation of the AET system evaluation model may be explained by means of an organisational archetype. Such an archetype serves as an illustration of an organisation's readiness to implement and evaluate an AET system.

1.5. Significance of the research

The absence in the current literature of a descriptive understanding of AET system evaluation constructs within South Africa in current literature signifies a need for meaningful investigation. The research problem's uniqueness and intricacies found in different organisational contexts, and their impact on AET performance in South Africa, warrants a more comprehensive descriptive understanding of evaluation practice. Identifying and describing effective AET evaluation constructs that support and enable the gathering of data, that can be used to determine organisational performance, to identify continuous improvement opportunities and advancement towards becoming a learning organisation, is envisaged.

This research aims to create new knowledge by demonstrating the ability to critically identify, describe and conceptualise a framework applicable to AET system evaluation which encompasses all regulatory conventions. This research contributes to AET theory by suggesting a core model and archetype for a learning organisation system, which is aimed at ensuring evaluation of organisational performance in South Africa. A presentation of core system constructs and fundamental relationships, including external factors surrounding AET organisations which affect the development of a leaming organisation, will be introduced. Furnished with this information, it is envisaged that AET organisations will be able to comprehensively evaluate AET systems with due consideration of context differences. Introducing this AET evaluation system may necessitate AET organisational policy reviews and changes. This research makes an original and creative contribution to the field of adult education, by presenting AET system evaluation constructs which are applicable to South Africa's AET sector.

1.6. Research aim, objectives and research questions

This research aims to critically examine AET system evaluation needs, from the viewpoint of South Africa's regulatory and professional perspectives, in order to present and describe effective AET system evaluation constructs which are supportive of performance excellence. The research is located in the topic area of education management, with the emphasis on system evaluation in the organisational context of AET in South Africa. In this study a system is referred to as a conceptual design which is bound by a purpose (Charnley, Lemon & Evans, 2011). A conceptual view of a system identifies linkages between components, integration of components, process demands and opportunities for improved innovation (Charnley et al., 2011).

Studies of AET systems have to consider various characteristics under input conditions, process requirements, output conditions and environmental conditions (Aithal & Aithal, 2015). Studies also have to focus on the interactions and the relationships between parts, have a broad boundary of analyses, measure performance, and consider the consequences of legislation (Ghaffarzadegan, Larson & Hawley, 2016; Mele, Pels & Polese, 2010). This conceptual view, system characteristics and considerations, assisted with the formulation of research objectives and questions.

The objectives of this research are:

- To identify and describe AET process elements which have to be evaluated by South Africa's AET organisations. Process elements consist of the operational activities found within system procedures, practices and actions. Process elements provide strategic, managerial and operational information of system enablers, drivers and outcomes. Enablers are the system-based functions, activities and culture which determine an organisation's capability. Drivers describe the specific process elements which are unique to the AET context. Outcomes refer to specific system results, which stipulate the realised benefits for key stakeholders.
- To understand which AET process elements have to be used to define AET evaluation constructs. Constructs consist of identified process elements which can be clustered to structure meaningful units and relationships in order to be operationalised within an AET system.
- To identify and describe the systemic characteristics of core AET evaluation constructs and how these constructs can be used to ensure performance excellence.

An overarching research question is presented as: Which effective system evaluation constructs are appropriate for South Africa's AET organisations to enhance performance excellence? The sub-questions are:

- Which AET process elements have to be evaluated by South Africa's AET organisations?
- Which AET process elements have to be used to define AET evaluation constructs?
- What are the systemic characteristics of these core AET evaluation constructs?
- How can AET organisations use these core AET evaluation constructs to ensure performance excellence?

1.7. Definition of terms and concepts

The following are key terms and concepts that have been used throughout the entire study.

AET organisations. A legally established public or private institution in South Africa which has been recognised by an appointed council, body or agent, as having the capacity or provisional capacity to offer recognised or registered AET services and/or products (SAQA, 2014, 2001a, 2001b). These include AET providers, as well as workplace providers. An AET provider is a body which delivers learning programmes which culminate in specified National Qualification Framework standards and/or qualifications and manages the assessment thereof (SAQA, 2001a: 2). AET providers are at the base of the AET system in that they are the organisations that engage in teaching and learning and deal directly with learners, whom the AET system is meant to serve (SAQA, 2001a: 2). AET organisations referred to in this thesis are those that provide post-school AET services and products in South Africa.

Adult learning (andragogy). The psychological description of an adult is one who has achieved a self-concept of overseeing his or her own decisions and living with the consequences (Dunlap, Dudak & Konty, 2012; Knowles, 1996). Andragogy remains the most learner-centred of all patterns of adult educational programming (Merriam, 2002). Adults learn for they are responsible and mature enough to discern and decide their own learning readiness, ability, goals and needs (Ntombela, 2015; Knowles, 1980). They have a wide spectrum of exposure and experiences which they use as a learning resource (Ntombela, 2015; Knowles, 1980). Adults expect learning to be readily applicable to problems they wish to solve and are therefore intrinsically motivated (Ntombela, 2015; Knowles, 1980). Learning emphasises the person in whom the change occurs or is expected to occur (Knowles, Holton & Swanson, 2005). An understanding of andragogy is important because the evaluation of an AET system has to include adult learning aspects, such as the quality of content, delivery mechanisms, and the

holistic process of adaptation and synergistic transaction between learner and environment (Jain, 2016; Kulkarni, 2013; Aguinis & Kraiger, 2009).

Development. Development refers to employee development within an organisation (Erasmus & Van Dyk, 2003). Development takes place within the context of an organisation and its objectives (MacBeath et al., 2018; Erasmus & Van Dyk, 2003). Development initiatives are those on-going learning opportunities which are produced in order to enable employees to improve and maintain high levels of performance (Erasmus & Van Dyk, 2003). Development consists of formal educational commitments and experiences such as coaching and mentoring which is designed for a future role or occupation (Masadeh, 2012). Pollock, Jefferson and Wick (2015) state that organisations have to rethink their AET structures, systems and processes in order to realise the full benefits which learning and development can and have to provide.

Education. Education describes a more formal academic background which is usually broadly defined as a more general, less specialised or hands-on approach to enhancing knowledge (Masadeh, 2012). Education is primarily concerned with the acquisition of knowledge in formal settings (Masadeh, 2012). Education refers to activities which provide the knowledge, skills and moral values which are needed in the ordinary course of life (Erasmus & Van Dyk, 2003). One of the purposes of education is to promote an understanding of social traditions so that individuals can contribute to society (Erasmus & Van Dyk, 2003). The term “education” accentuates the educator and the agent of change who presents stimuli and strengthening for learning, as well as designing activities to induce change (Knowles et al., 2005). For the purpose of this study “education” refers to post-school adult education. Post-school adult education is described as all good-standard education beyond formal schooling which includes all learning programmes leading to a qualification that meets the requirements of the Higher Education Qualifications Framework (DHET, 2011).

Evaluation. A process of determining the merit, worth and value of things (Scriven, 1991: 139). Evaluations are the products of that process (Scriven, 1991: 139). Evaluation includes not only the assessment of value but the collection and analysis of the information on the basis on which the assessment is to be made (Sharma, 2016). Evaluation necessitates a systematic collection of descriptive and judgmental information (Vijay et al., 2016). Conscious understanding of evaluation processes from a situated perspective can be found in the perceptions and interpretations offered by stakeholders (Mason, 2016; Santagata & Yeh, 2015). Evaluation covers all activities needed to ensure the alignment to an organisation’s mission statements (Handiwibowo, 2017). Evaluation refers to specific elements of a decision-making process (Morrow, Mood, Disch & Kang, 2016). Performance system management aspects found in AET organisations, including strategic planning, policies, resource allocation,

programme design and development, implementation, assessment and reporting of results may serve as examples of such elements.

Learning. A series of events in which learners become aware of important information, aspects or issues of a training course (Van Rooy, 1997). Learning refers to learners' abilities or preparedness to master the learning content and react effectively to such learning (Van Rooy, 1997). Learning, as a process, encompasses training and education (Noe, 2012; Masadeh, 2012; Wiesenberg, 2000; Mumford, 1995). Learning includes the acquisition of skills and insights or factual knowledge (Noe, 2012; Masadeh, 2012; Wiesenberg, 2000; Mumford, 1995). Transfer of learning is the extent to which knowledge, skills and abilities learned in work-related and classroom training are generalised and retained on the job (Bates et al., 2012; Henry, 2009; Wiesenberg, 2000). Such learning can take many forms, including simulated learning, work-directed theoretical learning, problem-based learning, project-based learning and workplace-based learning (SAQA, 2014). Pollock et al. (2015) state that organisations have to professionally plan and execute learning initiatives by shifting focus from delivering training to facilitating learning aimed at improved organisational performance.

Learning organisation. Organisational learning is a concept used to describe certain types of activity that take place in an organisation while the learning organisation refers to a particular type of organisation (Mohd-Zainal, Yusof & Goodyear, 2016: 27; Tsang, 1997). A learning organisation is the type of organisation that has excellent organisational learning capabilities (Mohd-Zainal et al., 2016: 27; Tsang, 1997). Senge (1990: 1) defines a learning organisation as: "an organisation where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn". A learning organisation assists the learning of its individuals and constantly changes itself to remain or achieve competitive advantages in its environment (Farrukh & Waheed, 2015; Gibbons, 2014). A learning organisation learns robustly and collectively and is continually transforming itself to better accumulate, manage and use learning for business success (MacBeath et al., 2018; Mohd-Zainal et al., 2016; Rana, Ardichvili & Poesello, 2016; Singh, 2008; Knights & Willmott, 2007; Agashae & Bratton, 2001; Earl, 2001; Watkins & Cervero, 2000; Watkins & Marsick, 1997). An organisation that is not committed toward building a learning organisation may not be able to sustain its competitive edge (Mohd-Zainal et al., 2016: 27). In this study, learning organisation characteristics are considered in order to describe performance excellence of AET organisations.

Organisational performance evaluation. Organisational performance evaluation is an important criterion which is used to analyse organisational growth, impact of actions and influence of

their environments (Richard, Devinney, Yip & Johnson, 2009). Gabcanova (2012) states that it is necessary for organisations to evaluate their strategies and systems by means of performance measurement. Organisational performance evaluation includes three dimensions of performance evaluation (measurement, analysis/control and planning/decision-making), which lead to the successful adaptability of an organisation within a specific setting (Valanciene & Gimzauskiene, 2009). Organisational performance evaluation in academic settings consist of predefined and measurable outcomes (De Rijcke, Wouters, Rushforth, Franssen & Hammarfelt, 2016). Organisational performance evaluation serves to steer academic institutions toward becoming more business oriented, by actively stimulating competition and innovation (De Rijcke et al., 2016).

Quality management. Quality management emphasises all aspects of quality assurance and control. Quality management describes the complete process required to ensure that quality processes do materialise (Doherty, 1995). Market analysis, curricula development, strategic planning, resourcing and student services are all part of the focus of a quality management system (Doherty, 1995). Quality assurance examines the aims, content, resourcing and projected training results of programmes and courses to ensure that any oversights are proactively addressed (Doherty, 1995). Quality control provides feedback originating from monitoring and review actions which are based on feedback received from staff, students, employers and other stakeholders (Doherty, 1995). The quality of the results of AET providers ought to be ensured through the quality management of their core business processes (Nelyubina, Safina, Panfilova, Kazantsev, Molchatsky, Stepanova & Ibrahimova, 2016). A measure of the quality of such processes is usually the degree of assurance that the provided educational service will exactly meet the requirements of all stakeholders (Nelyubina et al., 2016). If an AET provider has a quality system which is built on the principles of the total quality and the process-oriented approach, it will maintain and strengthen the strategic position of the organisation (Nelyubina et al., 2016; Bobkova, Korobejnikova, Nelyubina, Birina & Safina, 2015).

System. A system is an interconnected set of elements which is coherently organised in a way which accomplishes defined goals and consists of elements, interconnectedness and a purpose (Monat & Gannon, 2015). A system presents an organised relationship between interdependent constructs and associated sub-systems, which is used to facilitate and achieve a common cause or objective (Backlund, 2000). A sub-system is a set of elements, which is a system itself, and a component of a larger system. Sub-systems consist of process elements (Pidwirny, 2006). Process elements are the operational activities which are supported, guided, directed and organised by system procedures, practices and activities (Pidwirny, 2006; Backlund, 2000). A system is defined by its inputs, outputs, processes, control mechanisms,

feedback, boundaries and the environment (Backlund, 2000). Systems modelling is used to describe and illustrate the conceptual composition of a system. An AET system is an arrangement of interacting components such as sub-systems, which facilitate numerous complex structures and processes (Wallace, 2009). These sub-systems can be clustered together with the aim to consolidate and group specific common processes and structures in order to shape system constructs (Wallace, 2009). An AET system is thus a cohesive integration of interrelated and interdependent constructs. An AET system may provide strategic, managerial and operational information and insights which are specific to the organisational context (Backlund, 2000). Education systems are vulnerable to pressures from within the system and from outside (Ballantine et al, 2017: 15). To cope with these pressures, organisations have to understand all elements and environments that make up the total education and training system (Ballantine et al, 2017). A system model can be used to describe and represent all the constructs which should be considered during an AET system evaluation.

Training. Training is conducted to address a performance disparity which has been identified or to introduce new technology which requires new skills (Erasmus & Van Dyk, 2003). Gomez-Mejia, Balkin and Cardy (2001) describe training as the process of providing employees with explicit skills or helping them correct deficiencies in their performance. Erasmus and Van Dyk (2003) view training as a systematic process used by an organisation to transform the knowledge, skills and behaviour of employees to ensure achievement of organisational objectives. Goldstein and Ford (2002) add that training is aimed at ensuring a systematic acquisition of skills, rules, concepts or attitudes that results in improved performance in a specific environment. Training is characterised as either a formal or informal intervention leading to anticipated changes in behaviour associated with on-the-job skills acquired for a particular role (Masadeh, 2012). The purpose of training is to improve employee performance in an organisation (Erasmus & Van Dyk, 2003). Masadeh (2012) states that training can be distinguished from education as an activity which typically takes place within business organisations. Training has a considerable impact on organisational performance (Hammond & Churchill, 2018). Ideally, training must become part of an organisation's strategy and it must be aligned to business goals and organisational performance to develop organisational cultures that foster innovation and flexibility (Hammond & Churchill, 2018).

1.8. Thesis chapters

This thesis consists of five chapters.

In Chapter 1 the researcher situates the context within which the study is located. In this chapter the background of the research problem, context of the study and the research

questions are described. A need to identify and describe AET system evaluation constructs which are supportive of performance excellence, is highlighted in this chapter.

In Chapter 2 the researcher introduces the literature review and theoretical underpinnings relevant to this study. Topics discussed in the literature review include systems-thinking as theoretical framework, organisational learning, AET evaluation, organisational performance evaluation in terms of excellence, as well as constructs and archetypes. In this chapter an analytical critique of what is already known about the topics is presented and gaps which this research seeks to close are identified.

In Chapter 3 the researcher presents the research methodology. This chapter deals with the research setting from which a sample is selected and the investigation process aimed at discovering deeper understanding of AET evaluation. Requirements pertaining to data collection by means of documents and interviews and details which guided data analyses are explained in this chapter. Generalisation, triangulation and trustworthiness, as well as ethical considerations which highlighted compliance matters, and the role of the researcher, are described in this chapter.

In Chapter 4 the researcher presents the research results in accordance with a thematic framework. The researcher explains how he become familiar with the data, generated initial codes, searched for themes, reviewed themes, defined themes and documented results.

In Chapter 5 the researcher concludes the thesis by analysing the findings before making recommendations, which emanate from the study. An AET evaluation model and accompanying archetype are also presented. Suggestions for further research are proposed in this chapter.

CHAPTER 2
LITERATURE REVIEW

2.1. Introduction

This literature review identifies, classifies, evaluates and synthesises the existing body of completed and recorded work produced by researchers, scholars and practitioners (Okoli & Schabram, 2010; Phillips & Pugh, 2010; Fink, 2005) pertinent to this study. Gaps found in existing literature identify a need to elaborate, explore or critique our current understanding of a phenomenon. In the literature review the researcher presents an analytical critique of the existing research and debates which are appropriate for South Africa's AET organisations to evaluate and enhance performance excellence. In this literature review the researcher takes into account that AET in South Africa is a major priority for the government and the private and public sectors (Meyer, Bushney, Mey, Joubert & Van der Merwe, 2010).

Not only is AET critical to achieving organisational and national transformation goals, but it also constitutes a key element in the pursuit of the achievement of business objectives (Meyer et al., 2010). Education, training and learning interventions in South Africa have to be aligned with the overall business objectives of the organisation (Meyer et al., 2010).

In addition to this business orientation, a learning organisation culture has to be created within AET organisations (Meyer et al., 2010). The goal of such a culture is to encourage employees, teams and the organisation as a whole, to continually learn, increase knowledge, and add new skills (Odor & Samuel, 2018; Al-bahussin & El-garaihy, 2013). Furthermore, learning organisation culture positively influences organisational performance, innovation and long-term success (Tohidi, Seyedaliakbar & Mandegari, 2012; Akhtar, Arif, Rubi & Naveed, 2011; Liao, 2006; Power & Waddell, 2004).

Organisational learning activities are directed and guided by organisational learning initiatives (Bates & Khasawneh, 2005). Organisational learning refers to all the strategies, processes and activities of learning which are introduced within an organisation with the intention of implementing and managing change (Odor & Samuel, 2018; Bersin, 2008; Rebelo, 2006; Marsick & Watkins, 2003). Organisational learning can also enhance the effectiveness of an organisation's drive towards performance excellence (Tshukudu & Nel, 2015; Heydari & Davoodi, 2013). Performance excellence is the product of interactions of different sub-systems and enablers in the organisation (Stankard, 2002). The organisational system enablers which influence AET practices in South Africa have to be identified and described (Meyer et al., 2010). Such an evaluation requires in-depth understanding of all the sub-systems and

enablers, for example organisational learning and culture aspects, which have to be considered when determining and measuring the effectiveness and efficiency of AET (Meyer et al., 2010).

The purpose of this literature review is to gain an in-depth understanding (with the aid of a theoretical framework) of the existing knowledge and to identify gaps in said knowledge which is relevant to applied systems-thinking of AET system evaluation. The intention of this review is to deliberate process elements of AET systems applicable to South Africa's AET organisations. A performance transition of South Africa's AET organisations, from an organisational learning situation towards meeting learning organisation qualities, is also deliberated. Possible AET system evaluation constructs that may assist such a journey towards performance excellence are examined. AET system evaluation constructs, influences and relationships which support the notion of a learning organisation and performance excellence are identified and described. The role and purpose of a model and an archetype to explain performance excellence are also contemplated.

Guided by the research questions and objectives, this review takes account of:

- Systems-thinking. The aim of the review is to conceptualise systems-thinking as a theoretical framework. This concept is extended to include a pragmatic view of systems-thinking which also analyses system-theory at the organisational level.
- Organisational learning and the learning organisation. The aim of the review is to investigate current organisational adult education, training and learning practices and cultures in order to appraise transformation towards a learning organisation.
- AET evaluation. The aim of the review is to identify and conceptualise the system-based elements of AET within a learning organisation context.
- Organisational performance evaluation in terms of excellence. The aim of the review is to identify and conceptualise learning organisation indicators and criteria which are supported by quality management systems in order to promote and plan for performance excellence.
- Constructs and archetypes. The aim of the review is to identify and conceptualise the use of constructs to provide a holistic and integrated theoretical model and archetype for the effective evaluation of AET in the South African context.

2.2. Systems-thinking

2.2.1. Theoretical framework

An actual perspective, or lens, through which to examine the research topic is provided by the theoretical framework. This research investigates AET systems with the goal of understanding the relationships which exist within and between structural components. A system consists of structural components which are interconnected and these collectively form a complete whole (Dutta, 2017; Monat & Gannon, 2015). A system is a concept that is utilised to understand reality (Dutta, 2017). Systems-thinking is applied in various disciplines, including education (Bures & Racz, 2016; Adham, Kasimin, Mat Isa, Othman & Ahmad, 2015). Systems-thinking is a mindset of looking not only at the problem at hand, or the situation under scrutiny, but also considering all related factors that impact upon the situation (Dutta, 2017). Systems-thinking provides a theoretical foundation which guides deliberations, insights and explanations of systems (Adams, Hester, Bradley, Meyers & Keating, 2014). Clemson (2012) explains that both systems-theory and perspectives are integral components of systems-thinking (Figure 2.1). This interrelationship shows systems-theory as the science of systems, and system perspectives as the practical applications of system methods and models in a given context, and systems-thinking as the paradigm or world view (Clemson, 2012). Reaching out to the future by creating new meaning and by bringing together parts that are not yet thought together seem to be the very essence of system-thinking (Grisold & Peschl, 2017). Systems-thinking (as theoretical framework) is used to identify, describe and understand AET systems (a pragmatic perspective).

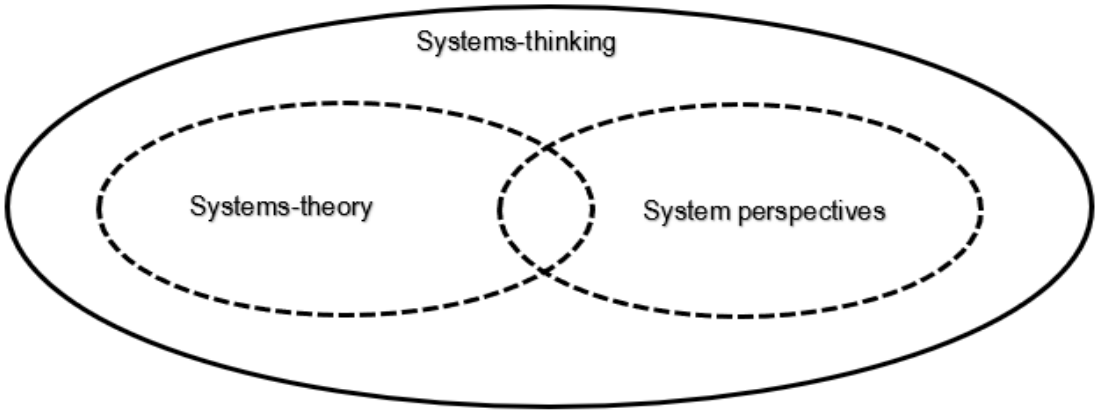

Figure 2.1: Systems-thinking (Adapted from Clemson, 2012: 1)

Systems-thinking as a theoretical orientation is described by Monat and Gannon (2015: 24) as a “perspective that recognises systems as collections of components which are all interrelated

and necessary, and whose inter-relationships are at least as important as the components themselves". Monat and Gannon (2015) found that systems-thinking is the opposite of linear thinking and that it focuses on the interactions and connections among system components, as opposed to the individual components. Studies by Funnell and Rogers (2011) and Weitzman, Silver and Dillman (2002) establish that systems-thinking contemplates the functions of a system's parts, based on their relations with one another and within the system's larger context. Considering the system's entire context is critical (Dutta, 2017). Systems-thinking derives from the shift in attention from the part to the whole system. Systems-thinking acknowledges that systems are dynamic (Monat & Gannon, 2015). The Iceberg Model (Figure 2.2) presented by Monat and Gannon (2015) (used to illustrate systems-thinking) postulates that known events and patterns are caused by less known systemic structures, including organisational hierarchy, interrelationships, rules, procedures and underlying forces which exist in an organisation and mental models.

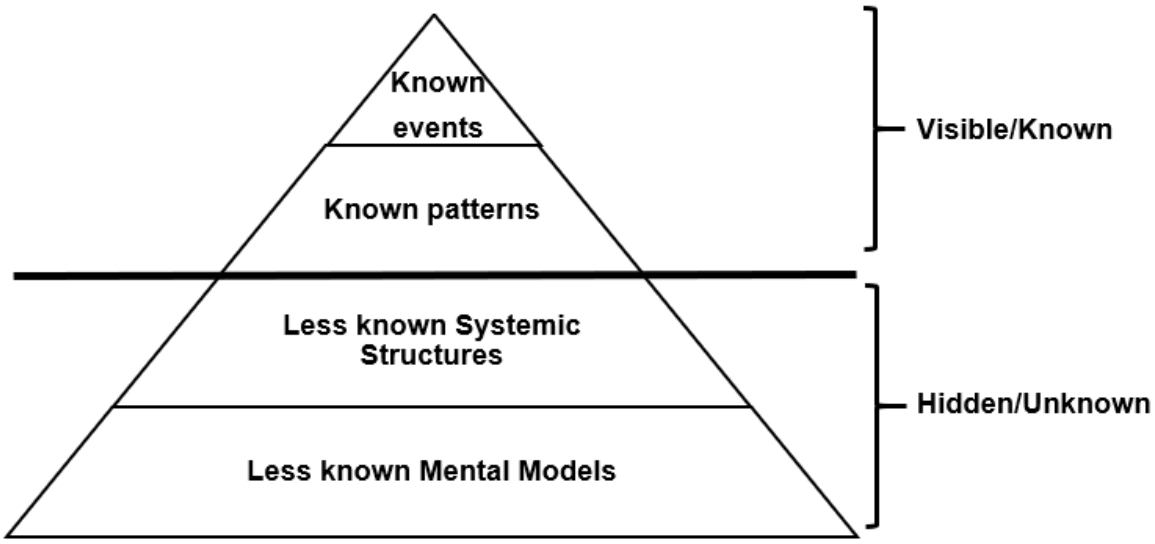

Figure 2.2: Iceberg Model (Adapted from Monat & Gannon, 2015: 18)

The epistemological aspects of systems-philosophy address the principles of how systems-inquiry is conducted, the specific nature of the inquiry and the importance of system synthesis (Banathy & Jenlink, 2004). The researcher acknowledges that a need exists to specifically address AET evaluation from a systemic perspective. The complete agreement about the definition of an AET system evaluation and its purpose and boundaries are therefore needed. When investigating an organisation's AET system, insight is required of the confirmed processes and significance as perceived by key-stakeholders. Such insight can provide guidance on possible evaluation design orientations, appropriate collection methods, data analysis techniques, reporting formats and dissemination strategies (Eseryel, 2002).

The ontological task associated with the formation of a systems-view has to define “what is” (Banathy & Jenlink, 2004). In the broadest sense this is a systems-view of the world (Banathy & Jenlink, 2004). Stroh (2003) emphasises the importance of “what is” when he states that people need to have a shared image of reality and to understand their role and contribution to the existing situation. This task can lead to a new orientation for scientific inquiry (Banathy & Jenlink, 2004). The methods and tools selected for systems-inquiry, including the epistemological and ontological processes which guide systems-inquiry, help to identify what is valued, what is beneficial and acceptable (Banathy & Jenlink, 2004). Furthermore, with reference to complexity theory, in complex adaptive systems all occurrences, actions and role-players are reciprocally dependent, mutually constitutive and materialise collectively in dynamic structures (Fenwick & Edwards, 2013).

The general theory of dynamic systems (Banathy & Jenlink, 2004; Jantsch, 1980; Prigogine, 1980) emphasises process in contrast to permanent sub-systems, structures, components and the development of processes within systems. This theory recognises that systems evolve in response to contextual variances and changes. Professing the use of only one AET system evaluation, irrespective of the organisational setting, can be problematic. It is imperative to consider the operating context, all the possible options when an AET system evaluation is designed, and to ensure appropriate combinations and optimum cohesion of the various system components. It is necessary to describe the objectives of the systems, identify the functions which have to be carried out to achieve the objectives, explain the system modules which can carry out the functions, and identify the interactive arrangements of the modules which constitute the structure of a system. The adequacy of each system element should also be probed. By acknowledging the stated ontological and epistemological summaries, systems-thinking, as a theoretical framework, provides a justified perspective by which to study this research topic. The researcher suggests that the perceived value of this study may be the emerging structure which results from recurring patterns and interactions of the elements in a system within an AET context. According to Mittal, Diallo and Tolk (2018), emergence is the result of interaction between a combination of components interacting together within a defined environment.

Studying complex real-life systems is difficult if system elements are unrelated (Dutta, 2017). It is easier to study a system comprehensively without having to study each and every element in its own environment (Dutta, 2017). Systems-thinking considers a system as part of another system (Furst-Bowe, 2011). A system is influenced by direct and indirect connections to another system (Furst-Bowe, 2011). The researcher proposes that system relationships cannot be precisely determined, because systems-thinking looks for dynamic patterns rather than discrete events within a specific context. However, the number of distinguishable

elements can be identified. Identification is possible for a combination of complementary systems perspectives, which contributes towards a more holistic and integrated view of a system (Hester & Adams, 2014). Monat and Gannon (2015) affirm that systems-thinking is useful when analysing, understanding and influencing complex business problems and behaviours. Systems-thinking acknowledges the complexity of a system due to the presence of many components and the multiple ways that those components interact (Monat & Gannon, 2015). Systems-thinking is different from knowledge held about systems, but it is also dependent upon it for there would be no systems-thinking without the knowledge of systems (Hammond, 2002; Sterman, 2002; Richmond, 2000; Senge, 1990). Systems-thinking is based on the idea that all vital processes in an organisation are interconnected (Furst-Bowe, 2011). Verhoeff, Waarlo and Boersma (2008) view these connections by thinking backward and forward between general system constructs and processes. This backward and forward thinking is an explicit element of systems-thinking (Verhoeff et al., 2008). Understanding these connections is imperative to obtain envisaged results, make targeted improvements and accomplish organisational success (Furst-Bowe, 2011). According to Dutta (2017), this insight is a determining factor both in gaining an understanding of a system and finding a solution for any difficult problem within a system.

In order to understand people's cognition of systems, it is necessary to identify and understand the systemic structures and underlying mental models which guide people's views. This calls for systems-thinking (Grisold & Peschl, 2017). Construction of knowledge relies on the notion of functional fitness and the idea of knowledge being organised and presented in its perceived context (Grisold & Peschl, 2017). Such understanding is advanced by means of qualitative information and linguistic terms used to describe system complexities resulting from the contexts in which they are embedded. Creating new meaning and realities is based on already existing knowledge, embedded into existing frameworks of reference and mental models (Grisold & Peschl, 2017). Systems-thinking is influenced by and influences scientific thinking (Cabrera & Cabrera, 2015). Systems-thinking has been adopted as a world-view, for it relies on systems-theory as a scientific basis.

2.2.2. Systems-thinking, theory and perspectives: A pragmatic view

A pragmatic view of systems-thinking may be found when a system is considered as a tangible or concrete object. One of the primary characteristics of the scholarly literature on systems-thinking, is that authors (for example Hammond, 2002; Sterman, 2002; Richmond, 2000; Senge, 1990) propose that systems-thinking is synonymous with a specific model. Systems-theory does not represent a single theory only but a set of constructs and related logical streams which are concerned with the nature and features of systems (Yawson, 2012;

Straussfogel & Von Schilling, 2009). Senge (1990) recaps that systems-thinking is a discipline for seeing wholes, patterns and interrelationships but manifests as a set of general principles. A systems-perspective includes using information and organisational knowledge to advance core strategies while linking these strategies with significant processes and resources (Furst-Bowe, 2011).

South Africa's AET organisations are required to advance national and organisational core strategies while linking these strategies with their processes and resources. Knowledge of organisational systems that guide and control processes, activities and resources provide insight into the management of such organisations (Dutta, 2017). The dynamics of systems-thinking in the management of South Africa's AET organisations is directed by the national skills development strategy (Walters, 2006). This strategy aims to continuously prepare South Africa to succeed in the global market and to offer opportunities to individuals and communities for self-advancement to enable them to play a productive role in society (Walters, 2006). Systems-thinking at organisational level needs to consider that individuals and communities (system input) have to be transformed (system process) in order to achieve a specific AET goal (system output). The implementation of systems-thinking to facilitate such transformation within a holistic framework is a challenge (Walters, 2006).

Systems-theory examines a phenomenon holistically and not as simply the sum of basic parts (Dutta, 2017; Arnold & Wade, 2015; Mele et al., 2010; Banathy, 1992). From a systems-theory perspective, a system is defined by Monat and Gannon (2015: 21) as a "group of interacting, interrelated or interdependent elements forming a unified whole which attempts to maintain stability through feedback, it has boundaries and constraints and for which the arrangement of the parts is significant". Subsequently, the interactions on and the relationships between parts have to be understood, as these influence an entity's organisation, functioning and outcomes (Mele et al., 2010). The focus here is on interventions which can be leveraged for systemic change that specifically contribute to educational and training results in South Africa (Shay, 2017). Within this context, interventions may include equity of access and outcomes, funding to improve the effectiveness of teaching and learning, required resources, a clear organisational vision and strategic plan (Shay, 2017). These AET results have to be strategically directed at interventions that can serve as systemic levers of change (Shay, 2017).

A complete systems-thinking definition has to consider the context within which it functions and the goal-oriented focus of a system (Arnold & Wade, 2015). To accomplish this, systems-thinking has to be viewed from different system perspectives. These perspectives not only consider mental images but also cognition required to define systems. A definition proposed

by Arnold and Wade (2015: 675) describes systems-thinking as “a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviours, and creating modifications to them in order to produce desired effects”. This definition is found to be applicable to this study, for it emphasises a clear goal, recognises elements of systems-thinking and all the interconnections between these elements. Systems-thinking is also dependent on a specific perspective, which indicates that understanding of the interrelationships within systems is context-specific (Bino, 2008). The system-perspective applicable to this study is South Africa’s AET context. Shay (2017) states that South Africa requires a significant educational investment into improving the effectiveness of adult teaching and learning. Systemic levers of change are required (Shay, 2017). Evaluation of the impact of change is also necessary (Jayashree & Hussain, 2010). A theory-based evaluation facilitates the development of a rational model with well-defined results and explicit causal links, thus suggesting a basic theory of change (Funnell & Rogers, 2011; Weitzman et al., 2002). As part of such development, it is important to recognise assumptions and risks underlying the theory of change and identifying contextual dynamics. A refined theory of change would consequently emerge (Funnell & Rogers, 2011; Weitzman et al., 2002).

South African AET organisations have to review existing systemic levers of change in order to ensure the effectiveness of teaching and learning and to meet their educational and organisational goals (Shay, 2017). The SAQA (2001b) acknowledges a need to maximise organisational education efforts. As a way of dealing with systemic changes, three different strategies may serve as examples (Eurocontrol, 1999). The first strategy considers that nothing should be done and no initiatives are taken to counter AET evaluation problems (Eurocontrol, 1999). However, should problems arise it will be addressed (Eurocontrol, 1999). The second strategy follows a reactive approach (Eurocontrol, 1999). Any concern for AET evaluation is left to the last stages of the development process (Eurocontrol, 1999). The third strategy advances a pro-active approach where AET evaluation problems are fixed before they occur (Eurocontrol, 1999). According to Struwig, Smith and Venter (2001), organisations of the future will not survive without becoming communities of learning. These organisations will need the knowledge and capacity to adapt and change continuously (Struwig et al., 2001). Elmore (2006) suggests the introduction of a theory of change which highlights the relationship between the different components and key actors in the AET system to facilitate organisational changes. A theory of change helps policymakers to discern how change is expected to happen through the implementation of AET policies (DHET, 2018a).

The Jika iMfundo Theory of Change introduced a monitoring and evaluation framework which addresses curriculum coverage, management practice and learner assessment outcomes applicable to South Africa’s School Management Teams (Metcalfe, 2018). The theory of

change for AET in South Africa captures in great detail the activities of the National Qualification Framework bodies and professional bodies but neglects the role of AET providers and other key stakeholders (DHET, 2018a). A specific theory of change which facilitates holistic and continuous systemic review and evaluation is not prescribed for South Africa's AET organisations. A logical model which is used to plan and monitor evaluation (revealing the relationships among resources, activities, outputs and outcomes) is not available due to the absence of a specific theory of change. However, introducing a specific theory of change and associated logical model may not serve as a viable solution due to its lack of comprehensiveness and effectiveness. Hummelbrunner (2010) states that a logical model/framework is frequently too simple and omits vital aspects of a process for it tends to be fixed and not up-dated, thus hindering learning and adaptation. De Bruijn (2007) found that monitoring and evaluation systems have become increasingly complex, less practical and inefficient.

Williams (2010) suggests the use of system modelling as an alternative to a theory of change and logical modelling. System modelling is based on the idea that different elements of a complex system need different kinds of information to function effectively (Williams, 2010). Complex causal relationships which are found in AET systems can be represented by linking output (indicators) and results (respectively objectives) and by assembling the expected contributions of each output (Hummelbrunner, 2010). System modelling is not detailed for South Africa's AET organisations by the DHET. Proposing a system model for South Africa's AET organisations can be used to identify and describe the operational, co-ordination, management, strategy and governance requirements needed to deliver on its strategy and purpose. Such a model can identify what information is needed at each level of the system and indicate how information flows through the system (Williams, 2010).

Modelling is an explicit part of systems-thinking (Verhoeff et al., 2008). Modelling is important when conceptual understanding of a topic has to be facilitated (Verhoeff et al., 2008). Systems-thinking provides models which are well understood and may be generalised and applied to different situations should their common dynamics remain constant. When systems-thinking encourages such an all-inclusive view, the strengths and weaknesses of a system and its relationships have to be discernible, examinable and comprehensible. It is anticipated that the quality, value and contribution of such a system, within an organisational context, should be noticeable. It is believed that complex systems can never be fully predictable. At best, the critical system elements or constructs can be identified by stakeholders. This means that systems-thinking relies upon a stakeholder who defines a system and establishes its boundaries according to some purpose or criteria. Multiple stakeholder inputs may indicate different interpretations or structures of complex systems. These interpretations identify

constructs which serve as conceptual labels or clusters to facilitate understanding of the critical elements of a system and its interrelations. These constructs can culminate into a proposed pattern/model/archetype which can be adopted and adapted as directed by the setting-specific circumstances. Such a proposed pattern/model/archetype is needed for South Africa's AET organisations. A proposed pattern/model/archetype can be used to review existing evaluation foci and practices in order to ensure the effectiveness of teaching and learning, meet educational and organisational goals, and maximise organisational education efforts.

2.2.3. Systems-theory at the organisational level

Systems-theory at the organisation performance level describes how the interrelationships among inputs, processes, outputs and feedback influence the performance system's mission, goals and outcomes (Fejes & Nylander, 2015; Clemson, 2012; Funnell & Rogers, 2011; Larsson, 2010; Lynham, Chermack & Noggle, 2004). It could be problematic to interpret the results of a system evaluation without any basis or theory to assist comprehension, guide implementation, and measure organisational change (Marock et al., 2016). Such a theory of change should demonstrate the integration between strategy, objectives, intended outcomes, practices and priorities to stimulate change, continuous improvement and innovation (Marock et al., 2016).

A theory of change has to underpin the means for achieving an organisation's vision, mission and objectives. The purpose of a theory of change is to provide beneficial and pertinent knowledge and methods for understanding in which way interrelationships affect the organisation's intentions and the external environment (Lynham et al., 2004). Such a theory of change suggests systems-thinking at an organisational level. Systems-thinking has to allow an organisation to design, manage and improve processes/sub-systems to fully meet its objectives (Calvo-Mora, Leal & Roldan, 2005). Processes have to be explicitly defined, systematically designed, comprehensively managed and periodically revised (Bou-Llusar, Escrig-Tena, Roca-Puig & Beltran-Martın, 2008). The development and innovation of processes have to be designed, developed, produced and delivered based on fulfilling organisational needs and expectations (Bou-Llusar et al., 2008). In support of continuous improvement and growth the organisation has a duty to develop new products or services ahead of competitors and these have to be superior to those of competitors (Bou-Llusar et al., 2008).

Systems-thinking creates an opportunity to critically review organisational performance by considering current processes and procedures. Such reviews are indispensable when remedial action and/or continued improvement is anticipated by an organisation. Studies by

Bou-Llusar et al. (2008) suggest support of homeostasis and stagnant structural formation within a system. This suggestion is not aligned to the findings presented by Yawson (2012); Straussfogel and Von Schilling (2009) and Senge (1990), who state that systemic differences associated with organisational settings have to be considered at all times. These researchers discovered that systems consist of a network of processes and elements. Leveson (2011: 4) states that the operation of some systems is so complex that it defies the understanding of all but a few experts and sometimes even they have incomplete information about the system's operation. This view emphasises system formation which acknowledges that systems evolve, their settings vary and the relations between them change. Understanding in which way systems are organised as they adapt to their environments is not described in detail for South Africa's AET organisations. The CHE (2009) acknowledges that such understanding aids management of change, albeit from a national legislative perspective.

Systems-thinking is a process of thinking about systemic distinctions, relationships, perspectives and boundaries (Cabrera & Cabrera, 2015). Systems-thinking not only creates understanding of a current framework and associated processes but provides a means to postulate future organisational expansions and practices. System innovation is primarily driven by making use of existing concepts and by improving, adapting, optimising or developing them further (Grisold & Peschl, 2017: 336). The CHE (2009) advocates for the optimisation of all system elements that could facilitate continuous change in education. Senge (2006) explains that a growing institution is one which is incessantly expanding its capacity to create its future. Such expansion could be guided by means of systems-thinking. Systems-thinking enables managers to understand how configurations can direct system behaviours (Gregory & Miller, 2014). Systems-thinking explains the reasons for the present status of a system (Gregory & Miller, 2014).

Systems-thinking is viewed as a discipline for seeing wholes as well as a framework for seeing interrelationships and patterns of change (Senge, 1990). Systems-thinking is the fifth discipline of a learning organisation (Monat & Gannon, 2015; Senge, 1990). The four other disciplines are personal mastery, mental models, building shared vision and team learning (Monat & Gannon, 2015; Senge, 1990). Personal mastery creates an opportunity for stakeholders to explore and discuss complex organisational learning issues (Senge, 2006). Mental modelling allows interested parties to challenge previous thinking about organisational practices and paves the way for an examination of prevailing assumptions and generalisations (Senge, 2006). Value can be found in members' willingness to listen to one another while questioning their own views (Senge, 2006). In true systems-thinking, all stakeholders are parts of a single system and have a shared vision of a learning organisation (Senge, 2006). Team learning facilitates dialogue to permit the discovery of new insights through a free flow of ideas (Senge,

2006). A professional discourse is advanced which, according to Hord and Sommers (2008), is supported by shared beliefs, values and visions, united and supportive leadership, collective learning, reassuring conditions and shared personal practice. A successful review has the potential to create a shared vision which could stimulate the creation and maintenance of a learning organisation (Senge, 2006).

Senge (1990) and Monat and Gannon (2015) contended that systems-thinking is the most significant discipline, as it integrates the other four disciplines. Pereira, Martins and Martins (2007) advance this view by recognising that the systemic thinking discipline accentuates the holistic capability of analysing the organisation and its competitive environment. Stroh (2003) found that systems-thinking not only increased understanding and focused problem-solving within an organisation, it also generated impetus for people to change. It may be possible for organisations to maintain a competitive edge by harnessing the collaborative energy of its employees. Such impetus relies upon individual, team and organisational efforts aimed at organisational performance, excellence and success. As a result, systems-thinking helps one to comprehend reality within different contexts in a way that incorporates complexity without being overpowering.

Pagano and Paucar-Caceres (2013: 95) state that systems-thinking at the organisational level has been applied in several business and management contexts, but not so much in education management or the management of learning. Systems-thinking in an organisational context can only be seen as meaningful when it constitutes the conceptual components defining the system and the holistic perspective of the system (Hmelo-Silver, Jordan, Eberbach & Sinha, 2017; Ben-Zvi Assaraf & Orion, 2005). Ege, Esen and Dizbar (2017) state that education, training and learning activities have to be embedded in the systems, structures, strategy, routines and prescribed practices of the organisation. In the South African context, a holistic perspective of the AET system is described in legislation. However, the DHET (2012) acknowledges that a major problem in the AET system as a whole is that provision of AET is inadequate in quantity, diversity and quality. Addressing and evaluating identified AET system concerns by means of systems-thinking can ensure high levels of excellence and innovation within a competitive environment.

From the literature reviewed, a need exists to identify and describe AET system evaluation by identifying those elements in the organisation and environment that influence the existence and functioning of the entity. According to the DHET (2012), evaluation data from AET institutions is not always accurate, comprehensive or organised as part of an integrated system. An understanding of the principles governing AET evaluation, operating within the organisational system, could lead to efficient and integrated system management practices.

Dutta (2017) states that a necessary condition to consider with regard to a system is to understand why the system is being described in the first place. The researcher realises that in situations where system structures are difficult to define, it is important that multiple information sources have to be involved to aggregate a wide range of data inputs. This outlook supports the role of pluralism (Midgley, 2000).

Pluralism means that a system has its own unique features, recognises more than one principal component, and that components co-exist. Systems-thinking in practice encourages an exploration of inter-relationships (context and connections), perspectives (unique perceptions of the situation) and context-based boundaries. Systems-thinking requires knowledge about the system dynamics in order to formulate conceptual themes and designs (Cabrera & Cabrera, 2015). Understanding system design therefore benefits from a variety of knowledge inputs from, for example, document analysis and interviews with knowledgeable organisational role players. This knowledge is required to describe how an organisation's system design ensures a competitive advantage, fosters innovation and improves efficiency, effectiveness and productivity (Dube & Ngulube, 2013; Whelan & Carcary, 2011; Bender & Fish, 2000). The researcher found that such knowledge, which identifies and describes AET system evaluation by identifying the elements in the organisation and environment that influence the performance excellence of organisations, is not described for the South African context.

2.3. Organisational learning and the learning organisation

2.3.1. AET in an organisational context

It is promising to note that there seems to be an agreement concerning the epistemological status of adult education, since scholars interpret this field as inherently interdisciplinary and pluralistic, borrowing theories and methodologies from a range of disciplines (Fejes & Nylander, 2015; Fejes & Salling Olesen, 2010; Larsson, 2010). This view favours systems-thinking. Arndt (2006) states that systems-thinking skills are a prerequisite for acting successfully and responsibly in a complex world. Education encompasses complex structures. Therefore, systems-approaches are appropriate for research and practice in this complex field (Davis & Sumara, 2006). Stroh (2003) provides evidence that applied systems-thinking allows an organisation to review its product portfolio, address problem symptoms (associated with high costs, inaccurate forecasts and declining customer satisfaction), allocate/re-allocate resources to focus on the most influential changes, and create a shared awareness among all stakeholders of the full impact of the organisation's actions. Systems-thinking is pertinent to a system-specific scenario such as AET. By applying systems-thinking, AET structures could be

investigated with the same style, tenacity and legitimacy as other organisational systems. However, traditional education largely fails to enhance system thinking skills (Arndt, 2006).

System dynamics underlying organisational learning are key to success in institutionalising a performance-based approach within an organisation (Gephart & Marsick, 2016). Caldwell (2012) proposes a learning-centred theory of processes and practices that can incorporate anticipated organisational learning. The purpose of organisational learning is to enable people to gain recognition and value through AET (Milana, 2017). Such education, training and learning are framed by an organisation's shared mental model (Snabe, 2017).

Shared mental models are individually held knowledge structures that help team members to function collaboratively in their environments and adapt to changes (Mathieu, Heffner, Goodwin, Salas & Cannon-Bowers, 2000). Organisational learning encompasses difficult learning issues which cannot be solved unless underlying individual and shared knowledge, values and assumptions are considered (Snabe, 2007). Zangiski, De Lima and Da Costa (2013); Swan, Scarbrough and Newell (2010) and Hummelbrunner (2010) state that organisational context and assumptions cannot be overlooked when organisations deal with complex systemic matters. An obligation to comprehend the interplay between organisational context and the type of learning activity is thus acknowledged. Merriam (2008) adds that an emerging line of research in workplace learning is context-based. Attention has shifted from understanding adult learning from the individual learner's perspective to including other perspectives and to considering the learner and learning in context. Argyris and Schön (2006) developed a model according to three levels of learning (Figure 2.3) to explain the learner and learning in context.

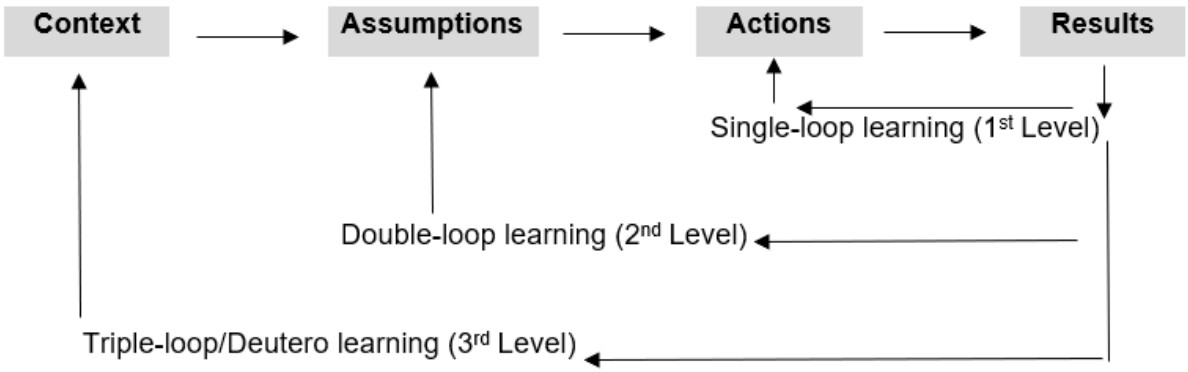

Figure 2.3: Single-double- and triple-loop learning (Adapted from Blakey, 2010: 31)

The first level (single-loop learning – associated with adaptive and incremental behaviour changes) occurs when employees detect and correct errors but maintain the organisation's

current state of affairs (Argyris & Schön, 2006). In single-loop learning, people, organisations or groups modify their actions according to the difference between expected and reached outcomes (Argyris, 2007; Argyris & Schön, 2006). The second level (double-loop learning – questioning and challenging assumptions of previously held norms) follows when learning motivates changes to the organisational norms (Argyris & Schön, 2006). During double-loop learning the focus shifts to the underlying assumptions behind actions and behaviours to ensure that learning from mistakes and incorrect methods transpire (Argyris, 2007; Argyris & Schön, 2006). Double-loop learning requires a systems-thinking approach (Barnard, 2013; Senge, 2006). The third level (triple-loop or deutero-learning – awareness of how individuals engage in single- and double-loop learning) transpires when employees reflect on previous learning which means that the organisation learns to improve its learning processes (Argyris, 2007; Argyris & Schön, 2006). Consequently, triple-loop learning develops the organisation's ability to learn about learning (Argyris, 2007; Argyris & Schön, 2006). Triple-loop learning manifests itself in the form of "collective mindfulness" when organisations are capable of discovering how they have facilitated or inhibited learning and then produce new context-based structures and strategies for education, training and learning (Romme & van Witteloostuijn, 1999). In organisational environments, the learning context such as structure, process and culture influence this "collective mindfulness" and the organisational learning process (Wang & Ahmed, 2002). The significance of the learning context is thus stressed (MacBeath et al., 2018).

Although the individual focus is prevalent in the literature, the organisational context is not presented. Fourie (2014) acknowledges that a better understanding and implementation of learning organisations in a South African context is needed. This understanding favours a contextual planning process for it considers both the context and the organisation in a holistic way. Conceptual system limits and conducive context conditions have not yet been identified and described for South Africa's AET organisations. What is needed for promoting learning organisations is to identify and describe the system enablers that may facilitate transformation.

A transition from individual towards organisational learning requires a fundamental shift towards systems-thinking within a defined context (Burnes, 2009). AET is critical to organisational success and it is associated with performance and innovation (Grohmann & Kauffeld, 2013; Grossman & Salas, 2011; Aguinis & Kraiger, 2009). Marock et al. (2016) mention that the point of departure for developing a theory of change which supports innovation, is the understanding of all key organisational processes, challenges as well as aspects which require change.

Odor and Samuel (2018) point out that organisations benefit when paying attention to their organisational learning processes. Organisational learning is an essential component in the transformation from the traditional organisation to the progressive organisation (Gilley & Maycunich, 2000). Organisational learning strategies and initiatives are influenced by national-specific histories which are defined by social, political and cultural phenomena as an example (Milana, 2017). Understanding social influences and needs may help to identify the origins and implications of a growing accountability for educational leaders (Horsford, Scott & Anderson, 2018). A topic such as “decolonisation of education” serves as an example of social influence which recognises the role South Africa’s educational leaders have to and could play in reviewing and possibly changing education policy and processes. Horsford et al. (2018) propose that these new conceptions will necessitate leadership which successfully incorporates educational diversity, equity and emerging logical theories. These conceptions call for a dynamic and functional view of education as compared with the traditional intellectual notion (UNESCO, 2014). The CHE (2004c) supports a framework that consists of quality-related matters pertaining to the transformation, continuous change and innovativeness of institutions in the production of new knowledge. A detailed framework which AET organisations can use to evaluate all systemic inputs, processes and results associated with organisational performance and innovation is not provided in the literature.

Empirical research is needed to reinforce the notion that AET is important to the success of South African commerce (Morris, 2015). Evaluation of AET in an organisational context is important to gauge the impact and sustainability of processes that influence success. In the South African context such evaluation is expected to be part of an organisation’s quality management system (DOL, 2008; CHE, 2006b; CHEQC, 2005; DHET, 2005; CHE, 2004f; SAQA, 2001a; SAQA, 2001b). No specific quality management is prescribed (DOL, 2008; CHE, 2006b; CHEQC, 2005; DHET, 2005; CHE, 2004f; SAQA, 2001a; SAQA, 2001b).

In the current literature, specific systemic evaluation aimed at determining value and benefit by means of organisational-specific conventions for South Africa’s AET organisations is not offered. A change in the collective perception of AET as essential investments for organisational performance in South Africa is needed (Morris, 2015). A well-conceptualised strategy for educational change is required (Shay, 2017). It is important that an organisation needs to determine which learning efforts are suitable or which knowledge has to be managed or advanced. Dynamic contextual factors which influence South Africa’s organisational learning systems are not identified and described. Insight into these learning enablers and associated indicators of results can be used to determine organisational learning accomplishments. The focus here can also be extended to include systemic change inspired

by the notion of a learning organisation which specifically contributes to organisational excellence.

2.3.2. A learning organisation

Facilitating the organisational learning capacity requires a specific strategic vision. Essentially, an AET organisation could benefit when a commitment exists to transcend towards greatness by aspiring to become a learning organisation. Deloitte (2015: 30) reports that “high-impact” learning organisations deliver 30% higher customer service and show similar high performance in innovation. Within a learning organisation, a focused learning approach is intended to create knowledge and transform it into effective action (Sarder, 2016).

Organisations should create facilitative structures and arrangements to support and ensure learning to move toward their objectives (Yang, Watkins & Marsick, 2004). It is practical for organisations to continuously produce results and ensure achievement of defined outcomes despite constant changes, rising complexities and knowledge advancements (Gao et al., 2008; De Jong & Den Hartog, 2007). According to Teo, Cheng and Low (2015), this is imperative for the learning organisation concept adds value to organisations which face changing environments and seek to sustain their competitive advantage. This signifies a need for a learning organisation, where employees continually learn to learn by means of expansive patterns of thinking and collective efforts (Senge, 1990).

A learning organisation is a dynamic entity which draws conclusions from its successes and mistakes and adapts those to the fluctuating environmental conditions in a systematic manner (Basim, Sesen & Korkmazyurek, 2007; Senge, 1996). Within the South African educational context, the notion of a learning organisation is encouraged (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SABPP, 2014; SAQA, 2001b). Fourie (2014) states that a within a learning organisation, learning has to be tied to business objectives to improve work processes and enhance services.

Learning organisations have an enterprise architecture which transform them into sites of education, training and learning (Odor & Samuel, 2018). The notion of a learning organisation is advanced by Holton (2005) and illustrated by means of the Human Resource Development (HRD) Evaluation and Research Model (Figure 2.4), which emphasises three outcome levels – learning, individual performance and organisational performance. These outcome levels have to be aligned to specific organisational abilities and expectations which are directed by business goals and shaped by valid, useful and relevant learning design and transfer initiatives (Holton, 2005).

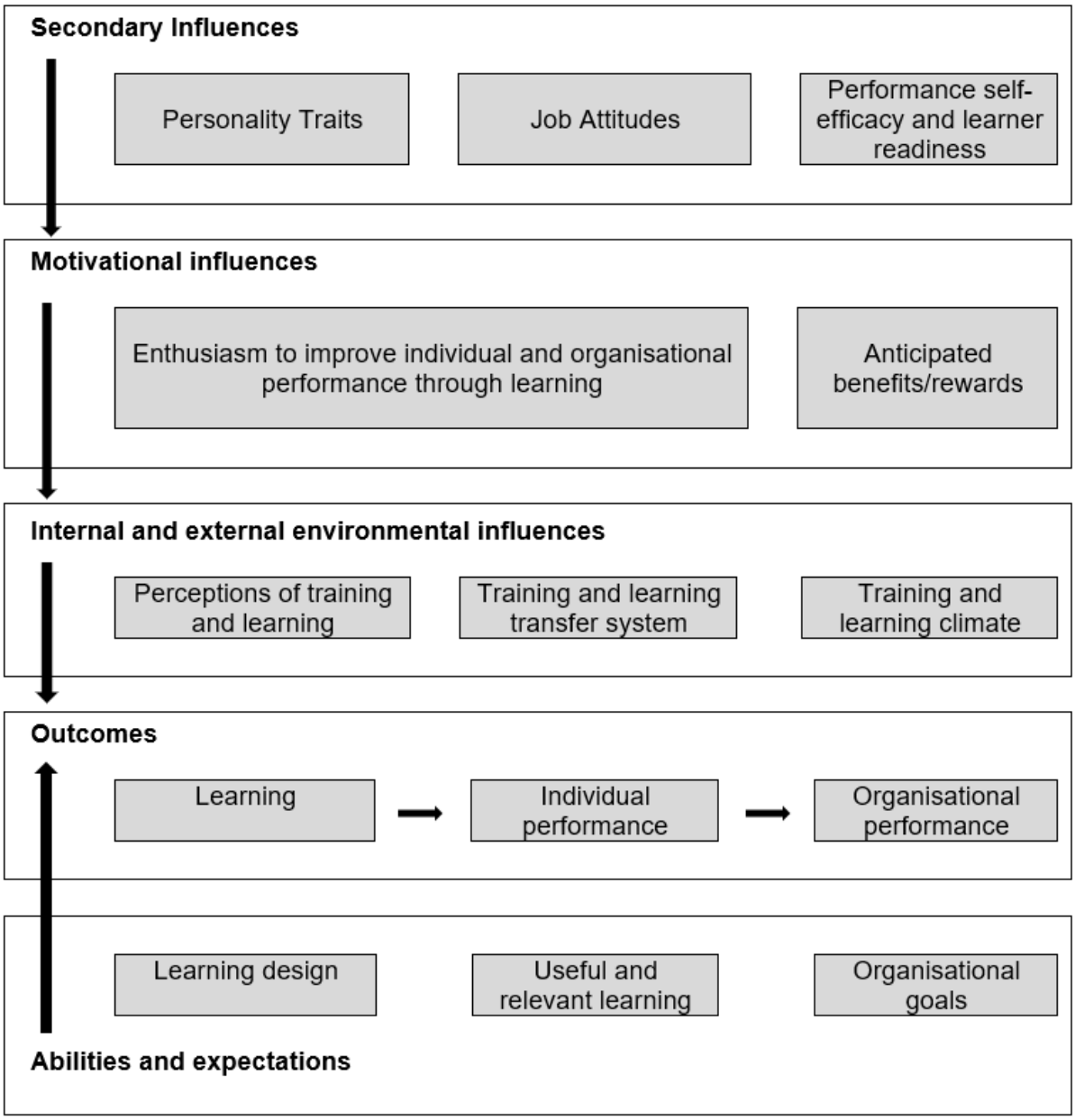

Figure 2.4: Revised HRD Evaluation and Research Model (Adapted from Holton, 2005: 51)

The HRD Evaluation and Research Model considers five personality traits (conscientiousness, neuroticism/emotional stability, openness to experience, goal orientation and locus of control), as secondary influences which could indirectly or directly have an effect on motivation to learn and the quality of learning (Holton, 2005). The second category of secondary influences which impacts on motivation to learn, is job attitude (organisational commitment and job involvement serve as predictors of motivation) (Holton, 2005). Performance self-efficacy and learner readiness are considered as motivational influences (Holton, 2005). Enthusiasm to improve work performance through learning, relies upon defined motivational readiness factors and

anticipated benefits/rewards (Holton, 2005). Perceptions of training (known as reactions) are expressed as utility reactions and behavioural intentions.

Environmental influences (essentially referring to the transfer climate or learning transfer system) encompass all personal, training and organisational factors which influence transfer of learning to job performance (Holton, 2005). Mentioned secondary, motivational and environmental influences have an effect on learning and performance outcomes, organisational learning abilities and transfer of learning (Holton, 2005; Subedi, 2004). Transfer of learning within an organisational context requires that new skills, strategies and knowledge be transferred in meaningful ways (Benander & Lightner, 2005). AET systems have to facilitate transfer of learning (Subedi, 2004). This means that organisations have to enhance workforce effectiveness and productivity by means of specified learning aimed at performance improvement (Subedi, 2004). This new culture of accountability of both the quality of learning and teaching (Kis, 2005) and its aptness for the labour market (Boarini, Martins, Strauss, de la Maisonneuve & Nicoletti, 2008) is mainstreaming andragogic dialogues.

Holton (2005) proposes that within a learning organisation, individuals are prepared to enter and participate in training (learner readiness) for they are motivated to eventually transfer learned knowledge and skills into the workplace. Such learning is often further reinforced by peer support and collaboration (Holton, 2005). Individuals experience positive personal outcomes when displaying competence (Holton, 2005). It is understood that not applying skills and knowledge learnt could lead to negative personal outcomes (Holton, 2005). Holton (2005) advocates a link between organisational goals and learning capacity (presumably resulting in higher perceived returns on investment (ROI), which is supposed to lead to greater motivation to learn). He suggests that learning is further advanced and enhanced when supervisors/managers support and reinforce on the job training (Holton, 2005). Carefully planned strategies to facilitate positive transfer of learning are required (Subedi, 2004).

Finally, individuals accept that changes in job performance will lead to valued organisational outcomes. Although this deliberation acknowledges the importance of work-based and work-integrated learning, specific enabling constructs of systemic applicability and value to a learning organisation is not evident in the South African context. The SAQA, CHE and DHET refer to a learning organisation as important for organisational success, performance and excellence (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SAQA, 2001b). However, specific reference to innovation and excellence efforts, supporting a learning organisation intent, and mention of explicit learning organisation characteristics are not provided by these entities.

AET organisations aspiring to become learning organisations cannot ignore the influence of business/strategic planning and stakeholder influences. A learning organisation supports the notion of excellence in AET (Askling & Kristensen, 2000). Such an organisation is characterised by self-regulation in its operations. Such self-regulation supports continuous learning efforts within these organisations (Askling & Kristensen, 2000). Long term planning and cooperation with influential stakeholders characterise a learning organisation (Askling & Kristensen, 2000). In addition, incisive leadership is found in learning organisations (Askling & Kristensen, 2000). Lakomski, Eacott and Evers (2017) advocate a move from leader-centrism and as an alternative, reflect more broadly on the various structural and institutional interrelationships that determine in which way an organisation has to function successfully. In the South African context, leaders responsible for AET strategy within a learning organisation have to address unique business/strategic planning needs and stakeholder influences (CHE, 2016, 2006b, 2004b; DOL, 2008; SABPP, 2014; SAQA, 2001a).

MacFarlane and Lomas (1994) state that a learning organisation requires education, training and development initiatives which address future requirements. Sarder (2016) adds that a learning organisation appreciates, supports, nurtures and considers learning at all levels within an organisation. A learning organisation views all its processes as knowledge processes (Dragomir, 2017). Organisational learning should be encouraged, and knowledge sharing mechanisms ought to be instituted, to encourage the integration of knowledge towards business objectives (Teo et al., 2015). Successful organisational learning allows employees to collectively comprehend and appreciate the value of life-long learning within a learning organisation (Sarder, 2016). Such a shared vision/mental model provides the focus for continuous participation in learning activities to enhance the capabilities and competencies of employees and thus the development into a learning organisation (Lazenby, 2007). The value of this learning manifests in terms of competence, business success and competitiveness (Sarder, 2016). Therefore, AET activities have to empower employees to achieve the organisation's goals (Noe, 2012) in order to successfully address current and future requirements (Sarder, 2016). Such empowerment has to be identified and described in enabling organisational systems (Luttrell, Quiroz, Scrutton & Bird, 2009). An emphasis on enabling organisational systems and processes is thus needed, for it leads to organisational capacity building to increase empowerment (Luttrell et al., 2009).

The idea of a learning organisation can be observed as a theoretical construct of systems-thinking and as a theory of practice (Caldwell, 2012). A learning organisation is thus viewed more as an idea than a process, requiring organisational leadership, strategy, culture, knowledge management and learning infrastructure. These aspects seem to underpin a learning organisation. It is conceded that a learning organisation not only incorporates single

and double-loop learning but further introduces triple or deutero-learning whereby an organisation learns to improve and manage its learning processes. Efficient organisational learning (supportive of systems-thinking) functions as a mechanism which enthuses the learning organisation. A favourable and probably preferred goal for South Africa's AET organisations is one aimed at becoming a learning organisation, for it can guide and facilitate continued education, learning and training. These organisations may wish to introduce innovation and excellence efforts supporting a learning organisation intent. These efforts can be guided by the strategy, policy and objectives of an organisation (CHE, 2015, 2012, 2010, 2008, 2007, 2004e, 2004f; DHET, 2014, 2010a; QCTO, 2014). Fourie (2014) adds that organisational learning has to be established as an ongoing cycle of learning within an organisation to facilitate transition towards a learning organisation. However, literature does not provide a detailed account of an AET system which considers organisational learning as a major learning organisation contributor for the South African context. Support for such a frame of mind may be influenced by an organisation's culture (Coldwell & Fried, 2012; Gill, 2010; Lazenby, 2007) – specifically to its learning culture and climate, which is presented in the next section.

2.3.3. Learning culture and climate

Organisations have to foster a system-wide culture of learning to develop into learning organisations (Jensen, 2017). The concept of learning culture and climate has its roots in organisational learning (Banerjee, Gupta & Bates, 2017). Banerjee et al. (2017) found that an optimistic perception of organisational learning culture was positively related to AET success. Al-bahussin and El-garaihy (2013) acknowledge that organisational culture has a positive relation with organisational performance, management, innovation, as well as growth and strategic advantage. A learning culture influences innovativeness, which is directly linked to long-term organisational achievements (Odor & Samuel, 2018). Todorut (2013) and Collins and Porras (2005) suggest that the management of institutional culture requires the successful implementation of new ways of thinking, strategic management and quality management. Hanson (2003) and Todorut (2013) state that such implementation will change institutional culture based on mediocrity and bureaucracy to a culture which ensures excellence and performance. Based on research findings, Banerjee et al. (2017) suggest that managers/academic coordinators have to take actions to make the tacit elements of a learning culture manifest properly through an organisation's learning climate. A need to understand the importance and presence of both learning culture and climate within an organisational context is stressed.

Singh (2013) states that training evaluation has not been culturally embedded in most organisations. James (2003) suggests that learning organisations should be characterised by democratic cultures, as this facilitates continuous improvement and adaptation at all levels. Organisations with strong democratic cultures create a set of norms, symbols/artefacts and beliefs which inspire organisational learning (James, 2003). A learning culture encourages the sharing and dissemination of what is learned, aimed at the development and success of the organisation (Bersin, 2008; Rebelo, 2006; Marsick & Watkins, 2003). The type of learning and the way in which it occurs, are determined by an organisation's culture or sub-cultures (Rebelo, 2006). Busch and Fernandez (2018) stress that the prevailing culture and climate found within the learning and teaching environment could profoundly improve and sustain organisational achievement over time. According to Schoonbeek and Henderson (2011), building learning cultures require a sequential process which needs a supporting psychological environment. Such anticipated learning environments cannot be imposed but have to be inspired, nurtured and sustained (Schoonbeek & Henderson, 2011). This emphasises the need for implementing and evaluating a learning culture and climate. The CHE and DHET support the implementation of a conducive teaching and learning environment (CHE, 2015, 2009; CHEQC, 2005; DHET, 2005). Specific instructions related to the introduction of a learning culture and climate as well as the methodology to follow when evaluating a learning culture and climate are not prescribed by these entities.

Tshukudu and Nel (2015) found that a philosophy supportive of the achievement of excellence within an organisation creates a type of culture that is conducive to elevated performance. The SABPP (2016) supports a learning culture and environment which enables optimal individual, team and organisational learning and growth in both competencies and behaviour. This can be achieved by means of continuous professional development and concerted efforts aimed at shaping the culture and aligning learning with organisational performance (SABPP, 2016). Such an endeavour supports a total quality management (TQM) approach, for an objective within the organisation is to create a climate in which all resources are used creatively and efficiently (Todorut, 2013). An organisation's learning climate should be supportive, open and ought to embrace new, critical and progressive ways of thinking for learning to take place in the workplace (Hetland, Skogstad, Hetland & Mikkelsen, 2011). Hetland et al. (2011) have identified five central dimensions of a learning climate – (1) enough time to learn and perform, (2) independence and responsibility, (3) opportunities to learn from colleagues in a supportive environment, (4) opportunities to develop, and (5) course of action on how to implement acquired learning. A positive learning climate inspires and stimulates the exchange of ideas, beliefs, information and knowledge in the organisation, which could lead to learning satisfaction (Wu et al., 2010). Mrisha, Ibua and Kingi (2017) found that a learning organisation culture significantly affects organisational performance. The existence of a relationship between

organisational performance and learning culture and climate is thus offered. The need to appraise the potential merit of such a relationship and methodologies to consider within a South African context are not evident in the literature reviewed.

Learning culture and climate can be regarded as the main contributors of an organisation's readiness and willingness to incorporate organisational learning as a business imperative. A learning organisation culture enables an entity to become more intelligent, deal with the constantly changing environment, and to capture its collective intelligence, experience and capacities (Tshukudu & Nel, 2015; Viedge, 2003). Mrisha et al. (2017: 33) state that "when a learning culture and climate is cultivated in an organisation, the organisation realises performance improvement, and a positive relationship between a learning organisation and performance improvement exists". Organisational learning and innovation are thus influenced by learning culture and climate (Bates & Khasawneh, 2005). The fusion of a learning climate and culture could provide a foundation for organisational learning. Organisational learning has to be enriched to develop and establish the learning organisation. This learning organisation evolution and affiliation is illustrated in Figure 2.5.

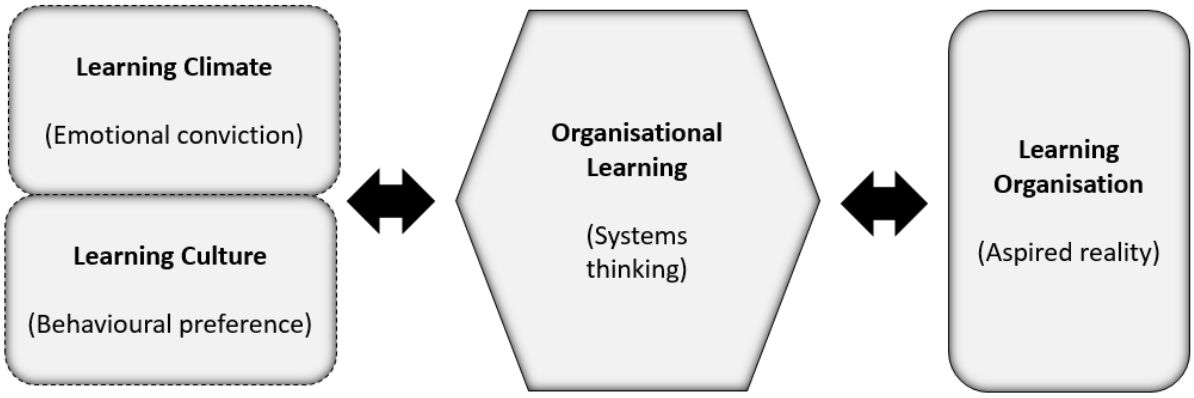

Figure 2.5: Learning organisation evolution (Own illustration)

Systems-thinking explains how organisational learning could progress from a neglectful and apathetic attitude towards people development, to managing learning in a more deliberated manner, which introduces learning-to-learn skills and methods of measuring improvement and transforming learning as a critical, constant and focused undertaking. The researcher conceives that successful organisational learning efforts could transcend an organisation towards facilitating the learning of all its members and continuously transforming itself (becoming a learning organisation). The CHE (2004b) acknowledges that a learning culture and climate is indispensable when implementing a system that enables optimal individual, team and organisation innovation and advancement. However, details explaining the functional

fit of a learning organisation culture and climate within an AET system in the South African context is not disclosed by the CHE, DHET, SABPP and SAQA. Within the South African context, a need for a conducive learning organisational climate and culture is thus acknowledged (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SABPP, 2014; SAQA, 2001b), but not detailed.

2.4. AET evaluation

2.4.1. AET evaluation within an organisational context

South Africa's economic prospects depend on the competence and productivity of its workforce (George, Surgey & Gow, 2014). Organisational learning is a strategic enabler for gaining competitive advantage and organisational success (Saadat & Saadat, 2016). Investments in organisational learning by companies in South Africa assist economic growth (George et al., 2014). In South Africa business organisations are spending more than the government's mandated level on training (George et al., 2014). Mele and Colurcio (2006) found that the concept of organisational progress, performance and improvement is closely linked to the individual and organisational process of learning and the creation of organisational learning structures. This supports the notion of becoming a learning organisation. The incipient importance of organisational learning changes is acknowledged. There seems to be little agreement on definitions, processes and models pertaining to this transformation. Findings in previous studies by Strawbridge (1994); Beder and Carrea (1988) and Feuer and Gerber (1988) do not provide context-specific strategies that could be employed to investigate and describe the necessary and preferred learning (Pratt, 2002; Holton, Bates & Ruona, 2000). Organisational context is typically fixed by resource and other restrictions (Clay-Williams et al., 2015; Krein, Damschroder, Kowalski, Forman, Hofer & Saint, 2010). It is sensible to consider adapting the AET system to the context rather than vice versa (Clay-Williams et al., 2015; Krein et al., 2010). The importance of organisational context has been cited by Lee, Vargo and Seville (2013); Meadows (2008) and Booth et al. (2007) as an important aspect of performance modelling and evaluation. The SABPP (2014) supports a systematic approach to developing and implementing AET strategies, policies and plans aligned to the intent of the organisation which may enable achievement of its objectives. Determining the benefits of such a systematic approach require AET evaluation within an organisational context.

Shenge (2014) states that there is need for organisations to critically evaluate training. Ramsay and Fulop (2015) add that the primary contribution of evaluations is that it enhances understanding of impending issues. The overall principle of the evaluation of AET is critical to the implementation and management of the learning organisation (Tshukudu & Nel, 2015).

Otala (2008) states that a learning organisation evaluates itself and uses derived information to continuously renew its actions. Keen and Berge (2014) found that in general, few organisations have mastered training evaluation. It has become crucial that organisations in each sector of the economy have a clear learning and development strategy, which will guide the development of capacity and sustainability to realise their vision through invention and building employee skills (SABPP, 2016). This necessity is accentuated by a Deloitte global survey (2015: 4) which found that only 40% of respondents rated their organisations as “ready” or “very ready” in learning and development in 2015, compared to 75% in 2014.

Measuring the effectiveness of AET initiatives is a necessary component in improving productivity, as well as in developing human capital (Aziz, 2015; Ramos, Rey-Maquieira & Tugores, 2004; Schonewille, 2001). Organisations would like to quantify the training benefits with regard to the financial investments made for training, and establish whether the knowledge and skills acquired in training courses, are in fact used in the working environment (Grohmann & Kauffeld, 2013; Kauffeld, Bates, Holton & Müller, 2008). Many organisations do not provide evidence that money spent on employee education, training and development has influenced the organisation's overall performance (Dave & Singh, 2014; Rothwell & Kazanas, 2008). Spitzer and Conway (2002) found that a reason for the lack of training evaluation is a lack of clarity regarding linking AET to business results. Schermuly, Schröder, Nachtwei, Kauffeld and Gläs (2012) state that education professionals have to systematically evaluate the benefits of training. This is important because the impact of training programs will continuously be questioned in future (Rothwell & Kazanas, 2008).

Rothwell and Kazanas (2008) found that most organisations never assess whether the money spent on employee training and development has advanced the organisation's overall productivity or improved individual performance. Additionally, Pineda (2010) discovered that only a few organisations evaluate training in depth, due to the difficulty involved and the lack of valid instruments and viable models. Marock et al. (2016) state that documenting the theory of change, developing a logical framework and conducting monitoring and evaluation, in relation to what was planned and expected at the outset, may be very difficult. Aziz (2015) notes that information on evaluating training effectiveness via a general instrument is limited despite its obvious need in education. The view of Aziz is advanced by Dave and Singh (2014) and Pineda (2010) who argue that evaluation of adult education, training and development has been examined from diverse perspectives. Very few of these perspectives evaluate adult education, training and development in depth, due to the effort involved and the deficiency of valid instruments and practical models (Pratt, 2002). This limitation presented in the literature may be attributed to uncertainties about the intention, nature and process to be followed concerning AET evaluation.

The most problematic part of a training function is the evaluation part (Sahoo & Mishra, 2017). The literature provides evidence of goal or objective-based training evaluation models, for example Donald Kirkpatrick's Four Levels Model, Jack Phillips Return on Investment (ROI Model), Hamblin's Five Levels Model, Guskey's Critical Levels Model, The Indiana University Taxonomy, Industrial Society Stages Model, Kearns and Miller KPMT Model, Nine Outcomes Model and Kaufman and Keller's Organizational Elements Model (Duignan, 2003). Mavin et al. (2010) and Tamkin et al. (2002) suggest that these models provide simple and pragmatic approaches that only help practitioners think about training programmes. Literature addressing training evaluation also emphasises the quality of content, delivery and decisions concerning the continuity of the training programme (Sahoo & Mishra, 2017). Griffin (2012) states that most organisations merely calculate the impact and return of their investment in AET by evaluating learning, without considering the improvement of organisational performance. Sharma (2016); Aziz (2015); Ford (2014); Noe (2010) and Brinkerhoff (2006) argue that these views of evaluation offer a partial measure of the entire organisational AET system. For example, the training evaluation models designed by Kirkpatrick and Philips consider the results of training (results which indicate the extent of improved individual and organisational performance), in terms of training programme effectiveness (Sahoo & Mishra, 2017; Shenge, 2014). Guerci et al. (2010) suggest that Kirkpatrick's four levels of evaluation provide for an overly simplified vision regarding the effectiveness of training, mainly that it does not consider the influences of the organisational context. These goal or objective-based models do not holistically reflect AET evaluation. Furthermore, AET organisations mostly use only the first two levels of Kirkpatrick's model (Sahoo & Mishra, 2017; Prasad et al., 2016; Lee-Kelley & Blackman, 2012). Although many training programme models exist, there is no consensus on an integrative evaluation model for training courses (Park, Welch & Sriraj, 2016; Aluko, 2014).

The use of goal or objective-based models provides valuable programme feedback, but does not deliver comprehensive AET system insights. The researcher concludes that these models emphasise and regard evaluation of AET as an essential aspect of a training programme. Evaluation is thus restricted to a process which critically examines a programme. Evaluation criteria are specific to individual programmes. Thus, evaluation of AET means merely assessing the impact of training on the trainee's performance and behaviour. Since these goal or objective-based models primarily focus on the evaluation of training programmes in a closed organisational setting (instead of an open and complex multi-stakeholder context), the use of a single programme-based model seems inadequate when evaluating an entire organisational system. As a result, evaluating adult education, training and learning from a systemic perspective, deserves a much more comprehensive and detailed investigation.

Evaluation processes archetypally consider more than the mere output element of a process. Zinovieff (2008: 2) defines evaluation as the "systematic acquisition and assessment of information to provide useful feedback about some object". According to Zinovieff (2008), evaluation literature refers to three dimensions of evaluation: process, outcome and impact. Process evaluations describe and assess programme resources and undertakings (Zinovieff, 2008). Outcome evaluations are aimed at determining the immediate or direct effects of the programme on participants (Zinovieff, 2008). Impact evaluations look beyond the immediate impact and results of policies, instructions or services to identify longer-term as well as unpremeditated programme effects (Zinovieff, 2008). Evaluation considers process, outcome and impact variables (Wankhede & Gujarathi, 2012; Zinovieff, 2008). Historically, these variables support a systemic evaluation process (Bushnell, 1990; Warr, Bird & Rackham, 1970; Stufflebeam, 2003). Zinovieff (2008) advises that systematic evaluation can be used as an approach to provide the information needed for continuous improvement. Tamkin et al. (2002) urge businesses to conduct the best AET evaluation possible with the aim of providing information which is concomitant to needs of the organisations. Such a systematic and context-specific approach highlights a need to move beyond learning programme evaluation and to include the entire organisational AET system. South Africa's AET organisations require comprehensive frameworks and processes to be aligned to policies and practices in relation to the core functions of adult teaching and learning, research and community engagement, as well as management, governance and administration (CHE, 2014a). This fundamentally favours the design, development and implementation of a systems-approach to confirm a comprehensive evaluation.

Tshilongamulenzhe et al. (2013) suggest that the appraisal of occupational learning in South Africa should include initiation, execution, monitoring and evaluation phases. Initiation refers to external and internal environmental scanning and includes legislative guidelines, a needs analysis, and the resources required to achieve the objectives of occupational learning programmes (Tshilongamulenzhe et al., 2013). Execution entails focusing on the ways in which an organisation plans, designs, implements and manages occupational learning programmes and includes administrative processes, quality assurance, learning programme specifications and learning programme design and development activities (Tshilongamulenzhe et al., 2013). Monitoring and evaluation refer to the systematic implementation and post-implementation monitoring and evaluation; including observation and problem solving, monitoring and evaluation and occupational competence (Tshilongamulenzhe et al., 2013). These four phases do not measure all facets of organisational impact effectively, for example they do not take fully into account the original business training and development requirements (Tamkin et al., 2002). To properly evaluate AET requires managers to think through the purposes of the evaluation, the results of the evaluation, the points or spans of points at which

measurements will be taken, and the overall framework to be utilised (Shenge, 2014; Nickols, 2000). Only then can training and its evaluation produce gains that advance an organisation's overall set goals (Shenge, 2014; Nickols, 2000).

Jasson and Govender (2017) state that South African organisations have to drive education, training and development as a national priority. AET efforts introduced by these organisations are criticised as having too little business insight to contribute meaningfully to organisational intent and performance (Jasson & Govender, 2017; Erasmus et al., 2011). An AET system evaluation should align closely to an organisation's business processes (Keen & Berge, 2014; Bersin, 2008). Phillips, Phillips, Stone and Burkett (2007) and Opperman and Meyer (2008) mention that training evaluation has to at least identify and improve education, training and learning processes, show alignment with business strategy, and meet the demands of legislation. The SABPP (2016) acknowledges that an understanding of the business model and the business vision, is required to ensure that organisational learning and development is driven by value impact, product delivery and service enhancement. Measuring the success of these interventions and comparing them to organisational performance, now becomes compulsory (SABPP, 2016).

The strategic objective of South Africa's National Plan for Higher Education (Ministry of Education, 2001) is to improve the supply of high quality skills (particularly scarce skills) which are more responsive to societal and economic needs (Favish, 2003). This plan does not provide clear pointers to evaluate skills development, other than broadening participation rates and improving mobility through the AET system (Favish, 2003). The Council on Higher Education Quality Committee (CHEQC) has introduced quality assurance to South Africa's AET organisations to affirm an organisation's own evaluation of the extent to which it has met quality management criteria (Boughey, 2010). Although quality assurance frameworks and mechanisms are in place to a greater or lesser extent, the degree to which they are implemented varies significantly (Boughey, 2010). Furthermore, quality assurance efforts tend to focus on the alignment of all the elements of a learning programme, in order to ensure that the programme is fit for purpose (Boughey, 2010). These variations in thinking and action, pertaining to review and evaluation foci, imply a need for organisations to appraise AET evaluation practices. The need for a more holistic systemic approach for evaluation purposes is contemplated in the South African context, which has to be guided by an evaluation of organisational enablers, processes and results. In the absence of such a holistic approach, evaluation problems such as inappropriate focus, unsuitable criteria, predisposed findings, unjustified conclusions, superfluous recommendations and inadequate interpretations may become apparent (Stufflebeam, 2000).

2.4.2. AET system-based evaluation

The literature on evaluation provides options which have moved further away from goal or objective-based models (Tamkin et al., 2002). System-based evaluation models are offered as an alternative. Zinovieff (2008) suggests the use of meta-evaluation to facilitate system-based evaluation. Meta-evaluation focuses on evaluating the evaluation (Zinovieff, 2008). The purpose of meta-evaluation is to validate the evaluation inputs, process, outputs and outcomes (Zinovieff, 2008). The description offered by Zinovieff (2008) is supportive of training evaluation guided by a process of collecting and measuring the outcomes needed to determine whether training is effective. The CHE (2006b) acknowledges that an AET evaluation process should at least consider organisational activities aimed at facilitating equity, redress, transformation and striving towards continuous improvement. Klein (2016) defines a need for an AET system-based evaluation framework which will enable the evaluation of the full scope of training activities including effectiveness, cost, quality and efficiency-related activities. This necessity implies that the main aim of evaluation is to improve AET by establishing which training processes are successful in achieving their stated objectives. Process-based theories and associated methodologies have been observed. These theories and methodologies support systems-thinking (Creemers & Kyriakides, 2012).

Evaluation foci differences are proposed by different models. For example, CIRO (Context, Input, Reaction, Outcome) Model (Warr et al., 1970), the CIPP (Context, Input, Process, Product) Model (Stufflebeam, 2003) and the IPO (Input, Process, Output) Model (Bushnell, 1990) take account of specific process components to be considered for systems-based evaluations. Whereas, the TVS (Training Valuation System) Model (Fitz-Enz, 1994) and Pulley's Responsive Evaluation Model (Pulley, 1994) stresses the importance of data collection and analyses from a system-based perspective. Bramley's Organisational effectiveness model (Bramley, 1996) and the Training Evaluation Model (Armstrong, 1996) describe different result areas to consider when performing system-based evaluations. Examples of specific focus areas are provided by Neirotti and Paolucci (2013) (an exploration of the relationship between training and innovation, using a resource based approach that highlighted organisational learning and labour studies), Margaryan, Littlejohn and Milligan (2013) (a study of professionals' self-regulatory strategies which support the planning and accomplishment of learning goals at work) and Strohmeier (2013) (a study on managing human resources by building and maintaining individualised and mutually valuable relationships with employees, based on information technology). Another evaluation perspective is presented by Preskill and Torres (1999), who introduce a need to connect evaluation to the organisation's mission and strategic plans. Kaplan and Norton (1992) consider an all-encompassing process by attempting to account for business management by

measuring across four different perspectives: finance, customers, internal business processes, and learning and growth. Simosi (2012) and Chuang (2012) consider evaluation aspects beyond the traditional borders of the organisation, for example, the combined effects of self-efficacy and organisational culture as well as globalisation and technology advancements. The SABPP (2014) accepts that a systematic approach to identify, develop, implement and evaluate AET strategies, policies and plans, should be aligned to the intent of the organisation. Meta-evaluation can employ system-based evaluation models, for such models are more useful in terms of thinking about the overall context and situation. These models support the notion of system evaluation. The question arises as to whether the contemporary system-based models consider all possible influences, variables and contingencies. Contemporary system-based models appraised are the Learning Transfer System Inventory, the Dimensions of the Learning Organisation Questionnaire, The Learning Company Concept, the Balanced Scorecard, and the Learning Organization Diamond Model.

Holton (2005) asserts that training evaluation should include learning, individual performance and organisational performance. Holton et al. (2000) developed the Learning Transfer System Inventory (LTSI) which consists of 16 factors and has been validated by over 8,500 participants in more than seven languages (Holton et al., 2000). The LTSI assesses individual perceptions of barriers and enablers to the transfer of work-related learning (Bates et al., 2012). The instrument measures 16 dimensions likely to influence training transfer; 11 specific factors, which relate to the particular training programme attended by the trainee (learner readiness, motivation to transfer, positive personal outcomes, negative personal outcomes, personal capacity for transfer, peer support, supervisor support, supervisor sanctions, perceived content validity, transfer design and opportunity to use), and five general factors, which are likely to influence any training programme conducted (transfer effort/performance expectations, performance outcome expectations, openness to change, performance self-efficacy and performance coaching).

The LTSI identifies the contributory factors which aid understanding of training transfer. It does not provide constructs which represent the dynamic relations associated with training organisation performance, possibly due to its focus on training transfer. Garvin, Edmondson and Gino (2008) assert that a supportive learning environment, concrete learning processes and practices, and leadership behaviour, contribute to the development of learning and adaptability in organisations.

Another possibility to consider is the Dimensions of the Learning Organisation Questionnaire. Dimensions of the Learning Organisation Questionnaire (DLOQ) is a survey developed by Watkins and Marsick (1997) and is used to assess learning activities within the organisation

(Basim et al., 2007; Moilanen, 2001). This survey investigates continuous learning opportunities (continuous learning), promotion of inquiry and dialogue (dialogue and inquiry), collaboration and team learning (team learning), systems to capture and share learning (embedded systems), empowerment of people towards a collective vision (empowerment), how the organisation connects to its environment (systems-connections), leaders as role-models and their support towards learning (provide leadership), the financial health and resources for growth (financial performance) and enhancement of products and services due to learning and knowledge capacity (knowledge performance) (Basim et al., 2007; Moilanen, 2001; Watkins & Marsick, 1997). The DLOQ identifies specific organisational learning activities and provides insight into organisational enablers and performance aspects which have to be considered in support of learning transfer. The full extent of organisational performance variables that link to strategic objectives is not explicitly described in the DLOQ.

The Learning Company Concept advanced by Pedler, Burgoyne and Boydell (1991) acknowledge that an organisation needs to facilitate the learning of all its members while continuously transforming itself to meet its strategic objectives. The following aspects were identified to be taken into consideration: (1) incorporating a learning approach to guide strategy formulation, (2) encouraging and creating scope for participative policymaking, (3) ensuring focused knowledge acquisition, (4) introducing formative accounting and control of learning initiatives, (5) confirming internal knowledge exchange mechanisms, (6) rewarding initiative and flexibility, (7) providing enabling structures, (8) utilising boundary workers as environmental scanners, (9) facilitating intercompany learning, (10) nurturing a learning climate and (11) motivating self-development for everyone (Yang et al., 2004). This concept emphasises aspects of learning at all organisational levels (Yang et al., 2004). In terms of potential execution, Choy, Bowman, Billet, Wignall and Haukka (2008) suggest that effective employment-based training models have to be didactically sound, have to lead to quality skill formation, guarantee positive outcomes for both individuals and the organisations, function well and be effectively ratified and sustained over time. These aspects direct organisational learning in line with its strategy and show potential to encourage continuous improvement. According to Pedler et al. (1991), the Learning Company Concept emphasises the facilitation of individual learning in order to continuously transform the entire organisation and its context. However, emphasis on flexibility, collaboration, innovation and creativity within a systems-view is not offered (Wang & Ahmed, 2002).

The Balanced Scorecard is a strategic planning and measurement tool that is used to align business activities in general to the organisational strategy (Shenge, 2014). The Balanced Scorecard criteria are valuable as they stress the need to evaluate organisational performance. Kaplan and Norton developed the Balanced Scorecard – a set of performance indicators which

provide a comprehensive view of organisational performance (Kaplan & Norton, 2001). Both financial and non-financial indicators which could keep track of an organisation's key success factors serve as focus areas (Jasson & Govender, 2017; Kaplan & Norton, 2001). The Balanced Scorecard involves four important perspectives: (1) financial goals, (2) customer perspective, (3) internal processes and (4) learning and growth (or innovation) (Kaplan & Norton, 1992). The Balanced Scorecard considers learning and development as a business success element with specific reference to innovation and learning in terms of operating efficiency, employee satisfaction, and continuous improvement (Shenge, 2014). The Balanced Scorecard has been accepted by educational institutions, mainly because organisations are managed by means of strategic concepts to meet demands and to manage change (Asan & Tanyas, 2007). The Balanced Scorecard measures the impact of AET initiatives on strategic goals. AET activities are evaluated as part of other general activities and not as a specific organisational system. Kennerley and Neely (2002) found the Balanced Scorecard to be lacking a competitiveness dimension.

Another option which deserves discussion, due to its organisational performance focus, is the Learning Organization Diamond Model. The Learning Organisation Diamond Model is based on the work of Moilanen (1996). The Learning Organisation Diamond Model includes two different levels and four different elements (Moilanen, 2001). The levels refer to individual and organisational levels. The four elements are (1) finding purpose (from the vision or strategy of an organisation), (2) questioning (reflecting on the significance of the value proposition and competitiveness of the organisation), (3) empowering (different systems for learning enhancement) and (4) evaluating (assessing the development of the learning organisation) (Moilanen, 1996). An addition to the model was made when management and leadership was included as another element (it was found to be vital in learning organisations) (Moilanen, 2001). Alazmi, Alazmi and Alqahtani (2013) found that the Learning Organisation Diamond Model pays little attention to the mediating role of innovation and knowledge transfer in the relationship between learning organisation and organisational performance.

Dahiya and Jha (2011) found that system-based training evaluation models do not always address the collaborative process of evaluation. The aforementioned contemporary system-based models did not provide constructs which represent the dynamic interactions associated with training performance multiplicities. These models did not provide descriptions of possible patterns and associated processes involved in each step of the evaluation system. The purpose of each evaluation model and its relevant parts are decided by the modeller. Each application and focus area of these models retains an essence of custom design, although following a pattern. Wiesenberg (2000) suggests that AET evaluations ought to be guided, designed and adapted by considering the entire situation and taking organisational

characteristics, institutional circumstances, the nature of the evaluation and resource constraints into account. For example, Tennant, Boonkrong and Roberts (2002) state the importance of creating a climate where evaluation is seen as a development instrument. The role and impact of the specific context within which an evaluation is sought, is exemplified. Mavin et al. (2010) underline the importance of linking learning with the organisation's overall strategies and business objectives. This implies that those responsible for learning, development and evaluation, need to have a good understanding of these strategies and objectives and have to deliberate the key issues with interested parties (Mavin et al., 2010; Anderson, 2009). Organisational strategy has to ultimately direct and guide AET evaluation. Knowledge of these key issues and possible similarities between key issues may assist with the design and development of a general model. Ritzmann et al. (2014) argue that it is necessary that researchers offer AET organisations some practical, system-based and plausible evaluation methods that can be flexible based on organisational objectives and context.

In the South African context, the SABPP (2014) urges AET organisations to develop an integrated AET measurement and reporting framework which is linked to organisational performance. The CHE (2006b) recommends that overall organisational achievement should rely on strategies, activities and performances which follow an integrated systems-approach. According to the CHE (2001) AET evaluation frameworks should follow a systems-approach. The South African Qualifications Authority (SAQA, 2006) argues that system variables may be measured in terms of outputs (what is produced or delivered through an activity), outcomes (the immediate, short-term impact achieved through the results) and objectives (the long-range consequences of the outcomes). Hayes, Scott and Abraczinskas (2016) identified a need to combine different evaluation methods which allow organisations to make decisions concerning organisational performance. The purpose is to analyse the effectiveness of the whole system and to enhance the interfaces between the sub-systems in order to increase the effectiveness of the entire system (Singh, 2013). Nonetheless, the SABPP and CHE do not advance details of such an evaluation framework and agreed metrics which support performance excellence criteria. This limitation can be addressed by presenting generic system-based evaluation constructs which can be adopted and adapted to suit South Africa's AET organisations.

2.4.3. AET evaluation within a learning organisation context

The CHE (2016) emphasises a need to ensure and evaluate AET excellence in South Africa. Extending the evaluation foci to include learning organisation characteristics is a step towards performance excellence (Mohd-Zainal et al., 2016). This visionary image enables organisations to understand their contexts, make sense of their practice and exploit their own unique situations to meet strategic and social goals (Nyhan, Cressey, Tomassini & Poell, 2003). The learning organisation is regarded as one which has the capacity to integrate people and structures to advance continuous learning and change (Yang et al., 2004). This integration relies upon supportive mechanisms and enabling systems which increase learning and innovation within an organisation (Zdunczyk & Blenkinsopp, 2007). When an organisation decides to follow a process of systemic development into the learning organisation, it has to evaluate the maturity of different organisational systems, sub-systems and departments (Jucevičienė & Leonavičienė, 2007). This statement draws attention to focus areas which are considered by learning organisations striving towards AET excellence.

Watkins and Marsick (1993) use the Dimensions of the Learning Organisation Questionnaire to describe seven dimensions of a learning organisation, being: (1) creating continuous learning occasions, (2) encouraging inquiry and dialogue, (3) inspiring collaboration and team learning, (4) empowering people toward a mutual vision, (5) establishing systems to capture and share learning, (6) linking the organisation to its environment and (7) providing strategic leadership for learning. The Dimensions of the Learning Organisation Questionnaire was developed as a diagnostic tool to measure changes in organisational learning practices and culture (Watkins, Milton & Kurz, 2009; Marsick & Watkins 2003; Watkins & Marsick, 2003). The dimensions and descriptions of a learning organisation, as postulated by Watkins and Marsick (1997) and Watkins et al. (2009), are presented in Table 2.1 below.

Table 2.1: Dimension descriptions and performance indicators of a learning organisation

Dimension descriptions	Explanation
Create continuous learning opportunities.	Learning is designed to enable people to learn in the work environment and opportunities are provided for continued education/development.
Promote inquiry and dialogue.	People gain useful reasoning skills to express their outlooks. They learn to listen and inquire into the views of others. The culture is transformed to support questioning, feedback and experimentation.
Encourage collaboration and team learning.	Work is designed to use teams to access different modes of thinking. Teams are expected to learn and work together. Collaboration is valued by the culture and rewarded.

Establish systems to capture and share learning.	Technology systems to share learning are created and integrated with work.
Empower people toward a collective vision.	People are involved in setting, owning and implementing a shared vision. Responsibility is distributed close to decision-making so that people are inspired to learn for what they are held accountable.
Connect the organisation to its environment.	People are helped to see the influence of their work on the entire business. The organisation is linked to community.
Leaders model and support learning.	Leaders model, inspire and support learning. Leadership uses learning strategically for business results.
Performance indicators	Explanation
Financial performance.	The financial health and resources available for progression.
Knowledge performance.	Enhancement of products and services due to learning and knowledge capacity.
Mission Performance.	Extent to which the organisation is fulfilling its mission in terms of client services.

An analysis of this questionnaire indicates that individual and group level learning activities (creating continuous learning opportunities, promoting inquiry and dialogue, encouraging collaboration/team learning, and empowering people toward a collective vision) have indirect but significant effects on organisational outcomes (Watkins et al., 2009; Yang et al., 2004). Three organisational level variables (linking the organisation to its environment, creating systems to capture and share learning, and providing strategic leadership for learning) serve as mediators of the relationship between team and individual learning activities and organisational results (Watkins et al., 2009; Yang et al., 2004). Based on the findings of a study by Kim, Egan and Tolson (2015), rigorous empirical evidence to verify the seven dimensions of the learning organisation measured by the Dimensions of the Learning Organisation Questionnaire could not be offered. However, the seven dimensions frame elements that can possibly be considered when investigating a learning organisation's learning practices and culture (Kim et al., 2015).

Further focus areas which are applicable to learning organisations striving towards AET excellence, include structure, process, sub-system processes and the relations between sub-systems. Anderson (2014) found that there is a lack of structured processes to create a learning strategy linked to business objectives and measurement of effectiveness. The CHE (2004f) state that AET system evaluations should be action-oriented and informed by organisational strategies. The Dimensions of the Learning Organisation Questionnaire lists financial, knowledge and mission indicators as learning organisation system results (Watkins et al., 2009; Marsick & Watkins 2003; Watkins & Marsick, 2003). Eseryel (2002) and Coffman and Beer (2011) state that evaluation process and methodologies have to be used to critically and painstakingly review education strategies. Learning organisations have to be able to

measure the effect of adult education, training, development and learning, to assess quality, alignment with strategy and impact on organisational capability (SABPP, 2014; Pineda, 2010). This view could be expanded by considering that viable, sustainable and enduring evaluation strategies not only provide an organisation with feedback regarding professional practice, but inform commercial performance, reflect on planning and offer best practice(s) (Preskill & Mack, 2013; Louw, 2012; Preskill & Boyle, 2008a & b; Rossi et al., 2004; Duignan, 2003). Organisational factors such as management support, training significance, transfer climate, and availability of resources and technology to support learning, have to be included in evaluating transfer of training (Holton & Baldwin, 2000). Mavin et al. (2010) identified a requirement to continuously monitor the added value which can be provided through evaluation. The CHE (2004f) encourages AET organisations to strive for excellence in terms of system outputs. An evaluation strategy which is aligned to systems-thinking and organisational transformation, which may impact the entire organisational AET process (including the organisational inputs, processes and performance results) of South Africa's AET organisations is not specified by the CHE.

Garvin et al. (2008) state that the ways to properly evaluate the performance aspects of learning organisations are lacking and it is the reason why many organisations fail to become learning organisations. Consensus on the definition and perception of the learning organisation concept does not seem to exist amongst researchers (Yeo, 2003). Nyhan et al. (2003) found that there has been a move away from an idealistic notion of a learning organisation to a more realistic and pragmatic assumption. Accordingly, the learning organisation has strategies, systems and plans in place to transform learning into action, in order to adapt more quickly to internal and external demands which it faces (Sarder 2016). Organisational performance is the product of these organisational capabilities which involves specific processes, activities and competences, which ensure competitive advantage (for example organisational learning and innovativeness) (Franco-Santos, Lucianetti & Bourne, 2012). These capabilities have to be systematically planned, structured and strategically linked to broader organisational processes and sub-system processes in order to support organisational transformation (Chrysler-Fox & Roodt, 2014; Ramlall, 2006). In addition, a systems-view can provide options to consider regarding possible evaluation design orientations, applicable collection methods, data analysis procedures, reporting formats and dissemination options. Such a detailed AET system evaluation (within a learning organisation context) as applicable to South Africa's AET organisations is not offered in the literature reviewed.

2.5. Organisational performance evaluation in terms of excellence

2.5.1. Organisational performance evaluation of AET organisations

Organisational performance evaluation is a systematic process for obtaining valid information about the performance of an organisation and the factors that affect performance (Lusthaus et al., 2002). Such an evaluation focuses on the organisation as the primary unit of analysis (Lusthaus et al., 2002). This statement is also applicable to performance evaluation of AET organisations (Tshukudu & Nel, 2015; Somolekae, 2010).

The South African Government encourages the development of a multiplicity of AET providers operating as equals in a market environment (DHET, 2013, 2012). Making use of a more varied and competitive range of AET providers has the potential benefit of improved flexibility, quality and cost-effectiveness (DHET, 2013, 2012). AET organisations have to perpetually renew their skills and resources to maintain their competitive advantage (Santos-Vijande, López-Sánchez & Trespalacios, 2012; Wu, 2010). Aziz (2015) and Brinkerhoff (2006) state that AET evaluation could be used to determine organisational performance. The purpose of evaluation is to influence decision-making or policy formulation through the provision of empirically driven feedback (Zinovieff, 2008). Improved mechanisms for the monitoring and evaluation of AET require specific criteria and performance indicators. It is important to develop the capability or have the competency to react effectively in changing AET needs, which will ensure the survival of an organisation and retain a sustainable competitive advantage (Chrysler-Fox & Roodt, 2014; Ramlall, 2006). Such efforts constitute generally agreed-upon events that consider the myriad factors that constitute organisational performance. Realistic and relevant performance measures, targets and time-frames are needed to ensure that the implementation and management of the agreed-upon events are effectively monitored and evaluated. In the South African context, AET system evaluation requires that organisations at least measure the quality and cost-effectiveness of training programmes, levels of satisfaction amongst training course participants, the relevance of training and education programmes to actual work situations, the impact of such programmes on productivity and performance, the levels of congruity between training and education programmes, and the achievement of individual and organisational needs (DHET, 2013, 2012). The DHET (2013, 2012) supports system evaluation which includes the establishment of evaluation targets, evaluation mechanisms and criteria. A specific and detailed system evaluation model, which considers organisational business modelling, is not detailed by the DHET.

Deloitte (2015) found that organisations want to radically simplify work environments, practices and processes, in favour of more streamlined approaches. Global trends such as growth,

volatility, change and disruptive technology drive organisations to shift their underlying business model (Deloitte, 2015: 11). A business model is a conceptual tool comprising of objects, concepts and their relationships with the organisational strategies, objectives, structures and systems (Drozdová, 2008; Osterwalter, Pigneur & Tucci, 2005). Business models are used to define an organisation's competitive strategy (Bocken, Short, Rana & Evans, 2014; Rasmussen, 2007). Teece (2010) acknowledges that a business model enunciates the logic, data and other evidence which support a value proposition. It describes the design of the product or service offered and provided to its market (Bocken et al., 2014; Rasmussen, 2007; Magretta, 2002). A business model offers the strategic choices and its operations, which enable communication, analysing, testing and validating the cause-effect relationships which are derived from the adopted strategy (Shafer, Smith & Linder, 2005). Sustaining excellence requires attention to strategic objectives, organisational capabilities, transformation planning, managing change, and continuous improvement efforts (Dewar, Blackburn, Nielsen, Irons, Keller, Meaney, Ulosevich & Wood, 2011 in McKinsey and Company, 2011). Although the notion "business model" is not commonly used by AET organisations, this kind of approach is necessary from the viewpoint of the changes in AET systems and technologies (Drozdová, 2008).

In South Africa's AET context, reference is made to logic modelling as a possible business model and framework (DHET, 2015a). Logic modelling (consisting of an input – process – output sequence) could help to describe the relationship between evaluation activities and outcomes (Glenaffric, 2007). Use of a logic model by learning organisations aids those involved in the development of evaluation, and its stakeholders understand the sequence of related events which connect the planned activity with the anticipated results (Glenaffric, 2007; Dikmen, Birgonul & Kiziltas, 2005). This specific type of business model could be used as a vehicle and a source for innovation by learning organisations in support of a long-term competitive advantage (Teece, 2010; Ramlall, 2006). A concern is that logic models often pay very little attention to the interaction between system interventions and context (Greenhalgh & Papoutsi, 2018; Fletcher, Jamal, Moore, Evans, Murphy & Bonell, 2016; Hawe, 2015; Ling, 2012). Mohamed, Hui, Rahman and Aziz (2014) propose the use of strategic performance measurement, for it is an effective way to evaluate and enhance organisational internal capabilities and competitiveness. Strategic performance measurement includes financial and non-financial measures which are derived from organisational strategy (Mohamed et al., 2014). Strategic performance measurements provide the basis for the evaluation and improvement of an organisation's business model/system (Mohamed et al., 2014). Strategic performance measurement focus areas prescribed by the Department of Education (DHET, 2002), require that AET organisations have to design their educational offerings to realise their different

visions, missions and plans, and meet the varying needs of the clients, communities and regions that they serve.

AET organisations are enterprises/businesses providing educational services (Drozdová, 2008). If these organisations wish to provide services in a competitive environment and at a sought-after level, they must adhere to business management principles similar to those in other industry and service sectors (Drozdová, 2008). Similar to other industries and organisations, it should also be natural for AET organisations to change their existing systems, processes and activities to create a new business model (Drozdová, 2008). Changing AET processes, activities and practices, require the creation of business models (Drozdová, 2008). The literature reviewed does not explicitly detail organisational business models which include performance aspects, associated evaluation systems and criteria for AET organisations in South Africa. Identifying and describing a general business model for South Africa's AET organisations serves as the basis for specifying and understanding the system elements and criteria which may contribute to organisational results, innovation and excellence.

2.5.2. Learning organisation performance indicators and criteria

The lack of understanding about the nature of a business model in South Africa's AET organisations may be resolved by determining realistic expectations about the nature and purpose of organisational performance indicators and criteria. Organisations committed to continuous improvement, innovation and competitiveness in business operations, need to introduce learning organisation qualities (Alipour, Khairuddin, Ismi, Uli & Karimi, 2011). The objective of such an undertaking is to identify and describe organisational indicators and criteria which lead to performance improvement in learning organisations. The SAQA, CHE and DHET suggest that the concept of a learning organisation be introduced within the AET sphere (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SAQA, 2001b). In order to adapt to changing environmental circumstances and to increase their competitive abilities, learning organisations find themselves in an unceasing process of innovation, change and development (Chrysler-Fox & Roodt, 2014; Tshilongamulenzhe et al., 2013; Kruss et al., 2012; Basim et al., 2007; Stroh, 2003). AET organisations can frame their business models in terms of the learning organisation concept in order to remain relevant and competitive.

Measurement of the performance of a learning organisation cannot be reduced to only a single indicator, possibly due to such performance being subjected to different evaluation foci, phases and practices. Learning organisation performance is concerned with organisational strategies, leadership, client satisfaction, business activities, support in business activities, relations with

influencing groups, organisational climate, the value chain and macro-environmental forces (Dikmen et al., 2005). Davids and Waghid (2017) and Lee et al. (2013) found that resilient organisations are dependent on strong leadership, an awareness and understanding of their operating environment, possess a capability to manage vulnerabilities, and to timely adapt in response to rapid change. Singh, Darwish, Costa and Anderson (2012) and McClure and Jaeger (2008) found that internal and external factors have the potential to directly and indirectly impact upon an organisation's performance. Internal factors include research and product development, productive and allocative efficiency, market power, marketing strategies, organisation structure, leadership, short and long-term growth objectives and strategies (Singh et al., 2012). External factors include the demand for the organisation's products and services, market structure, competitive conditions, political, economic, social, legal and technical environment, industry incentives and economic policies (Singh et al., 2012). Holton and Naquin (2005) and Zidan (2001) accentuate a need to ensure that all organisational activities are planned, delivered and evaluated in an ethical, compliant manner. The CHE (2004f) requires AET organisations to consider all system elements, processes and links associated with policy requirements, organisational strategy, academic and educational standards, process management, teaching and learning operations, research projects, financial accountabilities, benchmarking, organisational culture and change/transformation management initiatives. According to Dervitsiotis (2004), consideration must also be afforded to organisational complexities, such as organisational efforts to adapt to change, limits imposed due to relationships with other entities, characteristics within the organisation and its operating environment. However, the CHE (2004f) requirements do not detail these complexities associated with learning organisation performance indicators and criteria.

Selecting performance indicators and criteria is guided by purpose and context. Performance criteria introduce expectations about the relative significance of possible measures of performance in relation to organisational goals and the interests of stakeholders (McClure & Jaeger, 2008; Rogers & Wright, 1998). From the perspective of internal processes, it is necessary to identify the critical processes in which the organisation has to be very successful in order to achieve organisational strategies and objectives (Fairholm, 2009; Ristić & Balaban, 2006). Bocken et al. (2014) and Richardson (2008) propose a consolidated view by referring to the value proposition (the offer and the target customer segment), the value creation and delivery system (key activities, resources and technology) and the value capture system (how to earn revenues). This consolidated view suggests that a systems-approach can be followed by AET organisations when designing and developing a business model which favours the notion of a learning organisation. Toni and Tonchia (2001) suggest that a systems-approach has to follow some type of hierarchy, where units of performance are dealt with separately at first but integrated at a later stage, and guided by the value chain. According to the Financial

Executives Research Foundation (FERF), organisations should fully integrate their planning and performance measurement processes and create mechanisms to link strategy, operational planning, performance measurement and management reporting to create more value for the entire organisation (FERF, 2003). In the South African context, learning organisation performance indicators and criteria have not been identified and described in order to design and develop a business model which is applicable to AET organisations. Essentially, such a business model needs to depict all the system inputs, processes and results, synonymous with an organisation's AET system. In the absence of these indicators and criteria, it is difficult to evaluate organisational results, successes and performance excellence.

2.5.3. Organisational excellence

Identifying and understanding all the system inputs, processes and results synonymous with an organisation's AET system (within the learning organisation context) may provide the information needed to assess the extent to which an organisation delivers value and achieves excellence. Mrisha et al. (2017) discovered a positive and strong relationship between embedded systems and organisational performance. Moullin (2007) found a clear link between performance measurement and organisational excellence. Excellence calls for a learning organisation to outline and express its intended results, plan and develop the integrated approaches to enable and achieve these envisaged results, execute these approaches in a systematic manner and then assess the actual results (Oakland, 2001). These activities can be guided by a framework that depicts the entire organisational value chain, including system standards and processes (Ensign, 2001). Knowledge of value chain factors which improve management methods and create competitive advantage is very important in higher education (Dorri, Yarmohammadian & Nadi, 2012). System inputs, processes and results, as well as the configuration of system activities will define an organisation's value chain, which can be used to create value that distinguishes it from its competition (Ensign, 2001). Van der Merwe and Cronje (2004) noted that processes included in an educational value chain should only include the high-level essential elements necessary to reach a predetermined outcome. Skilled use of excellence systems can boost performance across an array of key domains, including financial, human capital, operations and the organisational value chain (Edgeman & Eskildsen, 2013). Organisational excellence relies on the design and implementation of a value chain that is purpose built, integrated, demand driven, resilient and focused on the notion of becoming a learning organisation.

Organisational excellence refers to ongoing efforts to establish an internal framework of standards and processes (Nenadál, Vykydal & Waloszek, 2018; Mele & Colurcio, 2006; Lee, 2002). Implementing the concept of organisational excellence ensures all organisational

systems are aligned and functioning cohesively together (Nenadál et al., 2018: 48; Musa & Tulay, 2008). The nature of an organisational excellence approach will depend on the organisation's competitive landscape, strategy, objectives and resources (Kanji, 2010). Measuring critical aspects of performance, selecting the right metrics and designing the organisation's processes are integral to improving performance and striving for excellence. The organisational excellence concept is implemented by means of organisational excellence frameworks (Nenadál et al., 2018). These excellence frameworks are referred to as quality award models or excellence models. The South African National Skills Development Strategy advances the culture of excellence in skills development and lifelong learning (Erasmus et al., 2011). The SAQA (2001b) and CHE (2012, 2006b, 2004f, 2003) recommend the use of a quality award model or excellence model which will facilitate the evaluation of AET accomplishments and organisational performance. A specific quality award model or excellence model is not prescribed by the SAQA and CHE.

Organisations adopt business excellence models because these models promote the implementation of best practices and tools which allow for the realisation of a strategy of quality, benchmarking of best practices, self-assessment and continuous improvement (Sampaio et al., 2012). The 4P Model (People, Partnership/Teams, Processes of Work, Products/Service Products Model) (Dahlgaard and Dahlgaard-Park, 2004), the Vanguard Method (Jackson, Johnston & Seddon, 2008), European Foundation for Quality Management (EFQM) Business Excellence Model (Wongrassamee, Gardiner & Simmons, 2003), and South African Business Excellence Foundation's (SAEF) Excellence Model (SAEF, 2001) are considered, for they reflect on system-based evaluations and recognise performance excellence as an achievable and measurable outcome.

Dahlgaard and Dahlgaard-Park (2004) designed the 4P Model for achieving innovation excellence. The model's five components are leadership, people, partnership, processes and products (Dahlgaard & Dahlgaard-Park, 2004). According to this model people, partnership/teams, processes of work and products/services, and strong leadership are preconditions for organisational excellence (Dahlgaard-Park & Dahlgaard, 2008; Dahlgaard & Dahlgaard-Park, 2004). The 4P Model specifically considers human resources and their role in an organisational context as one of the most critical issues for any organisational improvement strategy (Dahlgaard-Park & Dahlgaard, 2008; Dahlgaard & Dahlgaard-Park, 2004). The first priority of any quality or excellence strategy is focused on people as the essential foundation and catalyst for improving partnerships, processes and products (Dahlgaard-Park & Dahlgaard, 2008; Dahlgaard & Dahlgaard-Park, 2004). The 4P Model also emphasises the need for an efficient quality strategy which can only be developed based on an understanding of the interrelationships and interactions between individuals, team and

organisational levels, as well as the critical contextual factors at each level (Dahlgaard & Dahlgaard-Park, 2003). The 4P Model can be used when AET organisations are planning to attain excellence (Hussein & Mohamed, 2015). This model only considers leadership, people, partnership, processes and product constructs, and does not provide detailed guidance for further steps that have to be taken by an organisation.

The Vanguard Method, aimed at continuously improving service operations to reduce and ultimately prevent repeated failure demands, serves as an example of system excellence (Jackson et al., 2008). The Vanguard Method acknowledges a shift from conventional measures towards the achievement of excellence by utilising service and demand analysis (Jackson et al., 2008). It consists of (1) an analysis of the "what" and "why" of the current system (ascertaining the purpose of the system and the nature of customer demand), (2) determining changes to improve performance against purpose, and (3) implementation of solutions and further continuous improvements (Jackson et al., 2008). A benefit of this method is that there is more control of service processes due to known data and availability to the people performing the tasks. It encourages those responsible to respond timely to the system's surrounding environment and associated demands (Jackson et al., 2008). The Vanguard Method can be used by AET organisations to encourage systems-thinking in order to design operations around customer demands (Dunnion & O'Donovan, 2014; Jaaron & Backhouse, 2013). The Vanguard Method is very restricted in its focus, for it relies on a system definition as seen from the point of view of the service user (O'Donovan, 2012). The Vanguard Method recognises issues of sub-optimisation at the system level at which it is operating, but pays less attention to issues at the wider system level (O'Donovan, 2012).

The EFQM Model is an outline which assists in providing a conceptual agenda to review the organisation and the matters through which business improvement could be structured (Leonard & McAdam, 2002). The purpose of this model is to provide a systems-perspective of organisational performance by means of a non-prescriptive framework (Wongrassamee et al., 2003). The basis of the EFQM model is total quality management (Wongrassamee et al., 2003). Similar to total quality management (TQM), the EFQM Model considers both tangible aspects (for example financial results) and less tangible measures (for example organisational culture and climate) (Bou-Llusar et al., 2008). The objective of the EFQM Model is to support organisations in order to accomplish business excellence by means of continuous improvement and deployment of processes (Kim, Kumar & Murphy, 2010; Andersen, Lawrie & Shulver, 2003). According to the EFQM Model (depicted in Figure 2.6), five criteria are grouped as "enablers" and four are grouped as "results" (Wongrassamee et al., 2003).

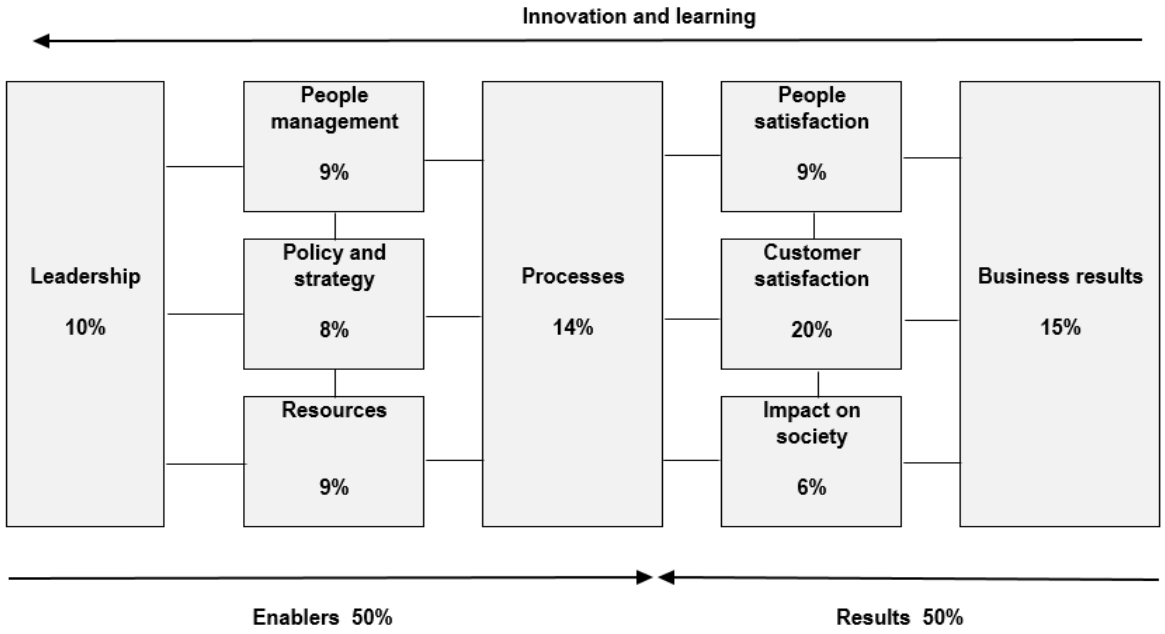

Figure 2.6: European Foundation for Quality Management (EFQM) Business Excellence Model (Adapted from Wongrassamee et al., 2003: 16)

The leadership measure of the EFQM refers to the behaviour of an organisation's leaders (focusing on clarity and unity of purpose within the organisation, and an environment in which the organisation and its people could excel). The people management measure includes the development and involvement of an organisation's employees, the influence of shared values, and a culture of trust and empowerment. Policy and strategy measures deal with organisational objectives, values and strategies, and their implementation in operations. The resources measure refers to the organisation's relationships towards its key partners, and the manner in which it utilises its facilities and all other input factors. Processes are value-adding business systems and activities in the organisation. People satisfaction investigates and assesses employees' perspectives of the organisation. Customer focus describes customer satisfaction as perceived by its external customers. Adopting an ethical approach and exceeding the expectations and regulations of the community at large, defines the impact on society criterion. Business results are determined by assessing an organisation's performance compared with its strategic objectives (inclusive of interests of all stakeholders, financial and non-financial measures). The EFQM Model has been successfully adopted by education institutions mainly due to its international recognition and previous validation (Campatelli, Citti & Meneghin, 2011). The literature reviewed considers that the EFQM Model is suitable to well-predicted business environments which are characterised by long-term strategic planning. The EFQM Model is prescriptive in terms of principles and may not be ideally suited to changing organisational environments where non-linear strategic thinking is required (Srivastava, 2016; Dervitsiotis, 2014). The breadth and complexity associated with the EFQM Model makes it difficult to know where to start, how to present its results visible and how to sustain continuous

improvements (George, Copper & Douglas, 2003). Anand and Kodali (2008) found that the EFQM Model does not involve external evaluations or a benchmarking process, it also does not show a clear way to measure performance in hierarchical organisational levels.

The South African Excellence Foundation states that "excellence" refers to an outcome (SAEF, 2001). Excellence is found in the attempts of an organisation to progress to this sought-after level of performance (SAEF, 2001). The South African Excellence Foundation introduced the South African Excellence Model which provides a non-prescriptive framework (Table 2.2 and Figure 2.7) for self-assessment and continuous improvement for all organisations.

Table 2.2: South African Excellence Model's criteria (SAEF, 2001)

SA Excellence Model's Criteria for Performance Excellence	
Criteria	**Description**
Leadership	How the behaviour and actions of the executive team and all other leaders inspire, support and promote a culture of performance excellence.
Policy and strategy	How the organisation formulates, reviews and turns policy and strategy into plans and actions.
Customer and market focus	How the organisation determines customer and market requirements and expectations, enhances relationships with customers, and determines their satisfaction.
People management	How the organisation releases the full potential of its people to create a high-performance organisation.
Resources and information management	How the organisation manages and uses resources and information effectively and efficiently.
Processes	How the organisation identifies, manages, reviews and improves its processes.
Impact on society	What the organisation is achieving in satisfying the needs and expectations of the local, national and international community at large.
Customer satisfaction	What the organisation is achieving in relation to its satisfaction of its external customers.
People satisfaction	What the organisation is achieving in relation to the satisfaction of its own people.
Supplier and partnership performance	What the organisation is achieving in relation to the management of supplier and partnering processes.
Business results	What the organisation is achieving in relation to its planned business objectives and in satisfying the needs and expectations of everyone with a financial interest or other stake in the organisation.

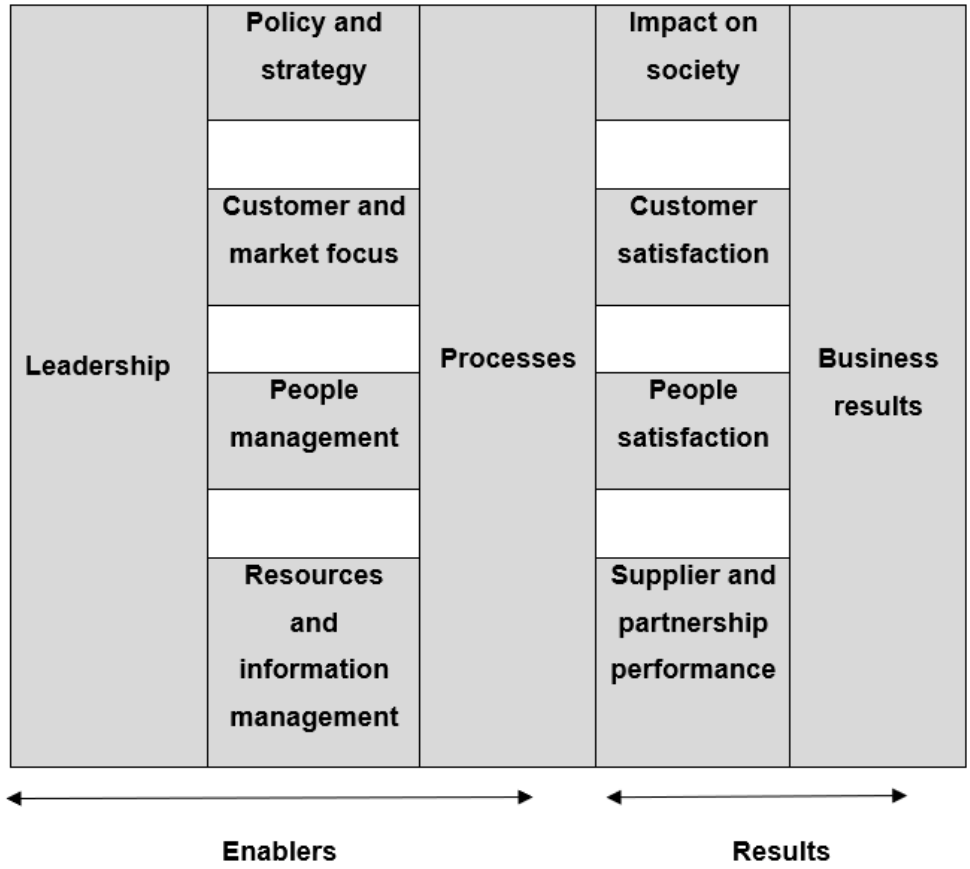

Figure 2.7: The South African Excellence Model (Adapted from SAEF, 2001: 16)

According to the South African Excellence Foundation, four organisational components, namely the enabler, the focus area, the enabling environment and the outcome are required to conceptualise excellence (SAEF, 2001). The enabler is described as the foundation of excellence and refers to management, employee and organisational strategy, vision and commitment (SAEF, 2001). The focus area, referred to as the strategic human resource development approach, provides the strategy ("best practice") for an organisation to ensure business and operational cohesion (SAEF, 2001). The enabling environment ensures a harmonious co-existence and functioning of all the organisational processes and elements (SAEF, 2001). These processes and elements are not only restricted to those within the organisation (SAEF, 2001). External forces also play an important role (SAEF, 2001). These forces include political, environmental, social and technological influences (SAEF, 2001). The outcome ("excellence") only becomes visible when all the enablers and results are measured in an integrative manner (SAEF, 2001). This type of measurement requires a diagnostic instrument which will enable an organisation to examine and evaluate business practices (SAEF, 2001). The South African Excellence Model is applicable to South Africa as a developing economy (Ladzani, 2016). From research performed by Ladzani (2016), none of the responding small and medium organisations used the South African Excellence Model to

measure their management performance. Strydom's (2006) research on a business model for higher education explored the possible use of industry models by the AET organisations. In Strydom's research the South African Excellence Model is compared with the CHEQC institutional audit criteria. Strydom's research findings demonstrate that the South African Excellence model requires adaptation and the extension of some criteria to render it appropriate to AET organisations (Strydom, 2006).

Organisations which use quality award models (such as excellence models) measure the rate of achievement in improvement programmes and their performance in comparison to other companies (Mohajer & Peykani, 2016). Quality award models provide a worldwide framework for evaluating aspects of quality management practices in an organisation (Jaafreh & Al-abedallat, 2013). Even though each model has its own unique categories and prominence, there are some common areas such as (1) models consisting of business enablers and results and (2) models emphasising the importance of leadership, quality management, strategy and policy, information, customer focus and process management (Alagaraja & Egan, 2013; Jaafreh & Al-abedallat, 2013). Business excellence models primarily emphasise the quality dimensions within an organisation (Abdullah, Ab Hamid, Mustafa, Husain, Idris, Suradi & Ismail, 2012; Husain, Abdullah, Idris & Sagir, 2001; Agus & Abdullah, 2000).

From the literature reviewed, it is concluded that organisational excellence is an accepted concept which could be quantified and qualified by considering both enablers and defined performance results. Quality award models or excellence models can be used for this purpose. The differences between excellence models (for example 4P, EFQM and SAEF Models) indicate that context-specific models are possible and plausible. The frameworks of excellence models focus attention on organisational performance, meeting and exceeding customer expectations, and a commitment to continuous improvement. Use of both financial and non-financial measures are encouraged (Jasson & Govender, 2017; Jaafreh & Al-abedallat, 2013; Sampaio et al., 2012). No single quality award model or excellence model could provide a clear performance target or focus attention on all the critical areas of the business. These models may be restrictive, due to the specificity of services within a pre-defined context and associated pre-defined essential constructs, which are frequently understated (Asif & Gouthier, 2014).

Excellence as an expression of preferred performance is also applicable to AET organisations, due to specific enablers and results which could be designed, developed, implemented and quality managed. Hides, Davies and Jackson (2004) suggest that educational excellence is synonymous with reaching a mission/vision, achieving/exceeding standards and internal measures, promoting best practice, ensuring community engagement, realising cost-

effectiveness, ascertaining customer/stakeholder fulfilment, following good practice nationally and internationally, reaching learning outcomes, making best use of all resources (financial, human and assets), matching anticipated and actual perceptions, sustaining a positive atmosphere in staff and student environments, integrating teaching and research, and guaranteeing quality of teaching and learning relative to a needs analysis (achieving targets). The AET excellence literature provides evidence of systemic properties to consider in terms of the architecture of models, such as the 4P Model, the Vanguard Method, EFQM and SAEF model. Possible evaluation areas derived from these models to consider for AET systems, include organisational enablers (leadership, strategy, people, partnership, processes, products, resources, culture, climate), results (internal and external satisfaction, innovation, continuous improvement and financial results) and surrounding environment. A specific quality award model or excellence model and associated constructs aimed at context-specific AET evaluation are not detailed in the literature reviewed.

2.5.4. Quality management: An organisational view

A quality management system aims to continually advance the quality of all organisation procedures, practices and activities (Dragomir, 2017). The DHET (2005) requires that an effective and efficient AET system should be supported by an organisational quality management system. Quality management systems follow a company-wide integrated approach to achieving and sustaining high quality output, which involves all organisational levels, systems, practices, techniques and functions (Nguyen, Phan & Matsui, 2017). Cerio (2003) states that when implementation of quality management practices increases, it also improves the organisational performance. Quality management practices, product design and development, were found to be the most important significant predictors of operational performance (Cerio, 2003). A high level of organisational performance can be achieved through quality management and improvements in inputs and processes (Mosadeghrad, 2006). Quality assurance in higher education is influenced by the policies, systems and processes directed at ensuring the quality of education provision in an AET organisation (Venter & Bezuidenhout, 2008). A reason for evaluating AET is to provide quality control over the design and delivery of training activities (Kulkarni, 2013; Aguinis & Kraiger, 2009; Dzimbiri, 2006). The SAQA (2001a) favours a systems-approach by acknowledging that such an approach ensures that quality management has a developmental impact on the organisation and the sector. Within an AET context, quality management typically includes all design, development, delivery, evaluation and management processes (Sârbu, Ilie, Enache & Dumitriu, 2009; Lagrosen, Hashemi & Leitner, 2004. The SAQA (2001a) requires core system criteria, which includes a policy statement, quality management system, review mechanisms, programme delivery, staff policies, learner policies, assessment policies and management

system policies as examples. The International Organisation for Standardisation (ISO) 9001 series provides core system criteria. The ISO 9001 series (including ISO 9001: 2015), stresses the need for common quality management system standards (Fonseca, 2015). Although it may not be fair to consider the ISO 9001 International Standard as a total quality or business excellence model, due to its specific focus on product and service delivery processes, this standard does incorporate the principles of the previously discussed quality award excellence models (Martínez-Costa, Menárguez-Tortosa, Fernández-Breis & Maldonado-Segura, 2009a). Detailed organisational processes aimed at customer service and service delivery are identified by the ISO 9001 International Standard, but organisational prospects and competitiveness dimensions are not specified. On the contrary, quality award models are used by organisations to identify their strengths and to improve their opportunities and competitiveness (Wongrassamee et al., 2003). Quality management tools and techniques which are of value in the improvement of systems exist, however, not many have been translated into all aspects of AET management (Ali & Zairi, 2005; Temponi 2005). Ferreira's (2003) research on a framework for continuous improvement in the South African Higher Education sector explored the implementation of quality models to ensure continuous improvement in South African Higher Education Institutions. Ferreira's (2003) study points out that there is a great need for institutional quality management which is contextualised for the higher education sector. Ntshoe, Higgs, Wolhuter and Higgs (2010) suggest that in South African higher education, quality management and quality assurance ought to be much more detailed to focus on and enhance organisational effectiveness and efficiency.

Quality management has to be integrated into all aspects of products and services within an organisation's management system (Nguyen et al., 2017). Erasmus et al. (2011) note a need to evaluate the delivery and quality assurance necessary for the implementation of the South African National Skills Development Strategy. This need for integration and evaluation gives rise to total quality management (SAQA, 2001a). Total quality management principles should be understood as patterns which guide, support and contribute to business excellence and stakeholder value, by means of the development of innovation processes (Mele & Colurcio, 2006). A total quality management framework could be divided into three typologies: enablers, trigger and goals (Mele & Colurcio, 2006). Customer satisfaction, as enabler, emphasises a need to develop several initiatives to orientate the whole organisation to the customer. The goal of customer satisfaction constitutes the aim of human resources, leadership intent, and management processes of continuous improvement and learning. These enabling factors contribute to the priming and feeding of innovation. Innovation is a trigger to gain business excellence and stakeholder value, as well as sustainable competitive advantage. The achievement of envisaged excellence is linked to value creation, business results, and the organisation's stakeholders. These typologies are depicted in Figure 2.8.

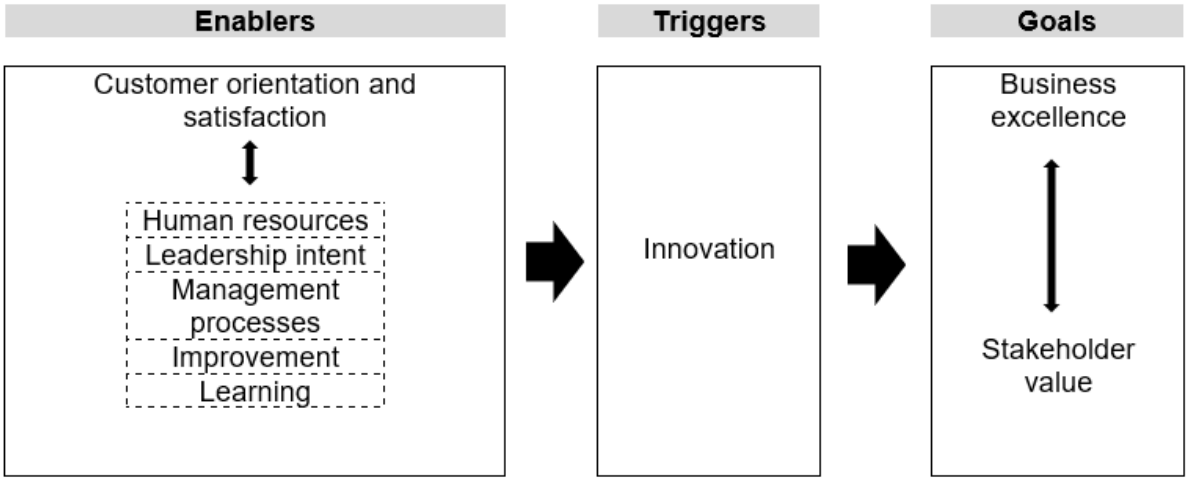

Figure 2.8: Total quality management typologies (Adapted from Mele & Colurcio, 2006: 470)

The three typologies (enablers, trigger and objectives) are not specifically tailored exclusively for an AET system evaluation. Schindler, Puls-Elvidge, Welzant and Crawford (2015) identify four distinct indicators associated with total quality management in education. These are administrative indicators (which pertain to all the administrative functions of an institution), student support indicators (refers to the availability and responsiveness of student support services), instructional indicators (addresses the relevance of educational content and the competence of instructors) and student performance indicators (refers to student engagement with the curriculum) (Schindler et al., 2015). The SAQA (2001b) states that AET providers have to understand the purpose in establishing a quality culture and managing all aspects of quality by operating a quality management system which maximises effectiveness within an organisation. The relationship between total quality management and the concept of a learning organisation serves as a further key consideration for an AET evaluation model that is explicitly devoted to an AET organisational context.

A strong relationship between total quality management practices and the learning organisation exists (Dragomir, 2017). In the perspective of total quality, a learning organisation is characterised by its unremitting evolution towards positions of excellence (Mele & Colurcio, 2006; Senge, 2006). Learning organisations with a sound quality strategy pay attention to training and development in order to stimulate cooperation and obtain the continuous improvement that quality implies (Katou, 2008; Deming, 1986). Context-specific cooperative and improvement initiatives, supportive of total quality management principles, are integrated in an AET evaluation framework. Total quality management is often used as a multi-dimensional approach to measuring organisational performance (Jaafreh & Al-abedallat, 2013;

Sila, 2007). Total quality management encompasses all the elements of an organisation (internal and external forces) – processes, practices, systems, methodologies and all involved in the quality of the product or service (Todorut, 2013). Mele and Colurcio (2006) describe total quality management as a systemic and universal approach to successful management, based on process management and continuous improvement of organisational performance. A total quality management approach accentuates internal and external forces as well as enablers and results criteria associated with AET evaluation excellence, within a defined context. According to the SAQA (2001b), total quality management requires that attention be afforded to the creation of an appropriate climate within an organisation, establishing a customer orientation, managing by means of research, data and facts, following a people-based and participative management philosophy, and focusing on continuous improvement of organisational performance. The SAQA (2001b) acknowledges that AET organisations may find it challenging to identify, implement and operate quality management systems which maximise effectiveness within an organisation. Pretorius (2003) adds that there is confusion about the meaning of quality and it has led to an increasingly negative view of quality assessment and assurance in higher education.

A learning organisation has to adopt best practices of quality management at all its organisational levels (Dragomir, 2017). Creating a learning organisation and the development of the processes of implementing the total quality management concept are extremely complex actions (Dragomir, 2017). The CHE expects all AET organisations to be responsible for the management of their own internal quality assurance activities (Stander & Herman, 2017). Pretorius (2003) states that the focus of quality management systems (implemented by the CHEQC) for South Africa's AET organisations tends to be bureaucratic and emphasises accountability, which limits its potential for transformation. Often, these quality management systems only consider the quality of the services provided, but not all system enablers and results, thus following a piecemeal approach (Pretorius, 2003). Mummenthey, Wildschut and Kruss (2012) found that quality management checks of occupational learning programmes in South Africa are often superficial and insufficient. Mummenthey et al. (2012) state that those who are tasked with quality control only check policies and procedures, but do not thoroughly investigate AET practices, processes and contexts. The DHET is experiencing challenges within the current quality management systems (Stander & Herman, 2017). These challenges are related to the complexity of the existing systems and the sequencing and timing of various processes within these systems (Stander & Herman, 2017). Management of systems directly and positively influences innovation and organisational performance (Sadikoglu & Olcay, 2014). Decisions based on quality management data and information are thus likely to have some bearing on performance evaluation. Literature reviewed does not explain this

relationship between quality management and performance evaluation for South Africa's AET organisations.

2.5.5. Planning for performance evaluation

Collins and Porras (2005) state that organisations which would like to transform themselves into visionary companies, should invest in innovation and eliminate aspects which may impede progress towards the envisioned future. This requires a dedicated analytical process, which includes an evaluation of organisational processes, structures and strategies (Collins & Porras, 2005; Collins, 2001). Organisational evaluations do not only indicate levels of performance – they identify opportunities for improvement (Davis & Sumara, 2006). Following a systems-perspective implies that in order to achieve improved results, one should alter the system and the ways of operating in it (Park, Hironaka, Carver & Nordstrum, 2013). Park et al. (2013) found that effective frameworks for quality improvement and continuous improvement is not at all common in educational organisations. System connections which have a positive and strong relationship with organisational performance have to be identified and described (Mrisha et al., 2017).

Adopting a mature approach, aimed to facilitate process improvements, could help an organisation to plan its training initiatives in relation to performance (Wagenstein, 2006). The Capability Maturity Model and the Capability Maturity Model Integration describe a process improvement approach, which provides organisations with a means to guide process improvement across the organisational system (Wagenstein, 2006). Five levels of maturity or readiness to change (depicted in Figure 2.9) are advanced. The first level of the basic Capability Maturity Model suggests that organisational processes are unpredictable and not consistent, often reactive and not properly defined (Wagenstein, 2006). The second level shows that basic processes have been established, defined and documented, but they are reactive (Wagenstein, 2006). The third level illustrates that internal control processes are becoming proactive and are strategically aligned (Wagenstein, 2006). The fourth level suggests that the organisation now analyses, measures and controls activities across departments and its business processes (Wagenstein, 2006). Organisational success is planned and predicted, rather than being merely opportunistic (Wagenstein, 2006). The final level shows that the organisation is continuously reviewing and improving processes in response to organisational needs (Wagenstein, 2006). It is postulated that the fifth and final level allows an organisation to advance towards a state of excellence. The potential value of this model is to furnish organisations with a conceptual roadmap to determine their level on the maturity curve, and enable them to track their progress to improve their position (Barnett & Mattox, 2010; Wagenstein, 2006).

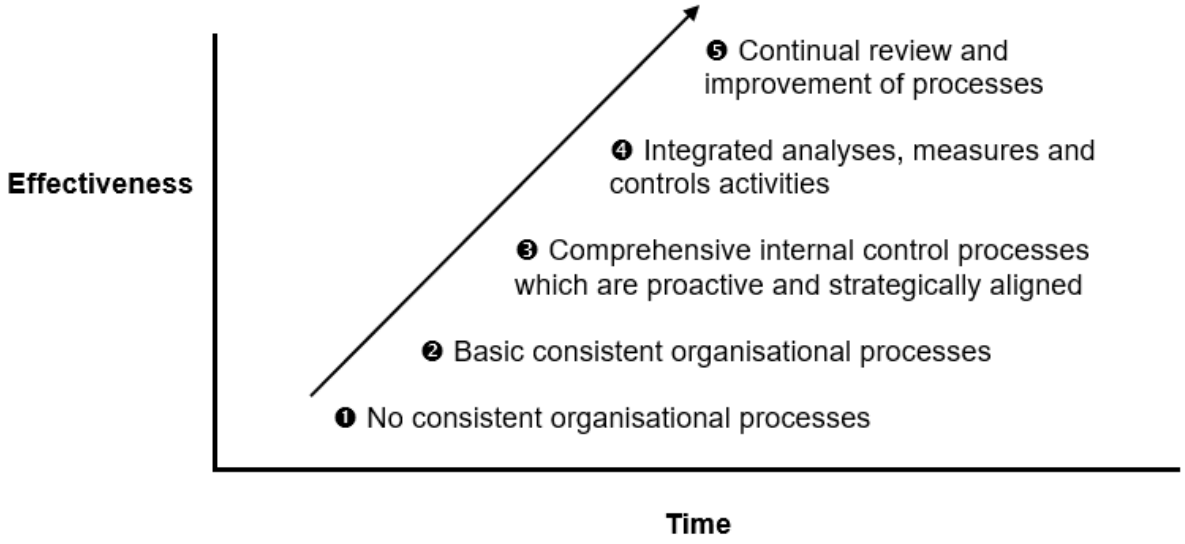

Figure 2.9: Knowledge Advisors' Measurement Maturity Model (Adapted from Wagenstein, 2006)

Four main models which follow a process improvement approach across the organisational system, will now be considered as potential solutions. The purpose of this discussion is to determine whether a specific model exists, which comprehensively describes AET constructs as an archetype for excellence in organisational performance. The models are the General Training Effectiveness Scale (GTES), Education Criteria for Performance Excellence Model (ECPE), as well as the Nomological Network of the Dimensions of Learning Organisation and Performance Outcomes Model. These four models are considered because they measure certain aspects of organisational and AET effectiveness.

The first model, the General Training Effectiveness Scale (GTES), emphasises planning measures to consider when evaluating AET. Aziz (2015) proposes the GTES as a general instrument to measure AET effectiveness. This scale is based on the levels of training effectiveness proposed by Cannon-Bowers, Salas, Tannenbaum and Mathieu (1995). Table 2.3 presents and describes these levels. These levels do not provide for constructs or measures of effectiveness and efficiency applicable to the entire AET system.

Table 2.3: Levels of training effectiveness

Level	Description
Learning Performance	Learning performance evaluation is the transformation of declarative knowledge, procedural knowledge and meta-cognition. Declarative knowledge assists with the insights gained, resulting from achieving the training objectives. Procedural knowledge allows for the use or application of training. Meta-cognition includes beliefs, certainty and confidence in grasping knowledge and skills accentuated in training.
Individual Performance	Individual performance evaluation is the advancement or changes in proficiencies, efficiencies and effectiveness in the place of work due to training.
Organisational Performance	Organisational performance evaluation is the improvement or changes in teamwork, customer satisfaction and goal achievement due to training.

The Education Criteria for Performance Excellence (ECPE) Model provides a system-based perspective of generic principles of performance excellence. The ECPE Model is available to educational institutions to measure improvements in operational performance, financial performance and market outcomes (Asif, Raouf & Searcy, 2012). The criteria require an organisation to assess its improvement efforts, diagnose its overall performance management systems, and identify strengths and opportunities for improvement (Asif et al., 2012). The criteria are non-prescriptive. The ECPE criteria consist of eleven core values. The ECPE evaluation framework (depicted in Figure 2.10) includes seven categories. These categories are systematic processes, comprising of (1) leadership, (2) strategic planning, (3) customer focus, (4) measurement, analysis, and knowledge management, (5) workforce focus, (6) process/operations management and (7) performance management (Sârbu et al., 2009). Five specific performance result focus areas are detailed in the ECPE.

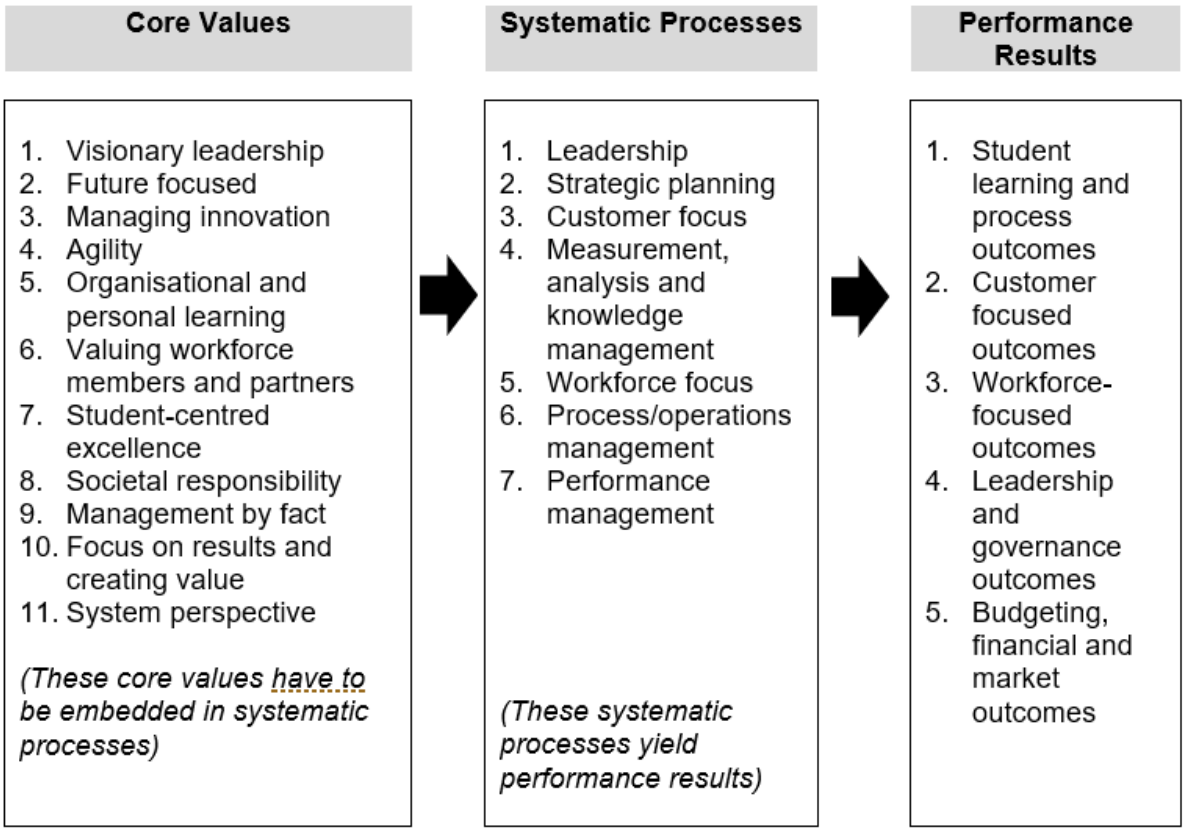

Figure 2.10: Structure of the Education Criteria for Performance Excellence (ECPE) Model (Adapted from Asif et al., 2012: 3097)

Asif et al. (2012) identified that the ECPE has two main weaknesses regarding performance measurement. The first weakness is that the performance measures are rather vague, especially when considering different contexts (Asif et al., 2012). The second weakness is that the ECPE does not discuss systematic performance measurement (Asif et al., 2012). Asif et al. (2012) and Arif and Smiley (2004) have noted that research needs to question the actuality and sufficiency or insufficiency of the existing ECPE elements. Veleva and Ellenbecker (2001), Chen (2012) and Asif et al. (2012) have identified a requirement to implement a more systematic approach which is supported by pre-planning of clear outcomes, developing measures and indicators for such outcomes, and introducing methods to track performance. Current literature does not provide detailed descriptions of these specific system constructs, measures and indicators within the South African context. In South Africa, the process of AET monitoring and evaluation revolves around the development and design processes, the implementation of learning programmes and assessment outcomes (DHET, 2010b). Additional specific requirements to consider include policy-based requirements, an AET focus, organisation-specific workforce management processes, and attention to the organisational setting (CHE, 2004e; CHEQC, 2005; SAQA, 2001a).

The third model (Nomological Network of the Dimensions of Learning Organisation and Performance Outcomes) considers criteria which are similar to learning organisation enablers. According to Wang and Wilcox (2006) there are three main aspects relevant for evaluating organisational results, namely qualitative, temporal and financial impact of training participation. In the same way, Yang et al. (2004), used two variables, being financial and knowledge performance, in establishing a nomological link between learning behaviours and outcomes. Suddaby (2010) describes these variables as constructs which are the result of a semantic network of conceptual connections to other prior constructs. Tangem (2004) and Sirgy (2002) suggest that due to the involvement of several stakeholders, organisational performance should not be exclusively assessed by financial indicators. Although there are various approaches, the nomological network derived from the learning organisation literature specifies the causal relationships of dimensions of a learning organisation of people and structural levels (Yang et al., 2004). The model is presented in Figure 2.11.

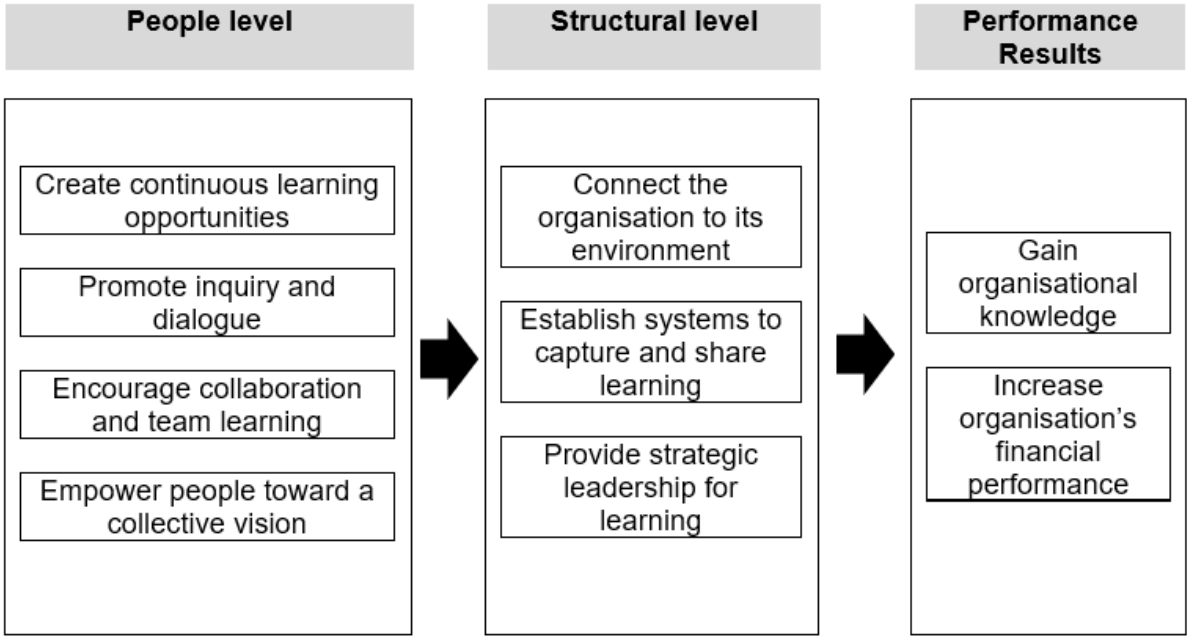

Figure 2.11: Nomological Network of the Dimensions of Learning Organisation and Performance Outcomes (Adapted from Yang et al., 2004: 41)

The General Training Effectiveness Scale (GTES), Education Criteria for Performance Excellence Model (ECPE) and the Nomological Network of the Dimensions of Learning Organisation and Performance Outcomes Model suggest possible levels to consider when planning to evaluate an AET system. These models highlight the necessity to follow a systems-approach and to consider internal and external influences as well as organisational maturity. Additionally, performance results which are comparable to organisational performance

outcomes, are stressed. Finally, alignment to learning organisation links (especially from a systems-perspective) could be traced (illustrated in Table 2.4). It is postulated that learning organisation characteristics could be connected to education excellence outcomes by following a systems-perspective (Table 2.4).

Table 2.4: Summary: Education excellence and learning organisation links

Learning organisation		Systems-perspective		Education excellence
Individual inspiration and motivation. Continuous learning, inquiry and dialogue. Collaborative/team learning and distribution. Maintain an internal learning focus. Maintain an external learning focus.	➡	Input evaluation.	➡	Policy focus. Strategic alignment. Shared vision. Trust, enthusiasm and respect. Organisational core values.
Empowering culture, climate and enabling environment. Leadership support. Knowledge repository.	➡	Process evaluation.	➡	Resource management. Process management. Organisational and leadership support. Quality of training. Use of technology. Utilising best practices. Conducive learning environment.
Organisational performance.	➡	Output evaluation.	➡	Stakeholder satisfaction. Business efficiency. Learning experience, value and outcome. Organisational knowledge. Return on investment. Continuous improvement (growth, transformation and development).

Education excellence and learning organisation links imply that a learning organisation input (with reference to individual inspiration and motivation, continuous learning, inquiry, dialogue, collaborative/team learning and distribution and both an internal and external learning focus) may potentially provide a distinguishing foundation (with reference to policy focus, strategic alignment, shared vision, trust, enthusiasm, respect and organisational core values). The input towards education excellence is followed by a process evaluation element. This element relies upon specific learning organisation enablers, such as an empowering culture, climate, enabling environment, leadership support and a knowledge repository in order to ensure a transition associated with education excellence (with specific reference to resource and process management, organisational and leadership support, quality of training, use of technology, utilising best practices and providing a conducive learning environment). It is proposed that

organisational performance will manifest in terms of educational excellence results (with reference to stakeholder satisfaction, business efficiency, organisational knowledge, return on investment, continuous improvement and advanced learning experiences, values and outcomes).

Planning and performing AET evaluation is an inseparable part of any educational process. Evaluation from an AET system perspective involves the application of a unique set of frameworks, concepts and conventions which have emerged for that perspective over time. Effective evaluation requires a careful analysis of the key factors that are relevant to an AET system and how these relate to each other. Evaluation thus involves the definition of appropriate constructs, and an examination of performance against those constructs.

The literature reviewed acknowledges that systems-thinking is relevant when planning the design of AET system evaluation constructs. A need to design, develop and implement system-based organisational focus and enablers, in pursuit of AET excellence, is stated by the CHE (2016). This activity cannot be successfully achieved unless an explicit and sustained effort is made to identify and describe information needed to evaluate and improve organisational performance. Evaluation of the performance of AET organisations requires an analytical framework and model which is unique to the South African perspective.

2.6. Constructs and archetypes

In the context of this research, identifying and describing AET system evaluation constructs, and an understanding of an archetype which facilitates system evaluation, is advanced. The purpose is to identify AET system evaluation constructs which are aligned to South Africa's requirements pertaining to system evaluation. These AET system evaluation constructs have to be aligned to a standard of performance excellence which supports the notion of a learning organisation. Without such a system performance standard, AET organisations may not be able to choose which key performance indicators to measure, and to identify which factors are clearly linked to the drivers of success. The idea is that these constructs will culminate into an AET system evaluation model. Once the constructs are known, an archetype depicting a proposed system-pattern available for consideration by AET organisations is introduced. Essentially, such an archetype aims to reveal systemic organisational aspects and dynamics, which are required in order to introduce and establish the AET system evaluation model. Presently, such a context-specific model and associated archetype is not specified in the literature reviewed.

2.6.1. Constructs

Constructs provide abstract frames which serve as conceptual abstractions of phenomena (Suddaby, 2010). Clear constructs expose a phenomenon to several perspectives (Suddaby, 2010). A construct is a concept which has been intentionally and consciously devised or adopted for a specific scientific purpose (Suddaby, 2010). It could be presumed that constructs serve as categories which help form the foundation of theory (Suddaby, 2010). From a systems-theory perspective, constructs could be categorised in terms of their associations. Constructs could be explained from diverse perspectives and have different dimensions, as derived from amongst other different settings (Nahapiet & Ghoshal, 1998; Rioux, 1997; Butler, 1975). It is not uncommon for constructs to suggest relationships, for they emphasise events which are multidimensional, temporally entrenched, and often spanning several levels of analysis (Suddaby, 2010; Langley, 1999; Van de Ven, 1992). AET system evaluation conceptual abstractions, which are applicable to the South African context, are not emphasised in the literature reviewed.

AET evaluation is accepted as being a system-directed activity. Systems-thinking suggests a relationship between related constructs (Suddaby, 2010). Related constructs can be defined both conceptually and operationally. Understanding the nature of a construct, its associations and its role, is considered important to comprehend its purpose and value within a given context. Essential properties and characteristics of a construct can be captured and by the same token be defined (Suddaby, 2010). Constructs have to create broad categories and should not be excessively reduced to narrow or constrained observations (Suddaby, 2010). Should constructs lack universality, it is important to note the contextual and/or scope conditions as well as conditions applicable or not to the scenario (Suddaby, 2010; Avital, 2000; George & Jones, 2000). The above context allows a construct to be produced, positioned and presented within a specific reality. This observation may further imply that constructs do not necessarily require specific and narrowly defined interpretations. It should prove to be more beneficial when constructs are generally defined within a specific scope. Such a definition ought to consider construct clarity as acceptable when the subjective meaning and interpretation of an abstraction is coherently presented (Suddaby, 2010). Due to organisational (context) differences, an analogous training and evaluation system may not be possible. Abstract concepts which accurately describe system characteristics, may be feasible. Detailed AET system evaluation elements and activities can be determined by each organisation in order to ensure that identified specific key areas that drive organisational performance are described.

More knowledge needs to be gained in respect of construct terms, aimed at AET evaluation within the South African context. A more comprehensive, construct-centred approach is thus required. Studies by Nahapiet and Ghoshal (1998); Rioux (1997) and Butler (1975) suggest that constructs could be defined. Definitions need not be unique, and constructs may vary for the same concept, especially when considering the context. It is anticipated that AET evaluation constructs could be identified and then be used and presented as mental abstractions. This activity requires an ordering of constructs, which necessitates systems-thinking. Constructs could be used to explain the general particulars of a training and evaluation system by means of a model. Tamkin et al. (2002) state that a model generates the steps in an explicit process which helps to explain conceptual abstractions.

2.6.2. Archetypes

System archetypes enable organisations to cope with complexity and make appropriate decisions to improve organisational performance (Bures & Racz, 2016). System archetypes emphasise general dynamics of the system itself, however, they do not describe any problem specifically (Bures & Racz, 2016). The researcher views system archetypes as underlying structures within an organisation. Novak and Levine (2010); Maani and Cavana (2007); Nguyen and Bosch (2013) and Bures and Racz (2016) suggest that system archetypes can be used to explain and provide an overview of a complex process by revealing the simplicity underlying such a process. Archetype-based modelling helps organisations to deal with system complexity more effectively (Bures & Racz, 2016; Schwaninger, 2003). An archetype explains ordering and structuring principles of a process within a specific context, bearing in mind that the general associated meaning and purpose remain fixed. It is noted that an archetype could be presented as an essential pattern of relationships among concepts. Ultimately, the benefit associated with the use of an archetype lies in its potential to facilitate instant understanding and diagramming of a system. System archetypes serve as a means for gaining insight into the underlying system structures from which the archetypal activities emerge. An archetype displaying performance success could describe the main structural elements of a system.

The potential role and significance in using an archetype, within a defined system-based scenario, is summarised as a way of identifying solutions to common organisational problems. Stroh (2003) suggests that useful archetypes typically have a recognisable story line and suggest ways to deal with a situation once it appears. Bures and Racz (2016), Nguyen and Bosch (2013) and Novak and Levine (2010) state that system archetypes illustrate the rules associated with their functioning. In this case, an archetype that needs to be representative of underlying mechanisms describing AET evaluation has to be clear and intuitive, mutually exclusive, and explanatory but not overly prescriptive (Bocken et al., 2014). A benefit of

familiarity with the archetypes, is that managers could use them to anticipate and avoid a wide range of system-based problems (Stroh, 2003). Such an understanding may enable organisations to develop more effective solutions to solve AET system evaluation challenges. A further advantage is that archetypes are suitable for gaining insight into the nature of an underlying problem, and for proposing a basic structure or foundation upon which a process could be further developed, improved, constructed and refined (Braun, 2001). It may be concluded that archetypes are used diagnostically to reveal insights into a structure which already exists, or to predict potential problems and/or problem symptoms (Braun, 2001). System archetypes provide a capability to reveal supposed simplicity, which underlines the complexity of management issues (Bures & Racz, 2016; Senge, 1990). An archetype illustrating a context-specific system-pattern for AET organisations is not specified in the literature reviewed.

An archetype developed to describe groupings of mechanisms and solutions, which could contribute to the introduction of a model for AET system evaluation, is required. Such an archetype illustrates new/novel development paths or a capability to innovate in pursuit of organisational excellence. This study aims to be significant, for an archetype could be used to illustrate and explain the way in which an AET system evaluation model can be introduced in support of organisational performance. This could be achieved by plotting the relationships between these components to recognise common system patterns. These system patterns would provide a conceptual map which could be applied to different contexts. AET evaluation constructs could consequently be mapped to depict a system-archetype supportive of organisational performance in South African AET organisations.

2.7. Summary of the literature reviewed

This chapter reviewed much of the available literature on the need for AET system evaluation within South Africa's AET organisations. The literature review considered research results which address systems-thinking, organisational learning, the learning organisation, AET evaluation, and organisational performance excellence. The selected literature foci have included concepts, paradigms and theories which explain and refer to AET system evaluation and performance, which aim to ensure alignment between regulatory intentions and actual implementation activities. For this reason, systems-thinking as a theoretical framework for AET evaluation is considered. Moreover, systems-thinking which also analyses system-theory at the organisational level, is considered. This line of reasoning is followed in order to investigate current organisational AET practices which facilitate transformation towards a learning organisation. Knowledge and understanding of the system-based elements of AET, within a learning organisation context, is thus also taken into account. The aim of this review is to

identify and conceptualise learning organisation indicators and criteria which are supported by quality management systems, in order to promote and plan for performance excellence. It is anticipated by the researcher that this knowledge and understanding could be used to identify and conceptualise constructs which provide a holistic and integrated theoretical model and archetype for the effective evaluation of AET in the South African context. A summary of systems-thinking, organisational learning, the learning organisation, AET evaluation, and organisational performance excellence literature reviewed, is offered below.

Systems-thinking provides a theoretical framework which underlines the importance of contextual dynamics when investigating AET evaluation from a holistic perspective. Such perspective includes intra- and inter-organisational components, relationships/links, forces, changes, views and enablers. It is important to note that systems-thinking does not profess only one theory. Systems-thinking acknowledges the presence of a set of constructs and related logical links which outline the nature and features of systems. These constructs could all be linked to the organisational purpose, strategy and associated activities. A critical evaluation of an organisational system (such as an AET system) can not only provide insight into its performance, but identify opportunities for development, growth and change. The literature has revealed a need for a pragmatic systems-approach which identifies and describes AET system evaluation characteristics within the South African context.

AET, by its very nature, consists of structural elements such as design, development, implementation and evaluation – which could be viewed as system elements. AET provided by an organisation requires evaluation to determine the effectiveness and efficiency of its system elements. The SAQA (2001b) acknowledges this specific need. These system elements influence and are influenced by the organisational learning culture and climate and its entire AET value chain (considering organisational learning enablers and results). The literature has revealed that current evaluation models emphasise system evaluation based on learning programmes. Donald Kirkpatrick's Four Levels Model, Jack Phillips' Return on Investment (ROI) Model, Hamblin's Five Levels Model, Guskey's Critical Levels Model, The Indiana University Taxonomy, Industrial Society Stages Model, Kearns and Miller KPMT Model, Nine Outcomes Model, and Kaufman and Keller's Organizational Elements Model (Duignan, 2003) serve as examples of this programme-based focus. An opportunity exists to consider the entire organisational system and its context when performing AET evaluation. It is suggested that learning organisation criteria have to be considered as standards for evaluation in pursuit of AET excellence. These criteria are favoured due to their relationship with organisational performance excellence, and their consideration of all organisational system enablers and results. Regrettably, a holistic system-based model which specifically addresses this evaluation problem could not be discovered.

A holistic AET system-based evaluation model, which includes organisational strategic goals and outcomes, the learning organisation concept, performance excellence outcomes, and a focus on continuous improvement could not be identified. However, the literature highlights system-based training evaluation fundamentals and themes, as well as learning organisation applications, which could provide a basis to contemplate and develop a holistic AET system-based evaluation model. Further work is thus required to encourage AET organisations to progress towards a learning organisation aspiration, which makes use of an AET system-based evaluation model. The introduction and application of systems-thinking could provide a basis to contemplate and develop an AET system-based evaluation model and constructs which could serve as an archetype for excellence in organisational performance.

AET system evaluation constructs which may facilitate the journey towards performance excellence have to be identified and illustrated. The role and purpose of a model and an archetype to explain the relationship between AET system evaluation and performance excellence are thus also essential. For these reasons, this study purports to identify and explain process elements of AET systems applicable to South Africa's AET organisations. Furthermore, an explanation of an AET system evaluation, which supports regulatory and professional compliance, is required. Additionally, an understanding of how AET system evaluation can be used to assist South Africa's AET organisations to become learning organisations, is considered necessary.

A need for regulatory (education authorities) and professional (AET organisations) emphasis is implicit in this research. An understanding of requirements detailing predefined system evaluation needs, quality management system aspects and training system excellence assessments (including enablers and results) which specifically provide insight into AET system evaluation have to be accentuated from a regulatory viewpoint. This is essential, as the literature reviewed does not identify and describe context-specific input, process and result elements of AET systems applicable to South Africa's AET organisations. The literature acknowledges that a performance shift of South Africa's AET (from an organisational learning situation towards a learning organisation) is required. However, AET system evaluation constructs, that may assist such a transition towards performance excellence, has not been formulated.

In this study, the relevance of AET system evaluation constructs, which can be used as a model and an archetype to enhance performance and excellence for South Africa's AET organisations, is identified and described. Within the South African AET context, quality management aspects to consider during AET evaluation are highlighted in the literature, but

are not presented as a system comprised of main constructs which are linked to organisational performance. It is necessary to find and describe AET system enablers and associated results, to understand training system evaluation methodologies, and to determine how education excellence in support of professional organisational performance should manifest. AET system standards and associated excellence indicators, descriptors, definitions and quality management system procedures which facilitate evaluation, have to be understood. A critical investigation aimed at assessing existing AET system evaluation management, enablers and associated results is required, which is the intention of this study. The researcher is of the opinion that such an investigation has to consider AET system evaluation from two different perspectives. Firstly, documents which specifically detail AET evaluation policies, procedures, processes, and associated activities of South African AET regulatory authorities and associated professional organisations, have to be investigated. Such an investigation may allow for insight into regulatory decisions which influence AET systems and evaluation. Secondly, interviews with key AET role players with specific AET evaluation knowledge, are required. These role players could contribute to this study by sharing their knowledge and understanding of AET legislation, policies, procedures, practices and system considerations.

2.8. Conclusion

This literature review interprets and describes what is already known about the research problem, and documents novel understanding and insights. Topics derived from the research questions and objectives guide the literature review schemata. This literature review provides a presentation and interpretation of relevant theories pertaining to specific topics. These topics are: systems-thinking as a theoretical framework; organisational learning and the learning organisation; AET evaluation; organisational performance evaluation in terms of excellence; as well as construct and archetype descriptions.

Systems-thinking, as a theoretical framework, is selected to analyse system-theory at the organisational level. At the organisational level, organisational learning efforts are used to encourage transformation towards a learning organisation. AET evaluation is used to determine the success and areas of continuous improvement which are required for this transformation. For this reason, it is necessary to conceptualise the system-based constructs of AET within a learning organisation context. These constructs include learning organisation indicators and criteria which promote and plan for performance excellence. Ideally, these constructs have to be included in a holistic and integrated theoretical model and archetype, which can be used for the effective evaluation of AET in the South African context.

Structured, focused, complete and traceable discussions of all these topics serve as evidence of a thorough investigation. These discussions thus serve as the theoretical foundation for this research. Finally, the literature review was used to motivate, design and develop the research methodology section of this project.

CHAPTER 3
RESEARCH METHODOLOGY

3.1. Introduction

Research methodology is the formal process of collecting, analysing and interpreting data to understand a phenomenon (Saunders, Lewis & Thornhill, 2007; Williams, 2007; Leedy & Ormrod, 2001). The research methodology is underpinned by a sound understanding of ontological and epistemological conventions and the explicit articulation of what the study is trying to achieve. Richards (2003) and McMillan and Schumacher (2001) add that research should have a proper theoretical foundation to ensure purpose, design and analyses which will support trustworthy claims based on evidence and knowledge which is relevant. The principal objective of research is the systematic production and expansion of knowledge based on evidence (Hussain, Elyas & Nasseef, 2013). In this chapter justifications are offered for methodological decisions.

This chapter presents the research methodology employed to answer the research question: Which effective system evaluation constructs are appropriate for South Africa's AET organisations to enhance performance excellence? This chapter presents the following headings:

- The research paradigm.
- The qualitative research approach.
- The research design.
- A description of the sampling procedure.
- Data collection and analyses.
- Generalisation, triangulation and trustworthiness.
- Ethical considerations.

3.2. Research paradigm

Within the interpretivist paradigm (also called the constructivist paradigm), theory does not precede research but follows it, so that it is grounded on the data generated by the research (Kivunja & Kuyini, 2017). Polit and Beck (2012) describe this process as an emergent inquiry based upon the realities and viewpoints of participants. The researcher opted to use the interpretivist paradigm to obtain, assist and manage understanding and appreciation of interpreted social reality. The interpretivist paradigm is characterised by a belief that realities

are multiple and socially constructed and that contextual factors have to be taken into consideration in any systematic pursuit of understanding (Kivunja & Kuyini, 2017). Through the interpretivist paradigm, the researcher will be able to make meaning of the accumulated data through his own thinking and cognitive processing, which will be informed by interactions with data sources (Kivunja & Kuyini, 2017; Singh & Rajput, 2013; Cooksey & McDonald, 2011; Aspers, 2009; Von Glasersfeld, 1995). Banathy and Jenlink (2004) state that such an inquiry could provide a set of logical and related methods and tools applicable to the investigation of compositions and problems, identify complications concerned with the interactive aspects of multifaceted structures, and recognise the complexities associated with the management of systems. Differences and similarities in experiences, views and actualities, due to socially constructed realities could be expected (Kivunja & Kuyini, 2017; Vogt, Gardner & Haeffele, 2012; Chalmers, Manley & Wasserman, 2005).

The selection of the interpretivist paradigm was influenced by an acceptance that knowledge can be prepared and presented by AET specialists and/or answerable AET organisations. The purpose of adopting this paradigm was to aid and guide comprehension and appreciation of construed social reality (Creswell, 2003). The researcher was thus concerned with understanding the world from the subjective meaning-oriented sources, obtained from documents and interview data. The interpretivist paradigm that was selected for this inquiry aimed to provide perceived inputs, processes and results which could be grouped to form AET system evaluation constructs, and provide for a description, model and an archetype to enhance AET effectiveness and excellence.

3.3. Research approach

The focus of this study is on discovering and understanding the expressed beliefs by South African AET regulatory authorities and associated professional bodies about excellence and effectiveness pertaining to AET system evaluation. It is concerned with deeper understanding of the research problem, in its unique context. This study does not seek to uncover the essence of AET system evaluation as in phenomenology, but rather to provide a general interpretation of AET system evaluation, thus aligning it with a qualitative approach. Guided by the research questions and favoured research paradigm, a qualitative research approach was chosen. Qualitative research is generic and interpretive, as individuals construct reality through interactions in the social world (Merriam & Tisdell, 2015). Researchers commonly use qualitative research in educational studies (Merriam & Tisdell, 2015).

A qualitative approach was used in this study to collect and interpret data from interviews and document analysis. As Gioia et al. (2012) and Merriam (2002) suggested, all good qualitative

research employs multiple data sources. This study employed documents and semi-structured interviews to obtain actual explanations by those people experiencing the phenomenon of theoretical interest. Data sources employed in this study thus included documents and individual interviews, in order to gain insight into the phenomenon of theoretical interest. The researcher had to rely on how AET experts interpreted their AET experiences, how they constructed their worlds, and what meaning they attributed to their experiences. However, the researcher did not focus solely on beliefs and opinions presented during interviews. Documents which specifically detail AET evaluation policies, procedures, processes and associated activities of South African AET regulatory authorities and associated professional organisations were also included. Central to this interpretation is inductive reasoning, which Antwi and Hamza (2015); Tuli (2010); Williams (2007) and Ulin, Robinson and Tolley (2004) describe as an orientation towards describing and exploring. Inductive reasoning moves from specific instances to a general conclusion, thereby allowing for understanding of insider perspectives shared by people (Antwi & Hamza, 2015; Polit & Beck, 2012; Salkind, 2012). Scientific explanations have to be grounded in the meaning structures of those studied (Aspers, 2009; Merriam, 1995). A qualitative approach thus supports inductive reasoning and is concerned with understanding the meaning of social phenomena and focuses on links among a larger number of attributes across relatively few cases (Antwi & Hamza, 2015).

3.4. Research design

The research design describes the overall strategy selected to integrate the different components of the study in a coherent and logical way, ensuring that the research problem was effectively and comprehensively addressed (De Vaus, 2001). It explains the collection, measurement, and analysis of data (De Vaus, 2001). The research design of the current study, therefore, provided an investigation and description of a phenomenon, guided by systems-thinking, as the theoretical foundation, within the South African AET context. Research efforts were aimed at explaining how AET system evaluation constructs could be used as an archetype for performance excellence, using data obtained from documents and interviews.

For this study, the selected qualitative research approach attempted to uncover participants' experiences and the meaning the participants ascribed to those experiences. This decision by the researcher was motivated by Merriam's (2009) view, which mentions that if a researcher's primary focus is on gaining insight into beliefs, opinions, attitudes or ideas about things, a basic interpretive design should be considered. Merriam (2009) comments that in applied fields of practice such as education, the most common research design adopted for a qualitative approach is a basic interpretive design. A basic interpretive research design is derived philosophically from constructivism and used by researchers who are interested in how people

interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences (Merriam, 2009).

The overall purpose of the design selected for this study, was to understand how people make sense of their lives and their experiences. In such a case, Merriam (2009) suggests that data are typically collected by means of interviews or document analysis, which are aimed at identifying recurring patterns or themes. The researcher decided to employ Braun and Clarke's (2006) framework to perform a thematic analysis in order to identify recurring patterns or themes found during data analyses. This method provided a meticulous data analysis approach, which called attention to both association and rich description of the data set, and theoretically informed interpretation of meaning (Braun & Clarke, 2006).

The purpose of this educational qualitative research project was to understand AET system evaluation from different perspectives. For this reason, the basic interpretive design was particularly well suited to obtaining an in-depth understanding of an educational system. The overall understanding of AET system evaluation was directed by the researcher's understanding of information derived from the data sources. In summary, this project employed a qualitative research approach, an inductive strategy, and a basic interpretive design, in order to generate theory by using an interpretivist paradigm, which considered the existence of multiple subjective perspectives during knowledge creation.

3.5. Sample population and sampling

3.5.1 Population

From the population a sample was drawn in order to contribute information and insights on AET evaluation theories, regulations, systems, procedures and results, albeit from regulatory and professional points of view. The population, as a collection of potential contributors (Bordens & Abbott, 2014; Salkind, 2012), included all AET regulatory authorities and professional organisations (collectively referred to as AET organisations) in South Africa. Examples of South African AET regulatory authorities include the CHE, DHET, QCTO, SAQA, training councils and all the SETAs. Professional AET organisations include various vocational bodies, professional associations and education quality assurance agencies. The SABPP and APPETD serve as examples of professional bodies. These regulatory authorities and professional organisations promulgate and publish accessible documented information which allows for insight into how decisions are taken and how these decisions may influence AET systems and evaluation. Such insight relies upon understanding the intentions of legislation, policies and procedures which convey intended meaning in terms of implied or explicit

significance. This “meaning” is associated with “work-as-imagined” (regulatory descriptions of how work should be done) (Hollnagel, 2014; Hollnagel et al., 2013).

The researcher thus sought “meaning” (“work-as-imagined”) which was documented and presented as legislation, policies and procedures. From a pragmatic perspective, meaning is influenced by linguistic and situational context. The linguistic context is how meaning is interpreted and understood. Legislation, policies and procedures must be translated into actions and influence the practical, day-to-day operations of an organisation (Bryson & Alston, 2005). Clarification and understanding of existing legislation, policies and procedures rely upon pragmatic interpretation. In this study, the researcher relied on pragmatic interpretation of existing legislation, policies and procedures to find and interpret concepts, paradigms and theories which explained and referred to AET system evaluation and performance. This task required the researcher to track down alignment between AET regulatory intentions and actual implementation requirements applicable to AET organisations.

The researcher realised that interpretations regarding alignment between AET regulatory intentions and actual implementation requirements were subjective and based on personal perceptions. These perceptions refer to the set of processes used to interpret and make decisions about a specific subject. Furthermore, these perceptions were obtained in this study for they provided subjective interpretations based on personal factors, knowledge and experiences. This “perceptual interpretation” equated to “work-as-done” (various assumptions, explicit or implicit about how work is done) (Hollnagel, 2014; Hollnagel et al., 2013). Thus, in addition to “meaning” (“work-as-imagined”), the researcher sought to also discover “work-as-done” (thus identifying various assumptions, explicit or implicit about how work is done). Prior experience and/or expertise play a major role in the way a specific subject is interpreted. Perceptual expectancy allows for a perception-based interpretation of legislation, policies and procedures by key AET organisational role players. There are many key role players in AET organisations who are responsible for all aspects of AET evaluation. These key role players were referred to as AET specialists, because they had specific AET evaluation knowledge or expertise at their disposal. The AET specialists had acquired knowledge and understanding through experience and analysis of legislation, policies, procedures and/or practices within a specific context. Their expertise included all aspects of AET strategy, leadership, management, processes and evaluation within defined organisational contexts. Data required from AET specialists included insights pertaining to AET system evaluation standards and associated excellence indicators, descriptors and definitions. Enabling quality management system procedures which facilitated evaluation, were also sought. Limitations found in pursuit of evaluation and envisaged excellence, were probed. An awareness of the successes associated with current evaluation practices were also pursued. Insights into AET system

evaluation enablers and the management and control of evaluation practices were elicited. Organisational performance insights detailing performance excellence measures and stakeholder relations were also explored. For these reasons, the researcher consulted AET specialists because they could interpret or explain their thoughts and embody their conceptions pertaining to these matters, including existing legislation, policies, procedures and practices. From this population, which included all AET regulatory authorities and professional organisations in South Africa, the researcher drew a sample which provided both “meaning” (“work-as-imagined”) and “work-as-done” (various assumptions, explicit or implicit about how work is done) pertaining to AET evaluation.

3.5.2. Sample and sampling procedure

Sampling refers to the selection of sources from where data are collected to address the research objectives (Gentles, Charles, Ploeg & McKibbon, 2015). A sample is a subset of the population (Bordens & Abbott, 2014; Passer, 2014; Salkind, 2012). Anderson (2010) notes that qualitative research requires an appropriate sample due to the detailed and intensive tasks associated with data collection, analysis and reporting which is required for a study. Vogt et al. (2012) emphasise that the research question foci are particularly important in identifying a sample. The emphasis is on acquiring information which is beneficial to understanding the complexity, profundity, disparity or context surrounding a phenomenon (Gentles et al., 2015).

The researcher’s task was to acquire information in order to determine how the detail of AET system evaluation, as contained in legislation, policies and procedures, connects to and gets translated into practice. A comparison between an analysis of documented information and pragmatic views, obtained during interviews regarding legislation, policies and procedures, provided a pragmatic interpretation and understanding of AET system evaluation practices. Such a comparison was used to show parallels or differences between intended meaning and interpretation of meaning regarding legislation, policies and procedures. The two data sources were used to recognise AET system evaluation practices which contributed to the identification and description of associated system constructs. These constructs allowed for the development of a new conceptual model and archetype that provides an important addition to current literature regarding AET system evaluation.

Past studies have indicated that should there be no need to make statistical inferences from the sample, a non-probability sample should be considered (Saunders et al., 2007; McMillan & Schumacher, 2001). Such a non-probability sample should include important stakeholders (Tansey, 2007). Non-probability sampling provides for control over a selection process and permits inclusion of important stakeholders (Tansey, 2007). This study adopted purposive

sampling. Purposeful sampling is commonly used in qualitative studies (Padilla-Díaz, 2015; Yüksel & Yildirim, 2015; Anderson, 2010; Creswell, 2007). According to Passer (2014) and Creswell (2007), such a purposeful sampling strategy involves the researcher selecting the participants.

Anderson (2010) suggests that qualitative researchers have to describe their sample in terms of characteristics and relevance to the wider population. The focus of this research was restricted to AET evaluation information, sourced from documents and descriptions provided by governing and professional organisations. The researcher decided to draw a sample which would provide important and meaningful contributions concerning the phenomenon under investigation.

The sample consisted of the CHE, DHET, QCTO, SAQA, ETDP SETA, SABPP and APPETD. The CHE is responsible for developing and implementing a system of quality assurance for higher education, including programme accreditation, institutional audits, quality promotion and capacity development, standards development and the implementation of the Higher Education Qualifications Sub-Framework. The CHE monitors and reports on the state of the higher education system, and contributes to the development of higher education with key national stakeholders on systemic issues to address short and long-term challenges facing higher education in South Africa. The DHET provides national strategic leadership in support of an integrated AET system. The DHET plans, develops, monitors, maintains and evaluates national policy, programmes, assessment practices and systems for AET. The QCTO oversees the design, implementation, assessment and certification of occupational qualifications, including trades, on the Occupational Qualifications Sub-Framework. The SAQA oversees the development and implementation of the National Qualifications Framework and advances its objectives which contribute to the full development of each lifelong learner, and to the social and economic development of South Africa at large. The ETDP SETA promotes, facilitates and develops quality AET, which provides diverse and flexible routes for initial and in-service AET. The SABPP advances clear standards of governance, quality assurance and professionalism in human resource management, learning and development practices in the workplace. The key focus of the SABPP is on adding value and contributing to the sustainability of organisations. The APPETD leads the broader private AET industry, by informing and guiding members regarding best institutional, educational and quality practices which promote AET.

The focus of South African AET regulatory authorities and professional AET organisations is on ensuring sustainable effectiveness, efficiency and continuous improvement. Sustainability relies on the nurturing of performance improvement, which implies consistent evaluation of

improvement (Van Dyk & Pretorius, 2014). Consistent evaluations of the performance of system elements help to determine the outcome of the system as a whole (Van Dyk & Pretorius, 2014). Understanding system evaluation considerations inferred and/or detailed by South African AET regulatory authorities and professional AET organisations was required. Sourcing AET system evaluation information from comparable documents and interviews, which relate to performance excellence, was thus feasible. Publicly accessible AET documents which identify and describe system evaluation are published by these AET organisations. AET specialists employed by these organisations are sources of expert specialised knowledge which is based on events, processes, interactions and dealings associated with AET evaluation.

The researcher conducted an electronic search of all AET evaluation policies, procedures, regulations and associated information within the South African context, published by the organisations sampled. From this search, only 36 documents detailed AET evaluation. These 36 documents that were electronically sourced during October 2016, are listed in Appendix C.

The researcher contacted the Chief Executive Officers of the CHE, DHET, QCTO, SAQA, ETDP SETA, SABPP and APPETD to explain the purpose of the research, in order to secure an appointment with an AET specialist for an interview. The Chief Executive Officers nominated seven AET specialists which participated in the interviews. A Senior Manager from the CHE, a Chief Director from the DHET, an Executive Manager from the QCTO, a Director from the SAQA, A Senior Manager from the ETDP SETA, a Manager from the SABPP and the Chief Executive of the APPETD participated in the interviews.

3.6. Data collection

Qualitative researchers usually study phenomena to make sense of or to understand these in terms of the meanings and values people bring to them (Denzin & Lincoln, 2000). For this reason, the purpose of data collection and analysis was to obtain descriptions of current AET evaluation concepts and conventions prescribed and supported by AET authorities and professional organisations. Document and interview (consisting of open-ended semi-structured questions) analyses were thus conducted. These analyses were appropriate to identify and describe input, process and result elements, which could then be grouped to form AET system evaluation constructs aimed at enhancing performance and excellence.

3.6.1. Documents

In this study, the researcher decided to collect and analyse documents, with the intention of gaining insight into a variety of credible data sources which describe the official perspective on AET evaluation requirements, issues and process within the South African AET organisational context. Vogt et al. (2012) suggest that when studying organisations, researchers consult collections of organisational documents and records. The documents considered included on-line accessible AET material from organisations, official (governmental) publications and reports. Salkind (2012) states that documentation which is composed and released either internally or for public consumption, could provide a treasure of information (for example a context to the official goals and policies of an organisation). Saunders et al. (2007) point out that documents could provide comparative and contextual data. Documents serve to sanction or contradict information gathered through other means (Salkind, 2012; Patton, 2002). Such findings could lead to unanticipated or astonishing new discoveries (Saunders et al., 2007). Vogt et al. (2012) note that document analyses are used to study phenomena of interest and to learn about the environment (context) and its influence.

In the case of this study, AET system evaluation served as the focus of interest and the researcher was keen to learn more about said evaluation within AET organisational contexts. Bowen (2009) and Saunders et al. (2007) concur that documents could provide data on the context within which research participants function, propose some questions which require follow-up, provide complementary research data, offer a means of tracing change and development, and could be analysed to authenticate findings or verify evidence from other sources. Vogt et al. (2012) reveal that social scientists and researchers in related applied disciplines, such as education, heavily rely on documented sources for data, due to documents representing the official perspective on a topic, issue or process (McMillan & Schumacher, 2001). For these reasons, the researcher opted to consult documents from more than one organisational source, which facilitated scrutiny into a variety of official and credible interpretations regarding AET evaluation.

Publicly accessible documents which specifically detail AET evaluation policies, procedures, processes and associated activities were electronically retrieved during October 2016 from the CHE, DHET, QCTO, SABPP, SAQA and the Department of Labour (DOL) websites (Appendices A & C). These publicly accessible documents include legislation, bulletins, policies, reviews, procedures, frameworks and guides. The contents of the 36 documents created an extensive foundation which allowed the researcher to identify and describe AET evaluation concepts, enablers, results and performance excellence aimed at AET evaluations.

Bowen (2009) states that researchers should establish the meaning of the document and its contribution to the issues being explored. The content of the documents had to be comparable and fit the conceptual framework of the study (Bowen, 2009). Each document was analysed to identify and describe (1) the priority given to AET system evaluation, (2) specific AET system evaluation factors, (3) the inputs, processes and results required for AET system evaluation and (4) information on how AET system evaluation must be implemented. Document analysis focus areas are listed and motivated in Table 3.1. Seven focus areas which identify and describe system elements, enablers, results and performance excellence were derived from the research sub-questions. Each document was thoroughly examined in accordance with the seven focus areas to identify meaningful and relevant passages of text. During the first review, meaningful and relevant passages of text were identified. The researcher had to identify pertinent information and separate it from information which was not pertinent (Bowen, 2009; Corbin & Strauss, 2008). During a second review, a closer look at the selected data followed. The purpose of the second review was to perform coding, category construction and to uncover themes pertinent to the phenomenon (Bowen, 2009). A data summary from the document analysis focus areas is presented in Appendix E. The researcher used document analysis findings to corroborate data by cross verification with regards to interview data analysis. The following table presents these documents analysis focus areas and purpose.

Table 3.1: Data collection: document analysis

Analysis focus	Purpose
1. Measurement processes which determine training system successes.	1. Identifying input, process and result elements.
2. System elements which are used to evaluate AET.	2. Identifying input, process and result elements and possible constructs.
3. Definitions and descriptions of training system excellence.	3. Describing performance and excellence criteria/indicators.
4. Internalising the concept of training system excellence in internal quality systems and culture.	4. Describing performance and excellence enablers.
5. Training system enablers and results.	5. Identifying input, process and result elements and possible constructs.
6. Optimising continuous improvements within a training system.	6. Describing performance and excellence enablers.
7. Links between AET system evaluation results and organisational performance.	7. Discovery of a possible model and an archetype to enhance performance and excellence.

3.6.2. Interviews

In this study, the researcher opted to use individual interviews, which allowed AET specialists to share and provide their detailed AET evaluation knowledge, experiences and views.

Interviews were only conducted with AET specialists in order to pursue AET evaluation matters in depth. For a detailed investigation, Vogt et al. (2012) suggest that interviewers select interviewees through purposive sampling, targeting individuals with specific knowledge and experiences or characteristics to gain knowledge from the interview subjects. Furthermore, individual interviews are useful when the researcher needs to investigate and describe in depth the experiences or views of individuals (Bordens & Abbott, 2014; Robson, 2011). After considering their usefulness and appropriateness, individual interviews were introduced as a method of data collection in this study.

The researcher used open-ended, semi-structured individual interviews. Jamshed (2014) describes these interviews as in-depth discussions where the respondents have to answer predetermined open-ended questions. Individual semi-structured interviews were selected, due to their ability to allow respondents to discuss their interpretations of the world in which they work, and to express how they regard situations from their own point of view (Cohen, Manion & Morrison, 2000). Interview questions for this study were aimed at eliciting experience-based descriptions of AET evaluation practices, systems and activities, supported by opinions which were directed by expert knowledge of the topic. DiCicco-Bloom and Crabtree, (2006) explain that open-ended, semi-structured individual interviews are used to keep respondents focused on the topic of discussion, thereby ensuring that data is gathered in a systematic and comprehensive manner. For this reason, open-ended questions based on the topic areas the researcher wanted to cover, were designed. The open-ended nature of the interview provided opportunities for both interviewer and interviewee to discuss some topics in more detail. When an interviewee had difficulty answering a question or provided only a brief response, the interviewer used cues or prompts to encourage further responses to the question. During the interviews, the interviewer also had the freedom to probe the interviewee to elaborate on the original response or to follow a line of inquiry introduced by the interviewee. For example, during the SABPP interview the notion of performance excellence required further probing from the interviewer. During the CHE interview, the use of monitoring and evaluation frameworks were introduced and explained in detail by the respondent. The recording of the interviews made it easier for the researcher to focus on the interview content and the verbal prompts. Verbatim transcripts were generated for each interview.

The researcher ensured that an interview protocol was compiled and followed. Gioia et al. (2012) recommend that attention has to be paid to the interview protocol to make sure that it is focused on the research questions. Open-ended questions were asked during interviews, as they require more thought and more than a simple one-word answer. The intention was not to ask leading questions. During individual interviews, open-ended semi-structured questions encouraged participants to offer detailed responses about the areas of focus (Alsaawi, 2014;

Passer, 2014). Questions explored participants' awareness of specific policies, and the participants' perceptions as to how they impact and need to impact on AET system evaluation. Interviews were conducted with seven AET specialists from the CHE, DHET, QCTO, SAQA, ETDP SETA, SABPP and the APPETD. All participants answered the same main open-ended semi-structured questions, which increased the comparability of responses (Cohen et al., 2000). Additionally, during each interview, probing questions were used to elicit more detail. This interview approach allowed participants to provide detailed responses. Such an open-ended format maximised people's freedom of response (Passer, 2014). Questions were presented to all participants in the same order during face-to-face interviews. The interview questions are listed in Appendix B. A data summary from the interview analysis focus areas is presented in Appendix E.

Creswell (2012) proposes an interview strategy which consists of: (1) deciding the open-ended questions which will be answered during the interview, (2) identify the interviewees, (3) determine the type of interview, (4) decide on the recording of interviews, and (5) design and use an interview protocol. This interview strategy was adopted for this study and is presented in Appendices A and B. Vogt et al. (2012) state that interview strategies are routinely combined with other methods of collecting data. Bowen (2009) states that document analysis is often used in combination with other qualitative data sources, such as interviews, as a means of triangulation. Triangulation was used to seek convergence and corroboration by using different data sources (Bowen, 2009). Triangulation was also used to counter threats to trustworthiness, such as reactivity, researcher bias and respondent bias (Bowen, 2009: 38).

3.7. Thematic analysis

A thematic analysis was adopted for this study. The aim of a thematic analysis is to provide a useful method for investigating the perspectives of different research participants, highlighting similarities and differences and generating unforeseen insights (Nowell, Norris, White & Moules, 2017; Braun & Clarke, 2006; King, 2004). The purpose of a thematic analysis is to identify themes which are important for a study, and to use these themes to address the research question (Maguire & Delahunt, 2017). A thematic analysis is a form of pattern recognition within the data, with emerging themes becoming the categories for analysis (Maguire & Delahunt, 2017; Bowen, 2009; Fereday & Muir-Cochrane, 2006). The benefit of this analysis was that multiple and socially constructed realities resulted, which took account of contextual factors. These realities relied on the recognition of patterns within the data in accordance with Braun and Clarke's (2006) framework.

Braun and Clarke (2006) describe two thematic levels of analysis, namely semantic and latent levels. At the semantic level the explicit meaning of the data was identified and described. The document analysis was used to identify and describe the explicit meanings of the data, without looking for anything beyond what had been documented. The interview analysis was used at the latent level, for it identified and described underlying ideas, assumptions, and conceptualisations which were theorised as shaping or enhancing the semantic content of the data. Thematic analysis results discussed in this section comprise of the document and interview data sets which were initially analysed separately, resulting in codes and sub-themes.

In preparation for the process of coding, the researcher had to be clear about what he was asking of the data. The analysis was informed by the research problem and purpose. Schreier (2012) acknowledges that qualitative data analysis involves a variety of processes and procedures which aim to present an account, understanding and clarification of the collected data. Furthermore, Yüksel and Yildirim (2015) and Moustakas (1994) suggest that researchers ought to look at all data as every statement has equal value. The researcher translated and grouped data into meaningful units. Data grouping served as the primary platform for formally articulating and defining codes, categories (referred to as families) and themes (referred to as super families) which formed the lifeblood of the qualitative data analysis.

The researcher had to decide whether to follow a deductive process, an inductive process or a combination of both processes to perform data analysis. King (2004) recommends that data analysis should be performed in accordance with a predetermined framework. Creswell (2014) contends that data analysis could be both inductive and deductive and needs to establish patterns or themes. This technique may be useful for researchers conducting a deductive thematic analysis (Fereday & Muir-Cochrane, 2006). In deductive thematic analysis, a structure or prearranged framework is used to analyse data (Nowell et al., 2017). Flexibility of analysis which can bias and limit the interpretation of the data may result when such a predetermined thematic framework is used (Nowell et al., 2017). Such a framework for analysis was not used due to these mentioned prescriptive qualities. In this study, data analysis was not considered as an abstraction in accordance with a predetermined framework. This research relied upon the emergence of an evaluation schemata through an inductive process, suggesting that specific themes derived from the coding process were not predetermined. Braun and Clarke (2006) propose that the search, definition and review of themes (referred to as super families) should only transpire after initial coding has been concluded. Similarly, Saldana (2013) concurs with Braun and Clarke that themes should emerge naturally as outcomes of the coding process. The decision to follow an inductive process thus allowed for such an emerging data analysis.

A specific data analysis and reporting framework was required by the researcher to guide the data analysis and coding. However, various views pertaining to data processing and coding were mentioned in the consulted literature. For example, Miles, Huberman and Saldana (2014) and Saldana (2013) acknowledge the presence of a diverse range of coding methods which are generally applied in qualitative data analysis. Creswell (2014) states the results of the analysis may include a chronology of events, a detailed discussion of several themes or a discussion of interconnecting themes. Saldana (2016) states that coding is not a precise science, and Maxwell (2009) admits that there is not one right model for qualitative research. Maguire and Delahunt (2017) state that Braun and Clarke's (2006) framework is arguably the most influential approach in the social sciences, probably because it offers a clear and usable framework for doing thematic analysis. Maguire and Delahunt (2017) report that Braun and Clarke's (2006) framework could be applied in a systematic manner to explain and justify the process of analysis within the context of AET research. Such a framework was required for this study, because a thorough data coding regime was essential. For this reason, Braun and Clarke's (2006) framework was chosen. Braun and Clarke's (2006) framework suggests that researchers have to become familiar with the data, generate initial codes, search for themes, review themes, define themes, and record all findings. The researcher found Braun and Clarke's (2006) framework very helpful during data analyses and reporting of results, for it provided a structured approach. The data analysis is presented in Appendix E and a summary of codes is presented in Appendix H.

In accordance with Braun and Clarke's (2006) framework, the researcher first ensured familiarity with the data by collecting and reading each applicable document, as well as transcribing and reviewing each interview. Each document which referred to training system elements, system enablers and results, measurement processes, continuous improvement and training excellence, including links between AET system evaluation results and organisational performance was studied. The aim of this first step was to ensure familiarity with each document's coverage of mentioned content. This activity allowed the researcher to acquire insight and an awareness of the entirety of the documented data (Appendix E). Initial ideas were noted for each document but not yet coded during this first step of the thematic analysis. By reading through each document the researcher obtained an initial insight into the role, focus and extent of training evaluation policies, procedures, processes and associated activities of South African AET regulatory authorities and associated professional organisations. The same process was followed to acquire insight and an awareness of the entirety of the transcribed interview data. At this initial stage of data analysis, the researcher discovered that the documents and interview transcripts analysed, provided a broad overview

of AET organisational performance standards and operational system requirements. This initial step guided the consequent data coding.

During the second step, initial codes were generated. In this phase, data were organised in a meaningful and systematic way with each segment of data that was relevant to the research problem and purpose. According to Saldana (2016), a code is a researcher-generated construct that captures primary content and essence (Saldana, 2016). In this study, coding was used to summarise and condense data (Saldana, 2016). Coding provided more than only a data category and illustrated relationships between codes and themes. Codes were generated from reading and analysing the data. Open coding (Maguire & Delahunt, 2017) was used in this study, which means that pre-set codes were not used but that they were developed and modified during the coding process. During the document and interview analyses, the initial codes were generated by organising pertinent text data in a structured manner (Appendices E & H). Text data in short summary phrases resulted. These short summary phrases, which assigned amassed, prominent, essence-capturing explanations for each portion of the document and interview-based data, were used to define codes (Appendix E). Examples of these coding activities are presented in Appendices E and H.

Computer assisted thematic coding, which automated various processes such as cataloguing of primary references (documents and transcripts), organising of codes alphabetically, presenting the strength of codes, and recording code descriptions, was introduced and utilised to generate initial codes. Atlas.ti.™ (Computer-assisted Qualitative Data Analysis software) was used to code the documents and interview transcripts. Codes were identified based on the concepts and themes mentioned in the documents pertaining to AET system evaluation. Quotations and codes were identified based on the concepts and themes frequently mentioned by interviewees (Hardy & Bryman, 2004). Atlas.ti.™ served as a powerful instrument for qualitative analysis (Atlas.ti., 2015). The application offered options and solutions to manage, extract, compare, explore, describe and reassemble meaningful pieces from large amounts of data (Atlas.ti., 2015). Word-processed data comprising of interview transcripts and documentation lists, were directly imported into the Atlas.ti.™ project file. Data analysis commenced by creating a project (hermeneutic unit) which was meant to enclose data, findings, codes and structures under a single name. The researcher developed definitions for each code to ensure that codes were applied reliably throughout the data analysis and result in reporting phases.

The search for sub-themes (families) took place during the third step. A sub-theme contains codes that have a common point of reference and a high degree of generality, which unifies ideas regarding the subject of inquiry (Vaismoradi, Jones, Turunen & Snelgrove, 2016;

Buetow, 2010; Bradley, Curry & Devers, 2007). The intention was to identify meaning connections, relationships and trends which were detected in the sub-themes. These sub-themes were descriptive and portrayed patterns in the data relevant to the research problem and purpose. The researcher examined the codes and some of them clearly fitted together into a sub-theme. Codes were grouped in sub-themes (families). These sub-themes were predominantly descriptive, for they described patterns in the data relevant to the research focus. At the end of this step, the codes for the document and interview analyses had all been organised into broader sub-themes. Thirteen sub-themes were identified and described in Appendix E.

In step four, these sub-themes (families) were reviewed and refined by considering their relevance in terms of the research problem and purpose. This step illustrated which sub-themes were relevant in the context of the entire data set. Defining each sub-theme to identify its essence was essential (Braun & Clarke, 2006; Patton, 1990). An inductive process was involved between sub-themes and the database, until a comprehensive set of sub-themes was established (Creswell, 2012). During the entire data coding process, the researcher ensured that codes, families and super-families were coherent, had specific boundaries and were useful and responsive to the research focus. At the end of this step, systemic characteristics and relationships of identified AET process elements were identified and clustered. These are detailed in Appendix E.

The final definition and demarcation of main themes (super families) followed during step five. Data derived from interviews and documents were coded individually and synthesised collectively, by means of triangulation. The essence of each main theme and systemic inferences were deliberated and expressed by the researcher during this step. The researcher considered and explained how the themes interacted and related to the research problem and purpose, and how the themes related to each other. In the discussion of main themes (super families) the essence of each main theme and the links between themes were identified and described in relation to the research problem and purpose. Codes, including families and super-families, were presented to an external codifier for critical comment, discussion and changes. The external codifier's report is presented in Appendix F.

During step six, the final phase, all of the results which supported the research focus, as well as recommendations, were formulated. The researcher formed analytical conclusions from the data presented as codes and then themes (with reference to families and super families). Sufficient evidence of each theme was provided by using examples from the data. The researcher was also able to describe conceptual patterns by developing relationships between themes. This relationship was depicted in a final thematic model. Designing a model

representing a complex, holistic picture within a specific context, was possible due to the descriptive nature of the qualitative approach utilised (Creswell, 2007).

3.8. Generalisation

Generalisation refers to the extent to which the results of a study applies to individuals, settings and circumstances beyond those studied (Robson, 2011; Ryan & Bernard, 2000). In qualitative research, the aim is to assign a logical generalisation of theoretical understanding to a similar class of phenomena (Goeken & Borner, 2012; Lee & Baskerville, 2003; Yin, 2011, 2003; Popay, Rogers & Williams, 1998). McMillan and Schumacher (2001) suggest that qualitative research is limited to context-bound generalisations. Allais and Shalem (2018) explain that context-bound generalisations refer to research conclusions which may only apply and be transferred to certain contexts. The responsibility for determining transferability lies with those who apply the findings to their own setting (Lincoln & Guba, 1985).

Due to the abovementioned recommendations, the researcher acknowledges that the results of this study may cautiously be generalised only to certain defined populations. As a result, findings may be applicable to South Africa's AET organisations, however, different organisational settings and circumstances have to be considered. Furthermore, the small sample size of this study and AET organisational context differences need to be considered when results are generalised. Larson (2009) explains that generalisation potential can be increased when context similarities exist. However, this suggestion does not consider the role of organisational context-differences. In this study, organisational context and AET system differences were highlighted. Ultimately, system evaluation considerations have to incorporate context-specific AET organisational enablers, processes and results.

3.9. Triangulation

Triangulation refers to the use of two or more data sources, procedures, investigators, theoretical standpoints and approaches in analysing the study of a single phenomenon and validating the similarity amongst it (Brink, 1993). According to Saunders et al. (2007), triangulation denotes the use of different data collection techniques within one study to ensure that data are "telling you what you think they are telling you". Triangulation could be built into a design in several ways by using data sources, multiple methods or multiple investigators (Vogt et al., 2012). Triangulation for this study was done by comparing and contrasting the codes and sub-themes (super families) from the document and interview data sets, in order to describe conceptual patterns and develop relationships between themes. Triangulation increased the latitude and depth of this study, due to diverse sets of data or different qualitative

methods, each involving different data, different participants and perspectives (Morse, 2012). The benefit, as explained by Vogt et al. (2012), was to provide understanding of a phenomenon and to increase confidence in results.

A primary objective of triangulation was to gather numerous perspectives to present a more comprehensive understanding of the phenomena under study. Triangulation was thus used to help mitigate potential bias. Different triangulation methods, such as triangulation of data methods, sources, investigators and theoretical triangulation exist (Krefting, 1990). Triangulation of data methods refer to comparison of data collected by various means (Krefting, 1990). Triangulation of data sources is based on the importance of variety in time, space and person in observation and interviewing (Krefting, 1990). Theoretical triangulation implies that ideas from diverse or competing theories could be tested (Krefting, 1990). Triangulation of investigators occurs in a study in which a research team, rather than a single researcher, is used (Krefting, 1990). The researcher used triangulation of data sources by aligning multiple perspectives, which led to a more comprehensive understanding of AET system evaluation. Cognition was consequently derived from constant comparisons within and between interview and document findings. Triangulation is illustrated in Figure 3.1.

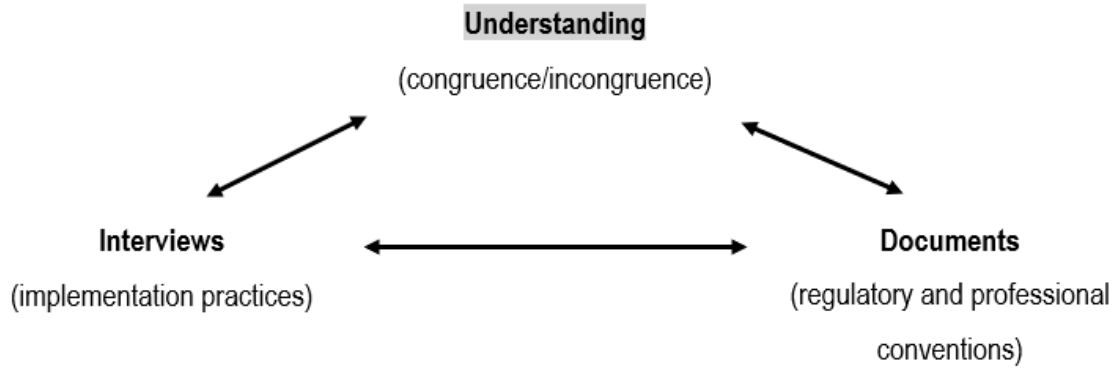

Figure 3.1: Triangulation (Own illustration)

3.10. Trustworthiness

The researcher introduced trustworthiness with the aim of supporting claims regarding credibility, transferability, dependability and confirmability applicable to data analysis and research results. Past studies by Creswell (2012); Morse (2012) and Guba and Lincoln (1989) have noted that trustworthiness consists of credibility, transferability, dependability and confirmability (these are respectively equivalent to the quantitative criteria of internal validity, external validity, reliability and objectivity). According to Morse (2012) and Guba and Lincoln (1989), credibility describes the prolonged engagement, tireless observation, triangulation,

peer debriefing, negative case analysis and member checks. Dependability is achieved by means of credibility, triangulation and a clear audit trail (Morse, 2012; Guba & Lincoln, 1989). Confirmability includes triangulation and an audit trail (Morse, 2012; Guba & Lincoln, 1989). The researcher ensured compliance with the credibility, dependability and confirmability requirements by means of triangulation, peer debriefing and member check invitations. In this study, transferability expresses the need for comprehensive descriptions (Morse, 2012; Guba & Lincoln, 1989). The researcher opted to provide detailed descriptions of the sampling process, data collection, analysis process and research results so as to ensure transferability. Creswell (2012) noted that qualitative researchers should engage in at least two of these criteria in any given study. The researcher therefore acknowledges that all four criteria were introduced in this study. In summary, the trustworthiness tactics introduced in this study consisted of a detailed account of the research process, including the process of data analysis, triangulation, member checking, purposive sampling and thick descriptions.

In addition to the abovementioned trustworthiness tactics, the researcher had to ensure that these tactics considered the qualitative nature of this study. Guba (1981) and Krefting (1990) define four aspects of trustworthiness which are relevant to qualitative studies (truth value, applicability, consistency and neutrality). Truth value asks whether the researcher has established confidence in the truth of the findings, with due consideration of the context in which the study was undertaken (Krefting, 1990; Lincoln & Guba, 1985). In response to the truth value aspect, the researcher tested the interrelatedness of findings within the data set, by means of triangulation. Applicability refers to the degree to which the findings could be applied to other contexts (Krefting, 1990). In terms of the applicability aspect, the researcher presented sufficient descriptive data to allow for comparison by identifying the settings, providing questions posed and presenting the coded responses. Consistency indicates whether findings would be consistent if replicated with the same subjects or in a similar context (Krefting, 1990). The researcher included a range of interview and document reports as well as data analysis and subsequent findings, which can be used to test consistency. Neutrality refers to the degree in which the findings are a function solely of the informants and conditions of the research and not of other biases, motivations or perspectives (Krefting, 1990; Guba, 1981). The researcher observed the neutrality of the data by describing the sample, identifying settings and providing evidence of data collection and analyses.

3.11. Ethical compliance

Ethics represent a structure of honourable principles and standards (Passer, 2014). The researcher ensured ethical compliance by adhering to suggestions advocated by Salkind (2012). According to Salkind (2012), the most important thing to remember when humans

serve as participants in research, is that individuals should be treated in order to preserve their dignity, despite the research process and/or the outcomes. This implied that all participants had to be protected from physical or psychological detriment (Salkind, 2012). In this research process, no physical or psychological harm was intended and participants were not coerced or forced to participate in this study. Furthermore, maintenance of privacy, which includes anonymity and protection of access, were observed (Salkind, 2012). This meant that confidentiality had to be maintained (Salkind, 2012). In response to this recommendation, the researcher ensured that during each research interview, an informed consent form was read, agreed and signed by each participant (Salkind, 2012). Finally, results of the interview data collected were made available to participants, and each participant was granted an opportunity to clear discrepancies (Salkind, 2012). Detailed actions employed by the researcher to ensure ethical compliance, is further clarified.

These actions included adherence to autonomy, beneficence and justice. Orb, Eisenhauer and Wynaden (2000) suggest the use of explicit principles (autonomy, beneficence and justice) in support of ethical compliance. Autonomy emphasises respect for people as the recognition of participants' rights (Passer, 2014; Orb et al., 2000). Beneficence ensures well-being and preventing harm (Bordens & Abbott, 2014; Passer, 2014; Orb et al., 2000). The justice principle aims to avoid exploitation and abuse of participants (Bordens & Abbott, 2014; Passer, 2014; Orb et al., 2000). These explicit principles were heeded by the researcher, by adhering to conditions of harmless and voluntary participation by respondents. In addition to these principles, compliance with prescribed institutional considerations, including ethical clearances, also served as the basis for all ethical actions. The researcher ensured compliance with all Cape Peninsula University of Technology (CPUT) requirements (reference CPUT Research Ethics Clearance Certificate EFEC1-11/2016), which describe the title and nature of the research, research procedures, potential risks, discomforts, inconveniences and confirmation of voluntary participation. Evidence of ethical compliance and requirements are presented in Appendix G.

The selection of participants from the specified population was according to sampling characteristics and requirements. The researcher informed the Chief Executives of the sampled AET organisations of the study (Appendix D) and requested interviews via email correspondence. The data collection initiative was enhanced by means of informed consent, information provided to participants, disclosure of the purpose of the research (reference Appendices D & G) and not exposing participants to physical and/or mental discomfort. The researcher ensured informed consent prior to each interview, by explaining the purpose of the study, and by requesting participants to voluntarily complete a documented process (reference Appendices B & G). In terms of anonymity, participants were assured that they would not be

referred to by name as participants in the study. Participants were informed that the security of their responses would be guaranteed. Electronic data had to be stored on a secure server. All paper records were scanned and securely stored. Scanned paper records were destroyed once scanned. The results of the study would be made accessible to all participants by means of an electronic link to this study.

The privacy of data in records was contemplated. The need to reveal the identity of organisations was required due to the scope of the research, insight into levels of ownership and influence pertaining to AET evaluation practices. In utilising these documents, the researcher ensured that the identities of the organisations were disclosed, as the documents consulted were in the public domain.

3.12. Role of the researcher

Researchers have to realise that systematic empiricism dictates three important aspects of science (Passer, 2014). The first aspect is that science relies on empirical evidence which requires good evidence to back up any assertions (Passer, 2014). Secondly, empirical evidence needs to be gathered according to a system or plan. Thirdly, reasoning should be used in evaluating evidence and in forming ideas (Passer, 2014). The researcher adhered to these conditions by collecting data in accordance with a detailed plan, process and provided accounts of data analyses and findings. He detailed the research methodology by explaining the research paradigm, approach, design, method, sample and data management applicable to this study. Reasoning was guided by using Braun and Clarke's (2006) recognised thematic analysis framework.

Creswell (2014) emphasises that participants have to know that they are actively participating in and contributing to a research study. In terms of data collection, the researcher followed a specific protocol. Researchers have to set aside their subjectivity and pre-conceptions of the phenomenon and focus on the research questions (Yüksel & Yildirim, 2015). The researcher recognised the potential impact of his own biases and tried to address these by making interview transcripts available to participants and by employing an external codifier to verify data analyses. Anderson (2010) states that an adequate account of the manner in which the findings were produced should be presented, and a detailed description provided of how the themes and concepts were derived from data. Adequate data have to be presented to allow the reader to undoubtedly see the connection between the data and the interpretation (Anderson, 2010). Research findings have to be presented in the context of any comparable previous research and or theories (Anderson, 2010). Creswell (2014) states that there needs to be some exchange to the participants for engaging in a study, for example sharing the final

research report. The researcher followed a transparent process by disclosing interpretations of interview and document data, as well as detailing all findings.

The researcher elected to engage in a collaborative partnership with respondents in order to collect and analyse data, aiming to generate understanding of AET evaluation. The functional researcher role, ethical considerations and future post-research actions, were managed by means of a researcher-respondent agreement (reference Appendix G).

Finally, the researcher ensured adherence to the Responsible Research in Business and Management (RRBM, 2017) Checklist. Responsible Research in Business and Management is an initiative aimed at tertiary institutions and scholars worldwide, which encourages successful transformation of research toward responsible science (RRBM, 2017). The RRBM checklist prompts researchers to produce credible knowledge that is ultimately useful for addressing problems important to business and society (RRBM, 2017). This checklist introduces seven principles to guide research, with four principles focused primarily on the usefulness of knowledge, and three principles focused on the credibility of knowledge. These principles and associated researcher actions are presented below.

- Principle 1: Service to society. The intention of this research project was to develop knowledge that could benefit business, for the ultimate purpose of advancing AET organisational management.
- Principle 2: Stakeholder involvement. The researcher engaged different stakeholders in the research process, without compromising the independence of inquiry.
- Principle 3: Impact on stakeholders. The researcher considered that this research could have an impact on diverse stakeholders, mindful that the research results may contribute to better business management. This understanding prompted the researcher to follow a process of accepted scientific inquiry.
- Principle 4: Valuing both basic and applied contributions. This research contributes to both the theoretical domain to create fundamental knowledge and in applied domains to address pressing and current issues. This research contributes to AET theory by suggesting a core model and archetype for a learning organisation system which is aimed at ensuring evaluation of organisational performance in South Africa.
- Principle 5: Valuing plurality and multidisciplinary collaboration. The researcher ensured diversity in the research inquiry by collecting data from two different sources. Furthermore, triangulation was used to compare and contrast data collected and analysed in order to reflect the plurality and complexity of AET system evaluation.
- Principle 6: Sound methodology. The researcher made use of an accepted and sound scientific method and processes in the qualitative domain.

- Principle 7: Broad dissemination. The research results will be published to ensure knowledge dissemination that advances basic knowledge and practice. Such publication is an assessment requirement enforced by CPUT.

3.13. Conclusion

In this chapter, all the methodological decisions and considerations taken by the researcher have been stated and explained. The researcher took specific care to display various parts of the research plan which fit together coherently. The research problem, purpose and questions demanded a scientific study, aimed at investigating and describing AET system evaluation features and constructs imposed by education authorities and professional bodies in order to ensure performance excellence.

In this study the researcher made use of the interpretivist paradigm, with the purpose of aiding and guiding comprehension and appreciation of construed social reality. A qualitative research approach was introduced with the intention of providing a deeper understanding of the social reality. This deeper understanding relied upon an investigation and description of AET system evaluation, guided by systems-thinking, as the theoretical foundation, within the South African AET context. For this reason, the research was designed to collect data by means of interviews and document analyses. A non-probability sample was drawn with the intention of collecting and analysing data. Publicly accessible AET documents and interviews with AET specialists served as data sources. Data analyses were guided by Braun and Clarke's (2006) thematic analysis framework. This framework introduced a structured process which was followed to identify recurring patterns and themes found during data analyses. This process also allowed the researcher to take cognisance of all ethical considerations and generalisation, triangulation and trustworthiness aspects.

In summary, in this chapter, attention was paid to the research paradigm, approach, design, sampling, data collection and analyses, generalisation, triangulation, trustworthiness, ethical considerations and the role of the researcher in order to enhance the qualitative inquiry.

CHAPTER 4
RESULTS

4.1. Introduction

Nowell et al. (2017) explain that when reporting qualitative results, the researcher has to highlight and comment on the themes which emerged from the data analysis. This chapter presents the results based on the data collected by means of interviews and documents.

The data collected from the two sources was used to identify and describe the codes and sub-themes, which are presented and discussed in Appendix E and H. Data triangulation was performed in order to compare and contrast the codes and sub-themes (super families). Triangulation was thus used to describe the interaction and conversation (O'Cathain, Murphy & Nicholl, 2010) of collected data. Each final theme represents an analysis and synthesis of data from the two data sources. These different qualitative research methods exposed different meaningful issues within each theme, such as the specific requirements, supporting statements and organisation specific experiences associated with the phenomenon. Triangulation ensured that all accounts provided rich, comprehensive, well-developed and synthesised information by integrating insights from the data sources. The objective of this synthesis was thus to gain good understanding from different perspectives of the investigated phenomenon. Furthermore, triangulation allowed the researcher to continually review the data in order to establish which characteristics of the data were the most important, thus developing a deeper understanding of "what the data is saying". A summary of the synthesised data is presented under each main theme, including comments which have implications for the problem statement, objectives and research question of this study.

The main themes provided data-driven explanations of evaluation constructs, their systemic characteristics and influence on performance excellence. These themes were developed in response to the research sub-questions. Five main themes emerged, which are presented in Appendix H and are discussed in detail below. They include (1) Organisational intent, (2) Organisational system enablers, (3) Organisational education and training system drivers, (4) Organisational performance results and (5) Learning culture. The discussion of each main theme was aimed at identifying AET process elements, which have to be evaluated by South Africa's AET organisations in order to define AET evaluation constructs. An integrated summary of the main themes is also offered in this chapter with the purpose of describing the systemic characteristics of these core AET evaluation constructs and how to use these core AET evaluation constructs to ensure performance excellence.

4.2. Organisational intent

Organisational intent helps an organisation to develop the right goals and targets, and aligns efforts into meeting them (Sârbu et al., 2009; Hord & Sommers, 2008; Collins & Porras, 2001). Data synthesised from documents and interviews revealed that the intent of an AET organisation is developed, described and nurtured by the leaders of an organisation. The intent of an AET organisation is framed by its vision, mission, strategy, policy and objectives (CHE, 2014a, 2006b, 2004a). These elements are summarised below and thereafter discussed in detail.

In its “Criteria for Institutional Audit” document, the CHE (2004b), describes organisational intent with reference to the vision, mission, strategy, policy and objectives, which an AET organisation’s leadership wishes to achieve. According to this document, the vision describes the ideal future position of an AET organisation. The mission delineates organisational goals which are required to follow the organisation’s vision (CHE, 2006b, 2004a). The vision and mission statements have to consider the transformational role that is envisaged for AET organisations, within the national higher education agenda (CHE, 2004b). Following from the vision and mission, the strategy describes the plans and actions an AET organisation intends to take to achieve these goals (CHE, 2004a). The CHE (2004e), in its “Criteria for Programme Accreditation” document, specifies that strategies have to be appropriate for the institutional type (as reflected in its mission). These strategies have to set targets, plans for implementation, mechanisms to monitor progress, evaluate impact and facilitate improvement (CHE, 2004e). These activities have to be explained in organisational policies (SAQA, 2001a).

Policies and directives provide guidance toward implementing strategies to achieve the organisation's vision, mission and objectives (SAQA, 2001a). In its “Quality Management System” document, the SAQA (2001a) explains that policies and directives indicate the ways in which an organisation sets out to achieve its goals. Organisational policies and directives thus inform and influence all the strategic decisions and actions of an organisation. Both policies and organisational objectives direct operational actions (CHE, 2003; SAQA, 2001a). The DHET (2012), in its “Post-school Education and Training” document, mentions that organisational policies and objectives refer to specific and measurable outcomes which accompany all planned operational actions. These objectives have to be formulated, implemented, monitored and evaluated in order to guide and support operational actions (DHET, 2012). Examples of operational actions include risk management, human resources management, corporate governance and social responsibility activities (CHE, 2004b; SABPP, 2014). The organisational vision, mission, strategies, policies and objectives provide clear guidance for operational management plans, programmes and associated business initiatives

(CHE, 2003; DHET, 2012; SAQA, 2001). These plans, programmes and activities have to be aligned to the AET organisation's business focus, policies and regulations (CHE, 2014b, 2003; SAQA, 2001b). Organisational intent serves thus as expression of the principles upon which an organisation positions itself as well as the ways in which it intends to operate, with whom, and for what purpose (SAQA, 2001a). For this reason, AET organisations have to determine their own strategic objectives, with associated priorities, plans and activities in order to deal with their business focus areas (CHE, 2014b). In summary, organisational intent, as a theme, includes all aspects of leadership, management, legislation, strategy, policies and objectives which provide business focus and purpose for an AET organisation. All these aspects, which have to be evaluated by South Africa's AET organisations, are discussed below in more detail.

A recurring topic that emerged in the documents and interviews was a need for organisational leadership. Organisational leadership is integral to the discourse on organisational purpose and focus, as leadership is responsible for designing, developing and evaluating the strategic intent of an AET organisation (CHE, 2016, 2004a, 2004f; SABPP, 2014; SAQA, 2001a). In its document "HR Management System Standards", the SABPP (2014), mentions that AET organisations require strategic leaders to identify strategically critical positions, roles and capabilities that will determine the sustainability and growth of the organisation. The CHE (2016), adds to these requirements, stating in its "Higher Education Review" document that organisational leadership is also concerned with establishing and promoting the direction of the AET organisation and the formulation of priorities, policy and strategy in relation to its vision, mission and objectives. Leadership is also accountable and responsible to direct and manage the various academic, support and administrative functional units (CHE, 2016).

Furthermore, the CHEQC (2005), in its "Good Practice Guide for Quality Management Systems" document, mentions that leadership has to consider the links between an AET organisation's vision, mission and objectives and its governance, teaching and learning strategies. The CHE (2003), in its "Good governance in higher education; reflections on cooperative governance in South African Higher Education" document, explains that governance is a mechanism to achieve business transformation and is aimed at enhancing a "collective good" which relies upon leadership accountability. This "collective good" includes an AET organisation's social responsibility to the community it serves (CHE, 2006b, 2004a, 2004b). The CHE (2004b), in its "Criteria for Institutional Audits" document, explains that community engagement ranges from informal activities to formal and structured activities aimed at particular community needs. Leadership's responsibility regarding governance requirements were also mentioned by the CHE participant. In response to a question which asked for recommendations that will help organisations to link AET system evaluation results to organisational performance, the participant remarked on leadership's role regarding

governance matters. She acknowledged that leadership has to consider a variety of operating considerations, for example organisational governance responsibilities, stating that:

> *Leadership has to look at how you operate, how you govern an institution; there is a lot of things at stake.*

The APPETD participant commented on the responsibility for community engagement. In response to a question which asked for recommended system elements to evaluate AET, she explained the need to evaluate community engagement and consultation. She stated that community consultation is necessary for an AET organisation to identify how it can best assist the community, stating that:

> *With society as well especially going to your rural areas it's very important to consult with the communities within those rural areas to find out the needs or the lack thereof; they have to go and look for what they can offer to help the community*.

According to the MICT SETA (2012), in its "Information on Education and Training Quality Assurance" document, one of the operating considerations is the legal standing of an AET organisation. An AET organisation may only function as a legal entity when it has been accredited as a training provider (MICT SETA, 2012). The APPETD participant highlighted the need for leadership to ensure that an AET organisation functions as a legal entity. In response to a question which asked for recommended system elements to evaluate AET, she stressed that AET organisations require formal operating systems. She commented as follows:

> *An organisation is a legal entity and second to that, it does have some form of formal structure that speaks to an education and training environment.*

The SABPP participant stated that these AET systems have to be aligned to each organisation's vision and mission. In response to a question which asked for processes to determine AET system success, he indicated the relationship between leadership and an organisation's vision and mission. He emphasised the important role of leadership by adding that if it (leadership) does not pay attention to this requirement, then an AET organisation may not achieve its goals. He stated that:

> *The education and training system must always ensure that the training covers the company's vision and mission, because if we're not doing that, not addressing company vison and mission, then what am I training the employees for?*

In his response above, the SABPP participant stressed leadership's responsibility to determine organisational intent, which was in agreement with what the CHE (2004b) states about leadership's role. The CHE (2004b) maintains that leadership is responsible to determine an AET organisation's organisational strategy. The CHE (2004b), in its "Criteria for Institutional audits" document, explains that the organisational vision, mission and objectives have to be detailed in a strategic plan with clear timeframes and resources for the achievement of goals and targets in its core functions. The purpose of a strategic plan is to determine and formulate overall goals for an organisation and to develop a plan to achieve them (Shay, 2017; Mele et al., 2010). According to CHE's (2016, 2003) governance and review documents, the formulation of such an organisational strategy has to be performed according to accepted standards of commercial and social morality (ethically) and in accordance with relevant legislation. In addition to these requirements, the CHE (2003), in its "Good Governance in Higher Education" document, stresses that such a strategy has to be aimed at achieving the optimal balance between the efficiency and effectiveness of organisational services and other activities. The CHE (2016), in its "Education Review" document, explains that leadership has to formulate organisational strategy in relation to established external regulations and internal rules. This leadership responsibility was also acknowledged by the DHET participant. For example, in response to a question which asked for system enablers to evaluate AET, she highlighted the influence of legislation and regulations as enablers. She explained that legislation and regulations which influence organisational strategy have to be considered as strategic enablers. She mentioned that the Public Financial Management Act (PFMA) and the NQF Act serve as examples of strategic enablers. She commented as follows:

> *The PFMA is a great enabler. Another great enabler is the NQF Act and there is associated Acts; those they are great strategic enablers.*

Organisational leadership is thus not only concerned with establishing and promoting the direction of the AET organisation but is also responsible for the formulation of its strategy in relation to established rules and regulations (CHE, 2016). The formulation of a strategic plan has to consider organisational performance criteria, time-frames and resources for the achievement of goals, targets and core functions (CHE, 2004b). Organisational strategy and its link to organisational performance was also advanced by the SAQA participant. In response to a question which asked for recommendations to link AET system evaluation to organisational performance, she acknowledged the need for such a link. She emphasised the importance of this link by explaining that an AET organisation's strategic imperatives have to relate to performance.

She commented as follows:

> *We have items that relate to the strategic, I mean the strategic imperatives. It's got the performance in relation to the strategic imperatives, so it's a whole thing about strategic imperatives.*

Organisational strategy is determined by its senior leadership and then executed by operational managers at all levels throughout the organisation (CHE, 2016, 2004a). A need for effective organisational management and business focus was another recurring topic that emerged from the document and interview data. Operational managers have to convert strategic plans into measurable outcomes by means of processes and procedures which guide business operations (CHE, 2016, 2015, 2004b; SAQA, 2001a; SABPP, 2014). Operational managers have to determine, as systematically and objectively as possible, the relevance, effectiveness, efficiency and impact of processes and procedures in the light of specified organisational strategies and objectives (CHE, 2004f).

Processes and procedures which guide business operations include corporate governance, risk management and organisational resource management (CHE, 2004b; DHET, 2012; SABPP, 2014). The CHE (2006), in its "Kagisano" publication, explains that organisational processes and procedures have to comply with corporate governance requirements. In its document "HR Management System Standards", the SABPP (2014), mentions that AET organisations have to manage operational risks by sourcing or developing risk assessment tools and methodologies that are relevant, credible, valid and reliable. The DHET (2012), in its "Post-school Education and Training" document, mentions that organisational resource management activities include infrastructure, facility and human resource processes and procedures.

ETDP SETA and APPETD interviewees pointed out that AET organisational managers have to pay attention to infrastructure and technology resource requirements. In response to a question which asked for recommended processes to determine AET system success, the ETDP SETA participant pointed out that within an AET system, teaching and administrative infrastructure matters have to be considered. He stated that managers have to ensure the availability of teaching and administrative infrastructure, stating that:

> *They need to demonstrate that they do have an infrastructure for admin purposes your office space and so forth, and also, they need to demonstrate to us that they do have access to a training facility.*

In response to a question which asked for recommendations that will help organisations to link AET system evaluation results to organisational performance, the APPETD participant stressed that both organisational resources and technology matters have to be taken into account. She explained that the role and need for technology, as an AET organisational resource, should not be underestimated, stating that:

> *What we sometimes forget is that providing resources to make that available within an organisation to enhance organisational performance and then, very much, technology plays a role.*

This business focus, processes and procedures are not the only areas of leadership and management responsibility within the AET organisational context. The QCTO's (2008), in its "Introduction to the QCTO" document, explains that AET leadership and managers are also responsible to align AET-specific organisational processes and structures to education and training legislation, policies and procedures. The CHE (2016), in its "Education Review" document, stipulates that AET organisations have to attend to the academic, support and administrative responsibilities, as stipulated in legislation. In response to a question which asked for AET system evaluation standards, the ETDP SETA participant referred to SAQA standards and requirements. He mentioned that specific and minimum AET academic, support and administrative requirements have been promulgated by the SAQA. He explained that the SAQA has published criteria and guidelines which may be used by AET organisations in order to meet these requirements, stating that:

> *SAQA had already published a criteria and guidelines that should be utilised. So there was a criteria and guideline for training providers which listed the specific and minimum requirements and standards that each and every provider must be able to meet.*

Legislative compliance is a precondition for registration, re-registration, accreditation and re-accreditation of AET organisations (MICT SETA, 2012). AET organisations have to adhere to a specific accreditation and registration processes (MICT SETA, 2012). The CHE (2009), in its "Guide for Evaluators: Accreditation and re-accreditation of programmes submitted to the Higher Education Quality Committee" document, mentions that adherence to accreditation and registration processes is an important strategic objective for an AET organisation. Accreditation and registration processes require AET organisations to demonstrate that qualifications, programmes and learning experiences which are responsive to the broad development needs of learners, national goals, priorities and targets are offered (CHE, 2009, 2001b). The MICT SETA (2012), in its "Information on Educations and Training Quality Assurance" document, explains that an AET organisation can only be accredited as a training

provider for a stipulated period of time. Accreditation and registration of AET organisations will only be awarded when a provider meets all legislative conditions and requirements for accreditation and registration (CHE, 2009, 2004b, 2004e; MICT SETA, 2012). In response to a question which asked for processes to determine AET system success, the CHE participant explained that AET organisations also have to comply with re-accreditation and re-registration process requirements. She explained that AET organisations have to submit various evaluation reports, which will be reviewed by the CHE. She added that evidence of compliance with re-accreditation and re-registration criteria and minimum standards will guide CHE and DHET decision-making. She summarised this process, stating that:

> *What we call a re-accreditation exercise, where after three to five years we will then ask for a submission like a self-evaluation report, and we will then ask them to submit their programme evaluation that's also based on criteria and minimum standards on what they did, how they implement this, and then this will again be reviewed through this whole process, and then a decision will be made if the programme can be re-accredited and be re-registered. If the institution does not comply with the basic aspects that the DHET requires from them they will never register them.*

In response to the same question which asked for processes to determine AET system success, the SAQA participant explained that accreditation efforts require compliance with stringent conditions, stating that:

> *Because at the moment you know there is accreditation for providers. The quality councils accredit providers and the DHET registers them; it is a very inclusive, very robust process*.

In response to the same question, the APPETD participant had the same opinion as the SAQA interviewee, stating that:

> *We would recommend firstly is compliance, because that is a definite and a must - whatever is needed to ensure you do get your accreditation and registration.*

National legislation, policies and procedures, have to be considered by AET organisations when internal policies and procedures are formulated (CHE, 2004b). An AET organisation's internal policies and procedures have to express the principles upon which it intends to operate, with whom, and for what purpose (SAQA, 2001a). The CHE (2001a), in its "New Academic Policy for Programmes and Qualifications in Higher Education" document, explains that from a strategic perspective, these policies and procedures have to pay attention to AET

priorities. These priorities include strategic matters such as responding to social needs, recognising prior learning, providing vocational competencies, maintaining high standards of teaching and assessment, motivating lifelong learning, ensuring institutional transformation, and undertaking benchmarking activities (CHE, 2001a). These policies and procedures have to be aimed at providing strategic support for continued growth, promoting accountability and monitoring an AET organisation's overall effectiveness (DHET, 2005). Internal policies and procedures thus have to be aligned to the organisational intent. The CHE (2004f), in its "Framework for the Monitoring and Evaluation of South African Higher Education" document, states that the development of an evaluation system has to be mindful of the intentions, focus and impact of internal policies and procedures. These policies and procedures have to be evaluated in terms of their contribution to the organisational intent, strategy, objectives and its performance (CHE, 2006b, 2004b). The intention of such a system-based evaluation has to be aimed at identifying interventions for improvement and enhancement which will guarantee organisational performance excellence (CHE, 2006b, 2004b, 2001a). This notion of excellence was raised by the SABPP participant, in response to a question which required a description of AET system excellence. The SABPP participant expressed the following view, in order to explain how an AET organisation's vision, mission and internal system can potentially contribute to organisational performance excellence:

> *The other point of systems and excellence are saying that what is the company's vision, mission - so that we can see excellence coming out of the systems.*

Organisational purpose and focus areas (i.e. organisational intent) specific to South African AET organisations were identified from the synthesised document and interview data. The interview and document data regarding an AET organisation's intent matched. Documents detailed specific organisational intent requirements, which have to be introduced by AET organisations. Interviewees elaborated on these requirements and pointed out the importance of organisational activities associated with this theme. The data thus elucidated complementary and related aspects of the same phenomenon. Systemic connections between leadership, management, legislation, strategy, policies and objectives were highlighted as elements of an AET organisation's intent. For example, specific reference was made by the QCTO (2008) of training legislation, policies and procedures. Legislation and leadership's vision and mission showed a link to an organisation's strategy and objectives (CHE, 2004b; 2004e). The organisational strategy informs directives, policies, targets, plans and activities which have to be introduced with the aim of achieving the organisation's vision, mission and objectives (SAQA, 2001a). Examples of organisational and business activities include academic services, support and administrative duties, control of infrastructure and technology resources, corporate governance compliance, risk management, organisational resource

management, community engagement arrangements, and accreditation assurance matters. (APPETD, 2018; CHE, 2018, 2016, 2004b; DHET, 2012; MICT SETA, 2012; SABPP, 2014). By comparing and synthesising data from the CHE (2003), DHET (2012) and SAQA (2001a), the researcher found that operational management plans, programmes and associated business initiatives have to be guided by organisational directives, policies, targets and plans. Furthermore, these plans, programmes and activities have to be aligned to the AET organisation's business focus, policies and regulations (CHE, 2014b, 2003; SAQA, 2001b). Finally, all these complimentary and related aspects have to be evaluated in terms of their contribution to the organisational intent, strategy, objectives and its performance (CHE, 2006b, 2004b, 2001a; SABPP, 2018). From these synthesised findings the researcher concluded that organisational intent, as a theme, made provision for all aspects of leadership, management, legislation, strategy, policies and objectives which provide business focus and purpose for an AET organisation.

These findings support the shared viewpoint expressed by Singh et al. (2012) and McClure and Jaeger (2008) that organisation structure, leadership, short and long-term growth objectives and strategies, directly and indirectly impact upon an organisation's performance. However, document and interview data did not reveal specific and detailed activities which describe how an AET organisation has to formulate its vision and mission and how to design, develop, implement and evaluate its strategy, objectives, policies and procedures. Such a visionary image has to enable an organisation to understand its contexts, make sense of its practice and exploit its own unique situations to meet strategic and social goals (Nyhan et al., 2003). For this reason, critical processes in which the organisation has to be very successful in order to achieve organisational strategies and objectives have to be detailed (Fairholm, 2009; Ristić & Balaban, 2006). Despite the absence of such detailed explanations, the CHE (2004f), in its "Framework for the Monitoring and Evaluation of South African Higher Education" document, states that an AET organisation has to evaluate and explain its performance, successes, deviations and failures attributed to its strategy, objectives, policies and procedures.

Although no specific system evaluation model is offered by the CHE, DHET, SAQA and QCTO, the expectation is that an AET organisation has to evaluate as systematically and objectively as possible the relevance, effectiveness, efficiency and impact of activities in the light of its vision, mission, strategy and objectives (CHE, 2004f). This statement supports systems-thinking, for it allows an organisation to design, manage and improve processes/sub-systems to fully meet its objectives (Calvo-Mora et al., 2005). In accordance with this requirement, organisational leadership, management, strategy, policies and objectives have to be evaluated (CHE, 2006b, 2004a; CHEQC, 2005). Such an evaluation has to be planned in order to provide

performance data which would indicate whether the organisation developed the right goals and targets and successfully aligned its efforts into meeting them (CHE, 2016, 2006b, 2004a; CHEQC, 2005). Evaluation satisfies CHE, DHET, SAQA and QCTO requirements and provides AET organisational leadership and management with performance data pertaining to its purpose, vision, mission, strategy and objectives (CHE, 2004a; SABPP, 2014). These findings support the view held by Mohamed et al. (2014) that strategic performance measurement has to provide the basis for the evaluation and improvement of an organisation's business model/system. Evaluation data have to be analysed and translated into action plans, indicators and objectives for improvement of organisational performance (CHE, 2004f; SAQA, 2001a). Thereafter, organisational leadership would be able to review the organisational purpose, its strategy and objectives, based on the evaluation data (CHE, 2006b, 2004f). Any changes to the overall organisational intent will thus be based on evaluation data and results (CHE, 2004f; SAQA, 2001a). The benefits associated with this level and focus of evaluation are that it supports continued growth, promotes accountability and monitors overall organisational intent and effectiveness.

4.3. Organisational system enablers

Organisational system enablers, as a second emerging theme, refer to enabling and supporting factors which allow an AET organisation to align its internal capabilities, processes and resources with its intent and context (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014). Realisation of an organisation's intent is thus facilitated by means of system enablers (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014).

Data from documents and interviews indicated that enablers include capabilities, processes and resources which are required to support all organisational systems. The SAQA (2001a), in its "Quality Management System for Education and Training Providers" document, describes organisational capabilities as market-driven and entrepreneurial expertise which serve to strategically align an organisation in order to ensure sustainability and growth of the business. The SAQA (2001b), in its "Quality Management System for Education and Training Quality Assurance Bodies" document, describes organisational processes as all the quality management activities and information an organisation uses to enable it to improve and more consistently deliver products and services, which meet and exceed the needs and expectations of its customers and beneficiaries. The CHE (2004b), in its "Criteria for Institutional Audits" document, states that human, financial, infrastructure and technology resources have to be made available and utilised to give effect to the goals and priorities. These capability, process and resource enablers are necessary to support the delivery of products and services of an AET organisation (SAQA, 2001a, 2001b). The CHE (2015), in its "Content Analysis of the

Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project" document, reminds AET organisations to establish quality management evaluation processes. These processes have to be used to evaluate regulatory compliance and the integrity of internal systems (CHE, 2015). The CHEQC (2005), in its "Good Practice Guide for Quality Management of Research" document, states that before an organisation can attempt to evaluate its entire AET system, a thorough understanding of the current practices, procedures and enablers is required. The identification and evaluation of enablers is thus an important step of the AET system evaluation (CHE, 2015; CHEQC, 2005). Organisational system enablers, as a theme, introduces organisational education and training processes, quality management system processes, and organisational capabilities and resources as AET system elements which are applicable to an AET organisation (CHE, 2016, 2015, 2014a, 2011a, 2006b, 2005, 2004b, 2001a, 2001b; CHEQC, 2005; Marock, 2000; QCTO, 2008; SAQA, 2001a, 2001b). These enablers and the role, purpose, influence and structure of quality management, including evaluation of system performance expectations, are presented in this theme. All these aspects, which have to be evaluated by South Africa's AET organisations, are discussed below in more detail.

Organisational capabilities in an AET organisation relies on the quality and suitability of facilities and resources which are available to staff, stakeholders and students to promote and support AET (CHE, 2014a, SAQA, 2001a, 2001b). Infrastructure and facilities include libraries, computer facilities, teaching spaces and laboratories (CHE, 2014a, 2009, 2004a; DHET, 2012). In response to a question which probed organisational process needs, the ETDP SETA participant identified organisational infrastructure as an important process requirement. He explained that infrastructure is a key requirement to ensure the success of AET efforts. He stated that:

> *Infrastructure is one of the key requirements; you'd be looking at infrastructure as I have alluded to earlier on, for them to deliver on their education and training programmes.*

Resources consist of all aspects of technology, financial and human resources management (CHE, 2004b; DHET, 2012). For example, the CHE (2004b), in its "Criteria for Institutional Audits" document, states that AET organisations have to make provision for staff recruitment, selection and development initiatives which promote professional competence. This provision was also revealed in the 4P Model, which specifically considers human resources and their role in an organisational context as one of the most critical issues for any organisational improvement strategy (Dahlgaard-Park & Dahlgaard, 2008; Dahlgaard & Dahlgaard-Park, 2004). These focus areas are also referred to by the SAEF (2001) as the strategic human

resource development approach, which provides the strategy for an organisation to ensure business and operational cohesion. The importance of this CHE provision was stated by the ETDP SETA participant in response to a question which asked for organisational process needs. The ETDP SETA participant explained that qualified and competent employees are required to ensure that business and academic processes and activities function in a professional manner. He describes these employees as organisational enablers, stating that:

> *The organisation would then need to have qualified practitioners, your human capital as an enabler for this organisation to be able to run professionally … the facilitator trainer who must be academically qualified to train.*

Technology refers to software which is required for teaching and learning purposes (CHE, 2016, 2015, 2007, 2004e; DHET, 2012). Technology examples, which include information, communication and technology-enabled training and learning tools, are presented by the CHE (2015) in its "Content Analysis of the Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project" document. The CHE (2007), in its "Review of Higher Education in South Africa" document, indicates that AET system evaluations have to address resources and technology facets of the organisation. A similar view was expressed by the APPETD participant, when she responded to a question which asked for her recommendations to link AET evaluation results to organisational performance. She explained that organisational resources and technology contribute towards enhancing organisational capability and performance. She specifically mentioned the important role of technology, stating:

> *That what we sometimes forget is that providing resources, to make that available within an organisation to enhance organisational performance and then, very much, technology plays a role.*

System enablers require financial resources in order to meet organisational objectives (CHE, 2004b; SAQA, 2001a). Financial resources are used to acquire and manage resources, technology and infrastructure within AET organisations in a sustainable manner (CHE, 2004b, 2004f, 2003; Marock, 2000). Sustainability refers to the availability of adequate financial resources for the development, implementation, management, review and improvement of AET products and services (CHE, 2004a, 2004f, 2003; Marock, 2000). Financial system enablers are also mentioned in the Nomological Network of the Dimensions of Learning Organisation and Performance Outcomes, GTES and ECPE Model to measure operational performance and organisational outcomes (Asif, Raouf & Searcy, 2012; Suddaby, 2010). In addition to these views, Wang and Wilcox (2006) explain that the financial impact of training participation is an important systemic consideration, for it illustrates a link between learning

behaviours and organisational outcomes. The importance of financial success was also mentioned by the DHET participant. In response to a question which asked for recommended processes which can be linked to AET system success. The DHET participant highlighted the importance of financial stability. She mentioned that financial stability serves as a precondition to attract learners. She also explained that without financial stability an AET organisation may face financial failure, stating that:

> *I have to be financially sustainable in order to make sure that learners that come into my institution or organisation, without us going bankrupt and learners are left on the streets.*

Organisational system enablers have to be managed in a structured manner (CHE, 2015, 2007, 2004f, 2001a; SAQA, 2001a). AET organisational capability, facilities and resources have to be performed and managed in accordance with a context-specific quality management system (CHE, 2016, 2015; CHEQC, 2005; QCTO, 2008). The role of a quality management system is to provide a clear description of the practices of the organisation and how it assures that quality needs are fulfilled (QCTO, 2008; SAQA, 2001a). An organisation-specific quality management system has to provide procedures which ensure that all the practices of the organisation are consistent with legislation, policies and internal regulations (Marock, 2000). A need for effective organisation-specific quality management system was thus another recurring topic that emerged from the data. The SAQA (2001a), in its "Quality Management System for Education and Training Providers" document, stresses the role of quality management as a context-specific and fit-for-purpose system which influences continuous improvement and organisational performance. This SAQA (2001a: 6) document describes the purpose of a quality management system as follows:

> A *quality management system has to include all the activities and information an AET organisation uses, to enable it to better and more consistently deliver products and services that meet and exceed the needs and expectations of its customers and beneficiaries, more cost effectively and cost efficiently, today and in the future*.

The above SAQA statement, was in agreement with the following statement by the ETDP SETA participant. In response to a question which asked for recommended processes to determine AET system success, the ETDP SETA participant stressed the need for a quality management system which deals with all organisational processes. He mentioned that AET organisations have to adhere to published SAQA criteria and guidelines, which prescribe the minimum quality management system requirements.

The ETDP SETA participant stated that:

> *Need to have in place policies and procedures, which we normally refer to it as QMS, quality management systems, with the policies that will cover all processes within the organisation. SAQA had already published a criteria and guidelines that should be utilised. So there was a criteria and guideline for training providers which listed the specific and minimum requirements and standards that each and every provider must be able to meet. When you look at quality management systems within a training provider it should meet these certain standards; we all have common understanding on the application of the policies and regulations that govern the quality assurance space.*

In his response above, the ETDP SETA participant motivated for a comprehensive quality management system. This system requirement was in agreement with the CHE's view of a fit-for-purpose quality management system, which has to be appropriately integrated with all facets of organisational operations (CHE, 2006b, 2004b, 2004e, 2001b). This integration is needed in order to identify and manage processes and outline procedures which support quality principles (CHE, 2006b, 2004b, 2001b). Such a comprehensive approach towards quality management has to ensure that the degree of excellence specified in organisational strategy, policy and objectives is achieved through the quality management procedures, practices and review mechanisms (Marock, 2000). This requirement calls for an evaluation of an AET organisation's quality management system (CHE, 2004b; SAQA, 2001a). The CHE (2004b), in its "Criteria for Institutional Audits" document, identifies a need to evaluate the performance and impact of a quality management system. This mentioned evaluation has to be aimed at identifying interventions for improvements and enhancements of the quality management system (CHE, 2004b, 2001b). Quality management system evaluations have to consider the links between planning, strategic choices, resource allocation and quality management (CHE, 2004b) which are guided by the mission and vision of the institution and the main goals of the AET organisation (CHE, 2009). In response to a question which asked for recommendations with respect to continuous improvements within an AET system, the need for a quality management system evaluation was stressed by the CHE participant. She explained that a quality management system has to be reviewed and evaluated to ensure that procedures and practices of the organisation are consistent with legislation, policies and internal regulations. She acknowledged that the review and evaluation outcomes have to encourage quality management system changes and improvements, saying:

> *It is very, very important to have that quality, continuous quality improvement, and we also look at that during our reviews, and any institution that needs to take stock in*

certain time frames to look if to see to it that they are still on track. Are they still doing what they are supposed to be doing, and if they're not and the results are not good, what are they going to do to improve?

Furthermore, in response to the same question, which asked for recommendations with respect to continuous improvements within an AET system, the ETDP SETA participant mentioned that an AET organisation has to regularly review its quality management system and processes. He remarked that AET organisations have to:

Be looking at systems and processes that they would need to put in place. *As a training provider you need to look at your quality management system. There is a review mechanism of the policies and systems processes … that you should continuously review your systems, review your processes, review your procedures.*

An AET organisation has to pay attention to organisational intent, strategy and resources when it designs, develops and implements its quality management system (CHE, 2001a, 2004b). However, finding a relevant quality management system, which focuses on all process elements, may be challenging for AET organisations. According to Marock (2000), in the "Quality Assurance in Higher Education: The role and approach of Professional Bodies and SETAs to Quality Assurance" document, the problem is that quality criteria tend to be very broad, making it difficult to gauge the adequacy, applicability and success of an AET organisation's quality management system. A challenge for an AET organisation is thus to create and operate a quality management system which maximises operational effectiveness (SAQA, 2001b).

Another quality management challenge was raised by the DHET participant in response to a question about organisational processes which are used to determine AET system success. She explained that performance measurement and evaluation cannot be successful when organisational system goals and objectives are not clearly defined. According to her, AET organisations have to determine all the applicable organisational goals and objectives before performing measurement and evaluation of the system. She argued that:

We've got lots of M&E things, but it's very ineffectual because it turned out to be just tick box. In order for us to do the theory of change and so on we identify the starting point are the goals and objectives of the system. Now, if the goals and objectives of the system are not good, are not clear, are not measurable and so on and so forth then we're not going to be successful.

Despite these challenges, the requirements for an appropriate quality management system are documented by the CHEQC (2005) in its "The Good Practice Guide for Quality Management of Research" and the QCTO (2008) in its "Introduction to the QCTO" documents. These documents refer to a need for standardised quality management processes and systems (CHEQC, 2005; QCTO, 2008). As a possible solution to the mentioned current quality management system problems, the CHE (2004c), in its "Framework for Institutional Audits" document, has identified a need for AET organisations to engage in systematic and continuous quality improvements which are appropriate to their context as well as to their mission and strategic goals. The CHE (2006b), in its "Kagisano" document, has identified a requirement for AET organisations to ensure that quality management systems identify opportunities for improvement of organisational processes and activities (CHE, 2006b). These improvements have to inspire performance which encourages organisational change, advancement and competitiveness (CHE, 2010, 2009, 2006b).

Organisational enablers, including capabilities, processes and resources specific to South African AET organisations, were identified from the document and interview data. Interview and document data regarding organisational enablers matched. Documents detailed specific enabling requirements which had to be introduced by AET organisations. Interviewees elaborated on these requirements and pointed out the importance of enablers and activities associated with this theme. The data thus elucidated complementary and related aspects of the same phenomenon. These data sources thus acknowledged the impact of organisational capabilities, processes and procedures on organisational performance. Organisational education and training processes, quality management system processes, and organisational capabilities and resources were identified as AET enablers (CHE, 2016, 2015, 2014a, 2011a, 2006b, 2005, 2004b, 2001a, 2001b; CHEQC, 2005; Marock, 2000; QCTO, 2008; SAQA, 2001a, 2001b). A comparison of data sources provided for a synthesised finding which illustrated that capabilities, processes and procedures direct all organisational activities. This outcome is discussed in more detail below.

From an AET system evaluation perspective, the impact of organisational enablers on AET efforts have to be evaluated (CHE, 2004b, 2004e; QCTO, 2008). Such a system evaluation requires in-depth understanding of aspects to be considered when determining and measuring the effectiveness and efficiency of AET (Meyer et al., 2010). The purpose of such an evaluation is to determine what effect organisational resources and capabilities have on AET processes (CHE, 2009, 2004b). Organisational processes thus have to ensure that organisations offer good quality AET (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f; QCTO, 2008). For example, the CHE (2004f), in its "Framework for the Monitoring and Evaluation of South African Higher Education" document, explains that education and training processes have to ensure

that academic and educational standards are maintained and applied within AET organisations. According to data sources, these processes and procedures, which are typically situated within a quality management system, have to ensure that the degree of organisational performance excellence specified is actually achieved (CHE, 2004b, 2001b; Marock, 2000; QCTO, 2008; SAQA, 2001a). For this reason, quality management has to be integrated into all aspects of products and services within an organisation's management system (Nguyen et al., 2017). Such a management system has to provide for financial, technological, human resource and stakeholder engagement processes and procedures (APPETD, 2018; CHE, 2007, 2004b, 2004f, 2003; DHET, 2012; ETDP SETA, 2018; Marock, 2000). Regular reviews of the effectiveness and impact of these capabilities, processes and procedures, are prescribed and required in order to ensure continuous improvement, innovation and transformation of organisational system enablers (CHE, 2004b; DHET, 2018; SAQA, 2001a, 2001b).

These outcomes support Jucevičienė and Leonavičienė's (2007) view, which suggests that when an organisation decides to follow a process of systemic development into the learning organisation, it has to evaluate the maturity of different organisational systems, sub-systems and departments. The benefit associated with this level and focus of system evaluation is that it acknowledges the important role, contribution and influence of organisational capabilities, processes and resources (organisational system enablers) within an AET organisational context. For this reason, organisational system enablers which influence AET practices in South Africa had to be identified and described for each organisation (Meyer et al., 2010). It was apparent from the document and interview data that organisational enablers, specific to South African AET organisations, have to be explicitly defined, systematically designed, comprehensively managed and periodically revised in order to satisfy organisational needs and expectations (Bou-Llusar et al., 2008).

4.4. Organisational education and training system drivers

Organisational education and training system drivers, as an emerging theme, refer to the core capabilities, processes and resources which are unique to an AET organisation. These drivers, according to Ege et al. (2017), include education, training and learning activities which have to be embedded in the systems, structures, strategy, routines and prescribed practices of the AET organisation. All these aspects, which have to be evaluated by South Africa's AET organisations, are discussed below in more detail.

Organisational education and training drivers are described by the CHE (2004b), in its "Criteria for Institutional Audits" document, as core academic activities which have to advance an AET

organisation's mission, strategy and goals. According to Anderson (2014), these drivers are important because there is a lack of structured processes to create a learning strategy linked to business objectives and measurement of effectiveness. These core AET and learning interventions in South Africa have to be aligned with the overall business objectives of the organisation (Meyer et al., 2010). Core AET capabilities include learning programme research, design, development, implementation and assessment expertise (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). The CHE (2016), in its "South African Higher Education Reviewed" document, states that AET organisations require a strong capability for institutional research which can produce new and relevant knowledge. The CHEQC (2005), in its "The Good Practice Guide for Quality Management of Research" document, stresses that AET organisations have to ensure that adequate and appropriate structures exist that implement, coordinate and monitor all aspects of the research processes, including the evaluation, approval, funding and assessment of research efforts. The SAQA (2001a), in its "Quality Management System for Education and Training Providers" document, explains that learning programmes have to be designed on the basis of research outcomes. This document also confirms that learning programmes have to be developed, delivered and assessed by following instructional design methodologies (SAQA, 2001a). These methodology choices have to be justified by AET organisations (SAQA, 2001a). AET processes refer to documented research, design, development, implementation and assessment guidelines and standards. The DOL (2008), in its "Quality Assurance Framework" document, explains that AET organisations have to adhere to best practice guidelines and standards when designing, developing, implementing and assessing programmes and qualifications. Core AET resources include human resources (for example Instructional Designers, Learning Facilitators, Programme Assessors) and AET resources such as training, learning support, and assessment materials which are specific to an organisation's AET system (CHE, 2014a, 2004e). In response to a question which asked for recommended processes in order to determine AET system success, the SAQA participant highlighted the important role of instructional design and development processes. She stated that AET organisations have to make use of instructional design and development specialists to produce programme content. She stressed the role of these specialists, stating that:

> *It really comes down to the specialists in the providing institutions and the qualification developers have that expertise, so that's the thing that you really, you know, that is key and that does come from qualifications developers, the technical content.*

Data from documents and interviews pointed out that system drivers are the key leverage points within an AET organisation, which can either be advanced, transformed or refined to produce some significant effect on the rest of the organisation (CHE, 2016, 2001a). The CHE (2001a), in its "A new Academic Policy for Programmes and Qualifications in Higher Education"

document, mentions that priorities such as responding to social needs, recognising prior learning, providing vocational competencies, maintaining high standards of teaching and assessment, and motivating lifelong learning have to guide the formulation and management of AET system drivers. In response to a question which dealt with system enablers used to evaluate AET, the QCTO participant reminded AET organisations of the tasks and responsibilities associated with teaching and learning advancements. He stressed that suitable qualifications have to be developed which will ensure that current educational challenges, such as unemployment, systemic imbalances, inequality and poverty, are adequately addressed and resolved, stating that:

> *Very good qualifications that have been developed that could make impact into the country, make impact into the triple challenge of the country: the unemployment, the imbalances of the past, inequality as well as poverty.*

Specific education and training system driver responsibilities and tasks which have to be considered by AET organisations are specified by the CHE (2016, 2004b) and SAQA (2001a). These specific drivers include: legislative compliance, learner-focused education and training needs, organisational learning processes, programme implementation, assessments and evaluations (CHE, 2016, 2004b; SAQA, 2001a). The researcher noted that specific education and training system drivers were not detailed in the quality and excellence models reviewed in Chapter 2. In addition to these drivers, the need for learner-focused instructional design processes was raised by the SABPP participant. In response to a question which asked for system enablers to evaluate AET, he explained that AET organisations have to consider the influence of learning style differences, stating that:

> *There is insufficient consideration of how we address different styles of learning. Very important, not everybody learns rote like you do in matric and writes an exam; there are five or six different learning styles. How do we approach that? Have we considered it?*

The QCTO (2014), in its "Occupational Qualifications Sub-Framework Policy" document, mentions that organisational education and training system drivers have to comply with national qualification structures, rules and methodologies. These requirements include the structured qualification frameworks introduced by the SAQA and QCTO, quality management rules and learning design, and assessment and moderation methodologies (DHET, 2005; QCTO, 2008; SAQA, 2001a). In response to a question which asked for recommendations that will help organisations to link AET system evaluation results to organisational performance, the APPETD participant stressed the need to comply with the SAQA and QCTO legislated

requirements. She specifically stressed that system drivers have to comply with national legislation. She made specific reference to a need for AET organisations to introduce and comply with mixed learning methodologies, as dictated by the National Policy Framework, stating that:

> *The new National Policy Framework for mixed learning methodology has to be followed.*

An AET organisation has to utilise its instructional design and development processes and capabilities in order to offer programmes which are designed to serve particular national goals, priorities and targets (CHE, 2016, 2006b, 2003, 2001b, QCTO, 2008). National goals, priorities and targets require that AET organisations educate an increasing number of skilled professionals and knowledge workers by providing opportunities to master the techniques, skills and work-based learning which are required by a specific profession or occupation (CHE, 2004b, 2006b). The DOL (2009), in its "Presentation: QCTO" document, mentions that these national goals, priorities and targets require the design, development and delivery of occupational curricula and qualifications which are directly linked to labour-market skills and needs (DOL, 2009). This link between curricula and labour-market skills and needs was acknowledged by the ETDP SETA participant. In response to a question about recommendations that will help organisations to link AET system evaluation results to organisational performance, the ETDP SETA participant explained that AET organisations have to address the challenges associated with national goals, targets and priorities. He suggested that fit-for-purpose learning programmes and life-long learning initiates have to be introduced to meet these challenges, stating that:

> *A well performing organisation is to be seen to be making a contribution to the redress around the challenges that are there when it comes to education. The driving vehicle for this organisation will be the learning programmes. Learning programmes must be aligned to the qualifications and or unit standards*; *we strongly believe in the principle of life-long learning.*

Instructional design and development processes have to be evaluated to ensure that the requirements of AET, as applicable to the design, development and delivery of the programme, have been met (CHE, 2004b, DHET, 2011; SAQA, 2001a). The SAQA (2001a), in its "Quality Management Systems for Education and Training Providers" document, states that AET organisations have to outline and document the process used for learning programme design, development, delivery and assessment. The impact of these system drivers on organisational results and performance has to be evaluated (CHE, 2015, 2014a, 2004a; DHET, 2011). The

CHE (2004e), in its “The Criteria for Programme Accreditation” document, stresses that this evaluation of system drivers requires an appraisal of the quality and success of learning programmes which serve to provide beneficial AET process feedback to the organisation. The CHE (2009), in its “The Guide for Evaluators: Accreditation and re-accreditation of programmes submitted to the Higher Education Quality Committee” document, suggests that implementation appraisals be used to facilitate system driver evaluations. The purpose of an implementation appraisal is to introduce strategies which will measure academic development, teaching and learning interaction, student assessment practices, and the integrity of the assessment process (CHE, 2009). Implementation appraisal results have to be used by an AET organisation to determine whether or not the programme offerings meet changing academic and market needs (CHE, 2009). The CHE (2004e), in its “The Criteria for Programme Accreditation” document, stresses that instructional design, development, delivery and appraisal processes have to be part of a systematic framework, which means that organisations have to implement ways to monitor, evaluate and effect improvement in teaching and learning.

Organisational education and training system drivers, specific to South African AET organisations, were identified from the document and interview data. Interview and document data regarding these system drivers matched. Documents detailed specific system drivers which have to be introduced by AET organisations. The system drivers included learning programme research, instructional design, development, and implementation and assessment expertise (CHE, 2016; CHEQC, 2005; DOL, 2008; SABPP, 2014; SAQA, 2001a). Interviewees elaborated on these aspects, and pointed out the importance of system drivers associated with this theme (QCTO, 2018; SABPP, 2018; SAQA, 2018). The data thus elucidated complementary and related aspects of the same phenomenon. This finding is important, for cognition of the system dynamics underlying organisational learning is key to success in institutionalising a performance-based approach within an organisation (Gephart & Marsick, 2016). For this reason, AET organisations have to create facilitative structures and arrangements to support and ensure learning to move toward their objectives (Yang et al., 2004).

The results of a synthesis of the data sources acknowledged that AET organisations have to put into practise education and training system drivers, which have to be regularly monitored by reviewing all the organisational arrangements for planning, design, development and management of learning programmes (CHE, 2004a, 2004b, 2004e; DOL, 2008; QCTO, 2014, 2008). These results, following an evaluation of organisational education and training system drivers, have to serve as important indicators of the effectiveness of an AET system (CHE, 2004a; Marock, 2000; SAQA, 2001a). These education and training system drivers serve as

examples of systemic levers of change, which according to Shay (2017), are needed to evaluate the effectiveness of teaching and learning and to determine whether an AET organisation is achieving its educational and organisational goals. Thus, regular reviews of the effectiveness of systems and procedures for the design, development, delivery and assessment of AET programmes, courses and modules are needed (CHE, 2004b; SABPP, 2014).

4.5. Organisational performance results

Organisational performance results, as the fourth emerging theme, refer to the impact of system variables on the effectiveness of the entire organisation. The CHE (2004a), in its "Criteria for Institutional Audits" document, provides a review of core organisational activities, including teaching and learning initiatives. This document describes the organisational performance evaluation as a regular review of the nature and extent of institutional responsiveness and associated outcomes, which are aligned to institutional goals and priorities (CHE, 2004a). Performance results are thus used to determine whether the intended purpose of the AET organisation was met, and whether the results are in accordance with these expectations (CHE, 2012, 2006b, 2004b, 2004f; CHEQC, 2005; Marock, 2000; SABPP, 2014). Performance results also provide information which reflects upon the systemic integration and alignment of all processes within the organisation (CHE, 2004c, 2004f; CHEQC, 2005). Organisational performance is influenced by a variety of factors that are both internal and external to the organisation (CHE, 2016, 2003; DHET, 2012). The CHE (2003), in its "Kagisano" document, explains that such a systems-approach has to include an evaluation of legislative compliance, the outputs of services, effectiveness of resource management actions, and the achievement of organisational strategies, goals and objectives. All the system evaluation focus areas which have to be taken into account when determining organisational performance results are described in this theme. All these aspects, which have to be evaluated by South Africa's AET organisations, are discussed below in more detail.

The systemic nature of performance evaluation served as a focus area. The role of system performance evaluation is explained by DHET (2012), in its "Post-school Education and Training" document, as a means to determine whether AET organisations are achieving their goals, and whether they have accurately anticipated the impact of these goals on the system. AET system evaluation has to be viewed from a systems-perspective, which means that all system inputs, enablers and outcomes required for organisational performance, have to be identified and evaluated (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f). AET system performance has to be determined in terms of organisation-specific success factors associated with core business and AET processes (CHE, 2016, 2004; SAQA, 2001a; QCTO, 2008). The

CHE (2004f), in its “Towards a framework for the monitoring and evaluation of South African Higher Education” document, acknowledges that an evaluation system has to include all institutional system levels. This systems-performance approach also requires organisations to identify AET system constructs which will ensure the optimal balance between the inputs, processes and outputs that are essential to achieve strategic intentions, policy objectives and operational goals (CHE, 2016, 2003). These findings provide context specific details associated with system modelling, which was identified by Williams (2010) as a South African AET requirement. According to Williams (2010), AET organisations have to plan for operational, management and strategy activities and results, by identifying what information is needed at each level of the system and indicating how information flows through the system. The intention of such an approach is to improve the processes and structures so that they will be more effective and efficient (QCTO, 2008). In response to a question which asked for recommended processes to determine AET system success, the importance of system-based considerations was stressed by the ETDP SETA participant. He explained that all aspects of the operational system and its processes have to be considered when organisational performance is monitored. He commented that such an approach has to be aimed at checking compliance and encouraging opportunities for continuous improvement. This view was expressed as:

> *Looking from a-z in terms of the operations systems and processes that are in that particular organisation. Continuous improvement is the main purpose of this monitoring: to check compliance, and also continuous improvement for those that are doing good in rendering their services as training providers.*

The CHE (2004f) requires AET organisations to consider all system elements when activities are planned, delivered and evaluated. This point of view is shared by Greenhalgh and Papoutsi (2018); Fletcher et al. (2016); Hawe (2015) and Ling (2012) who acknowledge that organisations have to take note to the interaction between system interventions and context during the design of their operations. The importance of system-based considerations was also mentioned by the DHET participant, in response to a question which asked for recommended processes to determine AET system success. She supported a comprehensive AET system evaluation, and stressed that such an evaluation has to also consider the influence of sub-systems. She stated that it is critical for an AET organisation to:

> *Evaluate how effective it is as an organisation: its administrative systems, its information systems, its management systems, its governance, all of it. But that’s an organisation.*

Another focus of performance evaluation was the need for documented AET system monitoring and evaluation methods (CHE, 2014a, 2004b). Evaluation methods which are appropriate for business and AET activities have to be considered (CHE, 2016, 2004; SAQA, 2001a; QCTO, 2008). This consideration supports Phillips et al. (2007) and Opperman and Meyer's (2008) shared point of view that training evaluation has to show alignment with business strategy. According to the CHE (2014a, 2004b), these methods have to allow for an all-inclusive system evaluation, and may include self-evaluations, programme evaluations, user surveys, internal audits and impact studies. The business component refers to financial and non-financial outcomes (CHE, 2004a, 2004b, 2004e; CHEQC, 2005). Use of both financial and non-financial measures and results are encouraged by Jasson and Govender (2017); Jaafreh and Al-abedallat (2013) and Sampaio et al. (2012). Financial outcomes include financial results associated with resource procurement and allocation for the development, implementation, review and improvement of the core organisational activities (CHE, 2004a; CHEQC, 2005). In response to a question which asked for recommended processes to determine AET system success, the SABPP participant stressed the need for a process to perform an evaluation of financial results. He explained that a financial return-on-investment (ROI) calculation had to reflect on performance associated with business targets. He explained that ROI has to be measured in terms of business targets and the organisation's pricing model, stating that:

> *The pricing model to me is also important. I also then believe that if a business need to look at targets because everybody is driven by targets. I need to make sure I get value, and we talk about ROI, return on investment.*

Non-financial aspects include results pertaining to academic governance, teaching and learning practices, and the structure of the learning programmes (CHE, 2004a, 2004b, 2004e; CHEQC, 2005). Examples of AET specific activities highlighted by DHET (2012), in its "Post-school Education and Training" document, include learner support, curriculum design, assessment protocols and materials development. In response to a question which asked for recommendations that will help organisations to link AET system evaluation results to organisational performance, a requirement to evaluate AET specific activities was also expressed by the APPETD participant. She acknowledged that AET organisational performance is important and has to be evaluated. She was of the opinion that organisational performance evaluation has to include indications of whether AET efforts were successful.

She stated that:

> *Organisational performance is a fundamental to ensure that, as a provider, you can deliver people that are ready for the work market or employment or the work force; so, organisational performance must be measured.*

Quality management system outcomes emerged from the document data as another focus of performance evaluation (CHE, 2006b; SAQA, 2001a). Such an evaluation has to be aimed at determining the contribution, influence and effectiveness of an AET organisation's quality management system (CHE, 2004f; DHET, 2011). The CHE (2006b), in its "Kagisano" document, confirms that quality management system outcomes have to be evaluated on the basis of whether they support and give effect to institutional missions and goals. This focus entails evaluating services and products against set standards, with a view to improvement, renewal and advancement of the quality management system (CHE, 2004f).

Such a quality management system evaluation essentially describes an intra-organisational activity. AET system evaluation has to also consider external influences and relations (CHE, 2016). An example of such an external focus area consists of the evaluation of stakeholder relations (CHE, 2016, 2014a, 2011b, 20056, 2001b; CHEQC, 2005). Stakeholders include professional bodies (Marock, 2000) and partnerships with government, industry, other AET institutions and the broader society (CHEQC, 2005). A professional body refers to a body of experts in an occupational field (Marock, 2000). An evaluation of stakeholder relations is aimed at providing all stakeholders with a framework within which to make judgements about the quality of AET services and products offered (CHE, 2001b). Such an evaluation framework has to indicate to what extent inter-institutional collaboration has led to a collective impact (CHE, 2014a). In response to a question about process requirements needed to determine AET system success, the SAQA participant stated that the influence of stakeholder relations has to be considered as a process requirement. She mentioned that joint curriculum development may serve as an example of stakeholder relations. She also explained that Memorandums of Understanding (MOUs) between AET stakeholders have to be used to develop curricula. Her statement served as an example of the type of AET activity which may benefit from a stakeholder relationship. She stated that:

> *There is a specific articulation which is when two or more institutions have MOUs, so they say, place a reservation, you know, and they do joint curriculum development.*

AET system evaluation results, which consider education and training evaluation outcomes, stakeholder relations and organisational capabilities, have to be used to inspire, stimulate and

influence organisational change, transformation, innovation and excellence (CHE, 2012, 2004f; SAQA, 2001a). The CHE (2004c), in its "Framework for Institutional Audits" document, mentions that continuous change and innovativeness within AET organisations are advantageous, for this creates and provides for new knowledge. AET organisations have a transformative role to play within the national higher education agenda by being responsive to AET developments and requirements found in the national and international contexts (CHE, 2016, 2004b, 2003). The CHE (2006a), in its "Academic Freedom, Institutional Autonomy and the Corporatised University in Contemporary South Africa" document, presents institutional autonomy, organisational integrity, and academic freedom as transformation examples. New ideas and cutting-edge knowledge are viewed as innovative activities (CHE, 2015, 200, 2004b, 2004e; SABPP, 2014). According to the CHE (2003), in its "Kagisano" document, innovation within an AET organisation can be stimulated by means of encouraging internal competition and offering rewards. The CHE (2001b), in its "Founding Document", explains that excellence refers to all aspects of improvement, renewal or progress. The CHE (2012), in its "Post-School Education and Training" document, reveals a need to advance innovation and excellence as integral parts of the agenda for the transformation of an AET organisation. The CHE (2004f), in its "Towards a framework for the monitoring and evaluation of South African Higher Education" document, states that opportunities for innovation and excellence have to be identified once an AET system has been evaluated. Organisational change, transformation, innovation and excellence have to be considered as part of an AET system evaluation (CHE, 2012, 2004f). Marock (2000), in his "Quality Assurance in Higher Education: The Role and Approach of Professional Bodies and SETAs to Quality Assurance" document, adds that AET system evaluation results have to motivate AET organisations to develop best practices. The ETDP SETA participant stressed the link between evaluation and best practices. In response to a question about recommendations with respect to continuous improvements within an AET system. The participant suggested that continuous system, process and procedure reviews have to be performed with the aim of identifying, analysing and sharing AET system best practices, stating that:

> *You should continuously review your systems, review your processes, review your procedures. Look at the best practices and let us share best practices.*

The quest for innovation and excellence relies upon post-evaluation follow-up data and an interpretation of data, with the purpose of attempting to discern, explain and assess change patterns and causalities (CHE, 2004f). The CHE (2004b), in its "Criteria for Institutional Audits" document, explains that evaluation follow-up is needed for the reason that organisational performance results have to encourage innovations and changes, which are based on organisational, quality and transformation achievements. In response to a question about

recommendations to link AET system evaluation results to organisational performance, the SABPP participant stated that it is futile to perform an evaluation if no follow-up and remedial actions follow. He explained that at present post-evaluation follow-up remains a concern, stating that:

> *There is no sense doing the monitoring and you don't have a follow-up loop, and I think we fall short in sourcing all this kind of work, but we are not doing the follow up.*

An AET system evaluation system has to also account for changes and provide explanations about organisational identity, successes, deviations and failure of policy and policy implementation (CHE, 2004e, 2004f). The benefit of such an approach is that generated data can be analysed and translated into action plans, indicators and objectives for improvement and in pursuit of organisational performance excellence (SAQA, 2001a). AET system evaluation has to provide organisations with unique and distinctive ways in which to enrich and add excellence to AET performance (CHEQ, 2005). These changes have to be directed at the achievement of performance excellence to become learning organisations (CHE, 2014a, 2012; QCTO, 2008). For this reason, AET organisations have to extend the evaluation foci to include learning organisation characteristics, which is a step towards performance excellence (Mohd-Zainal et al., 2016). Innovation and continuous improvement efforts are thus essential in an organisation's pursuit to become a learning organisation (CHE, 2016, 2014a, 2004b; CHEQC, 2005; DOL, 2008). The establishment of a learning organisation is thus supported by efforts aimed at innovation and continuous improvement.

Spitzer and Conway (2002) found that a reason for the lack of training evaluation is a lack of clarity regarding linking AET to organisational results. In response to this lack of clarity, organisational performance results specific to South African AET organisations were identified from the document and interview data. Interview and document data regarding organisational performance results thus matched. Documents detailed specific performance requirements which have to be introduced by AET organisations. Interviewees elaborated on these requirements and pointed out the importance of performance results associated with this theme. The data thus elucidated complementary and related aspects of the same phenomenon. These data sources acknowledged that organisational performance is a fundamental function and it has to be evaluated (CHEQC, 2005; DHET, 2012; QCTO, 2008). Organisational performance results consist of measures which have to illustrate that the intended purpose of the AET organisation was met. These results include all aspects associated with legislative compliance, business strategy alignment, effectiveness of internal processes, financial and non-financial performance, deliverables and activities which have to meet predefined organisational goals and plans (APPETD, 2018; CHE, 2012, 2006b, 2004a,

2004b, 2004f, 2003; CHEQC, 2005; DHET, 2018, 2012; ETDP SETA, 2018; Marock, 2000; SABPP, 2018, 2014; SAQA, 2018). For this reason, all systemic links which include inputs, enablers and outcomes required for organisational performance, have to be identified and evaluated (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f). The need for a systems-approach which has to be used for AET evaluation was also highlighted by the CHE (2015) and SAQA (2001a). According to the data, a context-specific approach has to consider all evaluation results which could be used to improve the systemic processes and structures so that they will become more effective and efficient (CHE, 2004c, 2004f; CHEQC, 2005). This approach requires a comprehensive AET evaluation framework which considers the entire organisational system (DHET, 2012; SAQA, 2001a). Organisational performance results have to provide evidence of areas of strength and excellence, as well as areas in need of focused attention and improvement (CHE, 2004b, 2004e, 2004f). Furthermore, such an approach has to include all internal and external considerations which may influence AET system operations and outcomes (CHE, 2011a, 2010; QCTO, 2008).

A synthesis of the data sources illustrated that findings support the point of view shared by Keen and Berge (2014) and Bersin (2008) that an AET system evaluation has to align closely with an organisation's business system and processes. Furthermore, Shay (2017) suggests that a comprehensive analysis of performance results has to be strategically directed at interventions which can serve as systemic levers of organisational change. According to the CHE (2004b, 2004e, 2001a), the benefit of a comprehensive analysis of performance results is found in the information which highlights systemic strengths, opportunities for advancement, and areas in need of attention. This finding supports Walters' (2006) point of view that the implementation of systems-thinking has the potential to facilitate transformation within an organisational context and framework. The benefit associated with this level and focus of system evaluation is that it identifies and describes organisational performance results, which could be used to explain system efficiency within an AET organisational context.

4.6. Learning culture

A learning culture emerged as the final theme. The DHET (2014), in its "Research Bulletin on Post-School Education and Training" document, refers to a learning culture as an institutional culture of teaching and learning. The SABPP (2014), in its "SABPP HR Management System Standards Model" document, explains that an organisational culture aims to provide a climate of trust, cooperation and stability within an organisation, which enables a harmonious and productive working environment. The CHE (2007), in its "Review of Higher Education in South Africa" document, reveals that an organisational culture is shaped by the roles, norms, values, beliefs and ideology of an institution. The CHE (2004b), in its "Criteria for Institutional Audits"

document, views a learning culture as an organisational culture which supports an AET system, aimed at performance excellence. In this document, the CHE explains that a learning culture may lead to innovation within the AET system. This document describes a learning culture as follows (CHE, 2004b: 3):

> *An incubator of new ideas and cutting-edge knowledge as part of the system of innovation.*

For a learning culture to be ingrained in an AET organisation, it should be introduced, nurtured and eventually be entrenched in all the systems, processes and activities of the business (SABPP, 2014; SAQA, 2001a). A learning culture has to encourage AET organisations to engage in systematic and continuous improvement appropriate to their mission, strategic goals, context and environment (CHE, 2004c; SABPP, 2014). These improvement activities have to also extend to AET initiatives (CHE, 2004b; SABPP, 2014). The SABPP (2014), in its "HR Management System Standards Model" document, states that learning and development strategies and plans have to be aligned to an organisation's strategy and culture. This document also explains the benefits associated with a learning culture. The SABPP (2014: 60) describes these benefits in terms of:

> *A learning culture and environment that enables optimal individual, team and organisation learning and growth in both competencies and behaviour*.

Despite documented references to a learning culture, no specific mention of such a culture was made during the interviews. However, in response to a question about AET system success considerations, the CHE participant did describe a favourable learning environment as an AET system condition where student learning is emphasised. The CHE participant explained that AET organisations have to ensure that an environment exists within which successful learning can be facilitated, stating that what is needed is to:

> *Foster that learning environment where students will be able to have a quality learning experience.*

The CHE (2014a), in its "Framework for Quality Enhancement in the Second Period of Quality Assurance" document, describes a favourable learning environment with reference to the availability of educational facilities and resources which have to be available to students to promote and support learning. According to the SABPP (2014), such a learning environment has to provide a favourable organisational setting that advances learning. A learning culture thus refers to a learning environment which grants access to conventions, processes and

practices that encourage the organisation as a whole to learn and increase its performance (CHE, 2006b, 2004b; SABPP, 2014). Interview and document data regarding learning culture did not match. Documents referred to the need for a learning culture which has to be introduced by AET organisations. On the other hand, interviewees pointed out the importance of a favourable learning environment by presenting organisation-specific supporting statements. Although the data sources diverged in terms of word choice, agreement existed for a favourable AET organisational learning situation and setting. The researcher decided to combine these differences under the theme titled “learning culture”. The goal was not to illustrate consensus, but to merely categorise the multiple ways of seeing the data under a single theme.

According to the literature reviewed, a learning culture has the potential to positively influence organisational performance, innovation and long-term success (Tohidi et al., 2012; Akhtar et al., 2011; Liao, 2006; Power & Waddell, 2004). An AET organisation striving for excellence in terms of system performance, has to consider all system elements and its culture (CHE, 2014b, 2004f). These two drivers influence transformation, change and excellence (CHE, 2004b; SABPP, 2014). According to Busch and Fernandez (2018), an evaluation of culture within the learning and teaching environment has to identify areas of improvement to sustain organisational achievement over time. As a result of this consideration, the influence of a learning culture, as an enabler of transformation, change and innovation, has to be assessed as part of an AET organisation’s system evaluation. In this theme the meaning of a learning culture specific to South African AET organisations was identified from the document and interview data. The benefit associated with this level and focus of system evaluation is that it identifies and describes the need for a learning culture within an AET organisational context.

4.7. An integrated summary of the main themes

An integrated summary of the main themes discussed above was considered essential in order to explain that both interview and document data results supported the necessity of an AET system evaluation process. Such an AET system evaluation process has to be able to account for the paths to change and explanations about success, deviation, and failure of AET efforts (CHE 2004f). However, such a comprehensive process which identifies, defines and describes AET system evaluation constructs, was not reported or documented.

Data synthesised by means of triangulation from both data sources were used to identify and describe AET system evaluation constructs, which are adaptable to different organisational contexts (within South Africa’s AET context) and aimed at performance excellence. This integrated interpretation of the data identified five organisational system constructs which have

to be monitored, reviewed and evaluated. These five AET system evaluation constructs are: organisational intent, organisational system enablers, organisational education and training system drivers, learning organisation performance results and learning culture. Each construct and its elements are integrated in Figure 4.1. In addition to this presentation, a brief discussion which illustrates this integrated interpretation follows.

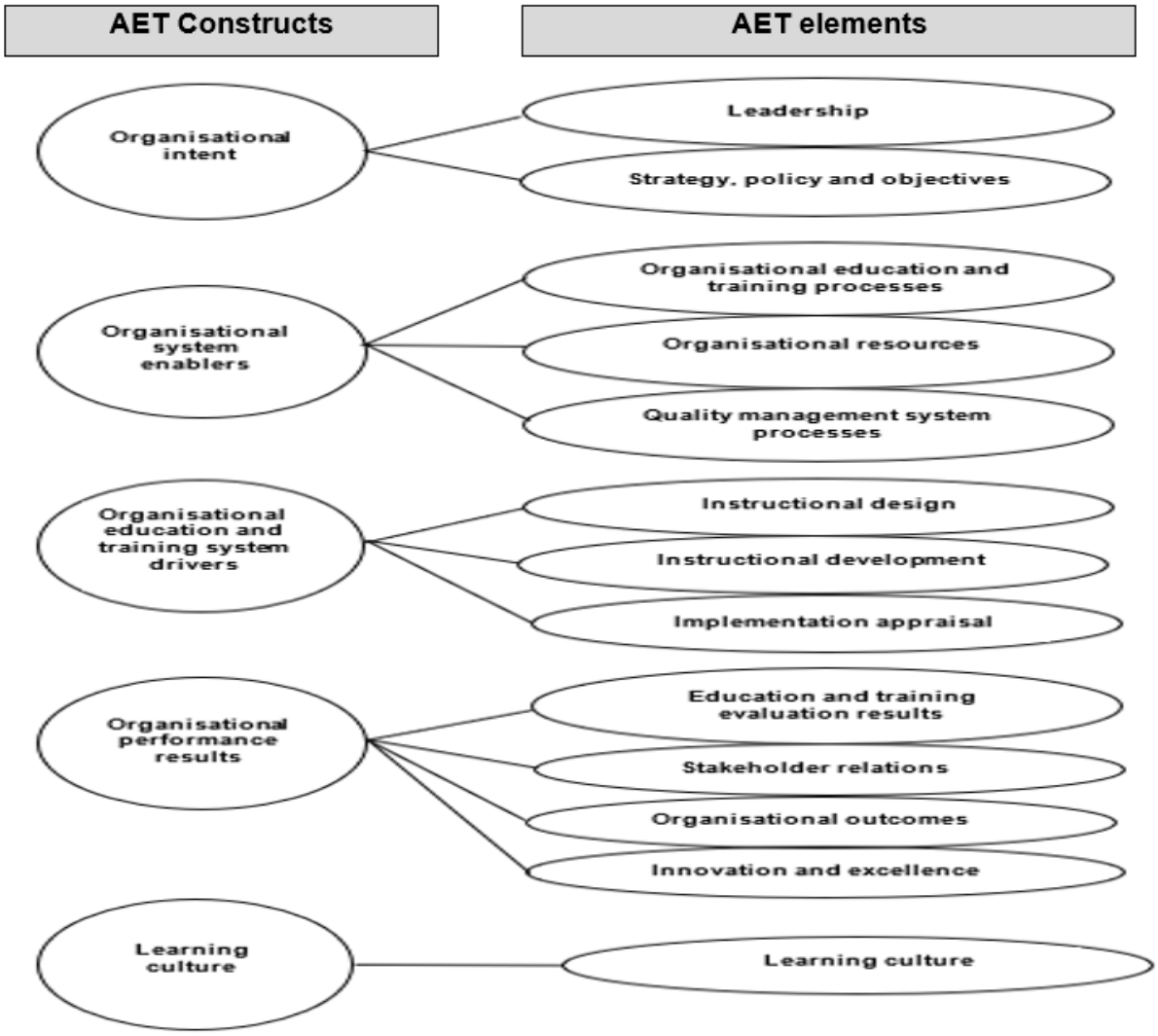

Figure 4.1: AET constructs and elements (Own illustration)

At the outset of the data analysis procedure, a crucial AET system function, namely organisational intent, was identified (CHE, 2004f, 2003; SABPP, 2018). It is leadership's responsibility to determine the organisational intent (including its vision, mission, strategy and objectives) and to ensure that the impact and success of this aspect on organisational performance is evaluated (CHE, 2004f, 2003; SABPP, 2018). AET organisational intent has to influence, shape and establish all strategic decisions, focus procedures and guide day-to-day operations (CHE, 2018; ETDP SETA, 2018; QCTO, 2018). Detailed work and quality

procedures have to follow from an AET organisation's intent (CHE, 2009, 2004b, 2004f, 2001a; SABPP, 2014; SAQA, 2001a). These organisational procedures (organisational system enablers) have to be reviewed and evaluated (CHE, 2004f; DHET, 2012; QCTO, 2008; SAQA, 2001a). AET specific activities (organisational education and training system drivers), which include learning programme research, design, development, implementation and assessment were identified and described (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). The impact of these system drivers on organisational results and performance has to be evaluated (CHE, 2015, 2014a, 2004a; DHET, 2011). AET systems have to be critically evaluated by collecting and analysing information about activities and outcomes in order to inform leadership and stakeholders of organisational performance results (CHE, 2016, 2004f; SAQA, 2001a). Organisational performance results have to be aimed at ensuring continuous improvement, innovation, transformation and excellence of the entire AET system (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f). Finally, AET organisations have to establish an environment which is conducive for learning, preferably by instilling and nurturing a learning culture (SABPP, 2014). According to the SABPP (2014), an AET system has to function within a conducive learning culture and environment. Establishing a learning culture requires AET organisations to introduce a performance-based strategy which considers learning organisational goals, a positive learning environment and a need to achieve and evaluate business excellence (CHE, 2004b, 2004c; DHET, 2014; SABPP, 2014). AET organisations have to be encouraged to work towards the achievement of excellence in order to become learning organisations (CHE, 2014a, 2012; DHET, 2018, 2014; DOL, 2008).

An integrated summary of the main themes provided a constructed reality through document and interview data perspectives, which considered the boundaries of and links between system constructs. No contradictions or disagreements were observed between these data sets. Document and interview data offered complementary information on the main themes. The only exception was that during the interviews, no references were specifically made to the notion of a learning organisation. The researcher found that document and interview data identified and described system elements, enablers, results and links between AET system evaluation results and organisational performance, which were aimed at continuous improvement and performance excellence. These elements, enablers and results, helped the researcher to identify five AET system constructs. The research results thus support the focus of the main research question, by identifying system evaluation constructs which are appropriate for South Africa's AET organisations to enhance performance excellence.

4.8. Limitations

The researcher identified three limitations of the study which may influence the interpretation and discussion of the findings from this research. These limitations are listed, and a critical, overall appraisal and interpretation of their impact is described. The following listed limitations of this study existed:

- Research was restricted to a small sample. The sample only consisted of the CHE, DHET, QCTO, SAQA, ETDP SETA, SABPP and APPETD. This sample selection limitation made it impossible to collect data from all South Africa's AET regulatory authorities and professional organisations. However, the purposive sample selected did provide important and meaningful data concerning the phenomenon under investigation. Despite this provision, selection of a larger sample may possibly have provided more significant information and relationships from the collected data.
- Only one person performed data collection and analysis. The researcher acknowledges that in this qualitative research study the data collection, analysis and reporting may be limiting because data cannot always be independently verified. In other words, the researcher had to take what he read in the various documents and what people said in interviews at face value. In an attempt to overcome this problem, the researcher did make use of an external codifier. However, she also had to deal with data at face value.
- Only AET system evaluation constructs were described. Specific evaluation measures and details were not presented. These measures and details would probably have provided more in-depth detail of the specific system construct aspects which should be considered and evaluated. However, the researcher presumed that such measures would be specific to each organisation. Thus, putting forward a list of measures may be restrictive or not applicable to every AET organisation. Therefore, the researcher's expectation is that each AET organisation has to determine its own measures.
- The interview sample was adequate, however, responses provided by the interviewees regarding a holistic perspective of AET systemic characteristics was often not forthcoming. The researcher presumed that this limitation could be attributed to the absence of a holistic AET system and associated evaluation process within the South African AET context. Despite this constraint, interviewees did provide useful data pertaining to AET evaluation aspects, considerations and expectations, albeit not from a systemic perspective.

4.9. Conclusion

This chapter presented the results of this study. By researching the phenomenon from various angles, the data demonstrated in which manner AET system evaluation constructs transpired. This outcome provided structures (from South African published regulations and held views) pertaining to AET system evaluation. Triangulated results from the two data sources provided deeper synthesised insights into these AET system evaluation constructs. The objective of triangulation was thus to gain good understanding from different perspectives of the AET system evaluation constructs by integrating insights from the data sources. Furthermore, a synthesis of the two data sources strengthened the results.

The five main AET system evaluation constructs which emerged, were (1) Organisational intent, (2) Organisational system enablers, (3) Organisational education and training system drivers, (4) Organisational performance results and (5) Learning culture. Within each main construct, specific AET process elements, which have to be evaluated by South Africa's AET organisations, were also identified and described. In addition to these findings, an integrated summary was offered with the intention of describing the systemic characteristics of the core AET evaluation constructs. These systemic characteristics were used to identify and describe potential links between the five main AET system evaluation constructs.

A discussion of conclusions and recommendations of the study are presented in Chapter 5. Included, in the next chapter is the final step of Braun & Clarke's (2006) framework which describes conceptual patterns that link the main themes back to the research questions and the reviewed literature.

CHAPTER 5
DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This final chapter presents an overview of the role of systems-thinking as applicable to this study, followed by a discussion of conclusions and recommendations. Conclusions are presented as the final step of Braun & Clarke's (2006) framework, described as conceptual patterns which connect the main themes back to the research questions and the present literature. The benefit of this description is that the research results are revisited and then linked to the research questions and literature, thus finalising the discussion of conclusions and recommendations of the scholarly report of this research project (Braun & Clarke, 2006).

A structured approach was followed in this chapter to present understanding and insight of the emerging conceptual patterns. Eisenhardt and Graebner's (2007) structured approach was used to guide this discussion. The purpose of this structured approach is to produce theory that is accurate, interesting and verifiable (Eisenhardt & Graebner, 2007). Following this structured approach allowed the researcher to describe an emergent theory. The theory is emergent in the sense that it is situated in and developed by recognising patterns of relationships among constructs within the interview and document data sources. The first step of this approach entailed an overview of the study and the emergent theory (Eisenhardt & Graebner, 2007). Thereafter, each proposition was explained by linking it to the supporting evidence for each construct and for the proposed relationships between the constructs (Eisenhardt & Graebner, 2007). Next, underlying theoretical arguments that provide conceptual links between the constructs within a proposition had to be introduced (Eisenhardt & Graebner, 2007). Systems-thinking was used to provide a conceptual framework through which different constructs could be explicitly integrated (Diez Roux, 2011). Finally, Eisenhardt and Graebner (2007) suggested the use of a visual theory summary such as a diagram to provide basic insights about fundamental constructs and their integration. For this study, an AET system evaluation model and archetype were compiled with the intention of providing such a visual theory summary. Furthermore, at the end of this chapter, recommendations were listed, proposals for future research was outlined, and the researcher's suggestions were presented.

5.2. An overview of the role of systems-thinking in this study

The purpose of this overview was to recognise and reiterate the role of systems-thinking in this study. Systems-thinking was employed by the researcher with the aim of identifying, describing

and illustrating a more holistic systemic approach for AET evaluation. The intention was to present an evaluation system which is appropriate for South Africa's AET organisations to enhance performance excellence. A systems-thinking overview was presented in this section in order to review current evaluation studies and to motivate for a holistic system evaluation approach, which is suitable for the South African AET environment.

A considerable amount of literature has been published on AET evaluation studies, which tend to emphasise programme evaluations, however, limited attention is paid to AET system evaluations (Sharma, 2016; Aziz, 2015; Ford, 2014; Mavin et al., 2010; Zinovieff, 2008; Duignan, 2003; Tamkin et al., 2002). Creemers and Kyriakides (2012) and Zinovieff (2008) suggest that AET system evaluation has to include a dynamic framework which helps organisations gather data: through self-evaluation processes, taking decisions about priorities for enhancement, and developing suitable policies and action plans. Glas et al. (2003) explain that AET system evaluation has to be viewed as a mechanism to encourage change, innovation and improvement in an AET organisation's performance and success. Such an approach allows organisations to move beyond learning programme evaluation and to include the entire organisational AET system. The need for a more holistic systemic approach for evaluation purposes is thus desired, which has to be guided by an evaluation of organisational constructs. This process can be used to provide information needed for innovation and continuous improvement (SABPP, 2014; Zinovieff, 2008). This research study specifically aimed to identify, describe and propose AET system evaluation constructs which also served as mechanisms of continuous improvement and innovation. Thus, within the South African AET context, a need to identify and describe AET system evaluation constructs, which were adaptable to different organisational contexts and aimed at performance excellence, was presented as a problem in this study.

At present, in the South African AET context, the use of monitoring and evaluation frameworks, as well as logical frameworks are emphasised as a means to manage system-based performance evaluation (DHET, 2015a). However, these frameworks are not very successful, mainly due to the systemic intricacies of AET organisations which are not considered (Jasson & Govender, 2017; Mthethwa & Jili, 2016; Lahey, 2015). Therefore, a discipline-specific AET system, which could provide an organisation with a context-specific stable platform to deal with critical process events, was desired (King & King, 2013). Identifying AET system constructs which would allow for the review and evaluation of these critical aspects was thus needed. Evidence in the literature suggested that an opportunity existed to identify AET system evaluation constructs (Khan, 2016; Tshilongamulenzhe et al., 2013; Louw-Potgieter, 2012; Zinovieff, 2008; Coetsee et al., 2006; Kirkpatrick & Kirkpatrick, 2006; Swanson, 2005; Duignan, 2003). The uniqueness and intricacies found within different AET contexts, demanded a

comprehensive and descriptive understanding of possible evaluation constructs to be considered by organisations (Tshilongamulenzhe et al., 2013). Henry (2009); Lankester (2013); Moyer et al. (2014); Wals and Rodela (2014) and Walker (2001) encourage researchers to attempt to integrate business results with systems-thinking when determining the whole dynamism of the overall performance of an AET organisation. The CHE (2006b) and DHET (2012) acknowledge that a comprehensive evaluation framework has to be designed, developed and implemented in AET organisations. Within such a framework, standardised processes and systems have to be employed in accordance with organisational needs and circumstances (QCTO, 2008). Conceptualising such a comprehensive evaluation framework may benefit from systems-thinking (Williams & Hummelbrunner, 2011).

Systems-thinking, as a theoretical framework, provided a practical view of systems evaluation at AET organisational level. Systems-thinking is supported by the CHE (2009, 2006b, 2004b, 2001b); CHEQC (2005) and QCTO (2008) and was thus used to provide a theoretical orientation of evaluation practice. The use of systems-thinking, as a theoretical orientation, helped to identify the interrelationships between process elements of a system, boundaries within and between the system constructs, and the dynamics that influence and are influenced by the system. Systems-thinking thus helped to expand understanding of the characteristics of AET systems and identified how this insight may be applied to system design and evaluation. According to the researcher, this conceptual knowledge and understanding of AET system design and characteristics, assisted with the identification and description of evaluation constructs. These constructs may be helpful when organisations introduce and evaluate frameworks and processes according to their own unique focus, needs and circumstances.

The researcher acknowledges that AET system evaluation constructs provided ways of framing and exploring the complex evaluation dynamics and demands faced by organisations. This insight is important, because organisations have to understand all elements and environments that make up the total education and training system (Ballantine et al, 2017). Knowledge of key factors which are relevant to an AET system, and of how these relate to each other, was thus required. These key factors which were identified, described and framed, were used to define and describe AET system evaluation constructs. The use of AET system evaluation constructs can improve the relevance and utility of evaluation. It can do this by helping AET organisations to clarify their goals, roles, responsibilities and context-specific requirements of an AET evaluation. This requirement was expressed as the overarching research question applicable to this study: Which effective system evaluation constructs are appropriate for South Africa's AET organisations to enhance performance excellence? Thinking systematically allows an AET organisation to understand the system

interrelationships, perspectives and process improvements within its contextual boundaries (Williams & Hummelbrunner, 2011).

5.3. Emergent theory

Eisenhardt and Graebner (2007) state that theory is emergent in the sense that it is situated in and developed by recognising patterns of relationships among constructs. The theoretical contributions of this study are explained as a combination of constructs, relationships between constructs and the underlying logic linking those constructs, which are focused on explaining AET system evaluation in a general way. The researcher was able to describe conceptual patterns and relationships between themes by following a systems-thinking approach. This approach assisted the researcher to identify and describe constructs, their interconnections and systemic mapping. Interconnections refer to the dynamic and interconnected array of relationships and dependencies found within a system in a specific environment. Systemic mapping reveals a way of seeing and understanding the main components of a system and how these components interact with each other (Jones, 2017; Antwi & Hamza, 2015). The purpose of systemic mapping is to articulate the constructs, processes and relationships that are essential within a system (Jones, 2017). Understanding constructs and their interactions provides an explanation of causality in order to conceptualise a dynamic and constantly evolving system (Jones, 2017). This conceptualisation identified and systemically mapped the constructs within an AET system. This systemic mapping enhanced understanding by describing and providing a visual interpretation of AET system interconnection, relations and evaluation focus areas.

5.4. AET constructs

The literature reviewed did not identify and describe AET system evaluation constructs applicable to South Africa's AET organisations, which may assist a transition towards performance excellence (Viljoen, 2015; Louw-Potgieter, 2012; Tshilongamulenzhe et al., 2013). Conceptualising and designing an AET system evaluation process identified a number of related activities, which included defining and describing what had to be evaluated, framing the boundaries for an evaluation and describing system performance results and impacts. The purpose of this research was to identify, describe and present AET system evaluation constructs which were supportive of organisational performance. The research objectives and the questions presented below, guided a comprehensive and descriptive understanding of AET system evaluation constructs within the South African context.

5.4.1. Which AET process elements have to be evaluated by South Africa's AET organisations?

The literature reviewed in Chapter 2 did not define, within an established system, the AET process elements which had to be evaluated by South Africa's AET organisations. Research results were used to identify and describe process elements which had to be evaluated by South Africa's AET organisations. Important process elements required for AET system evaluations were identified and described during interviews and in documents published by South African educational organisations. Existing AET evaluation knowledge was structured by the researcher in a new and creative way, so as to generate new concepts and understanding. These results addressed the first research sub-question. All AET process elements which referred to system evaluation were identified and described. These process elements were also depicted and defined in Appendix E and H. Both the document and interview data provided detailed AET process element considerations. The AET process elements identified and described, included (1) leadership, (2) strategy, policy and objectives, (3) organisational education and training processes, (4) organisational resources, (5) quality management system processes, (6) instructional design, (7) instructional development, (8) implementation appraisal, (9) education and training evaluation results, (10) stakeholder relations, (11) organisational outcomes, (12) innovation and excellence, and (13) learning culture. The relevance of these process elements is summarised below and supported by research findings and literature. The process elements and their constructs are summarised, illustrated (Figure 5.1) and supported by research findings and literature.

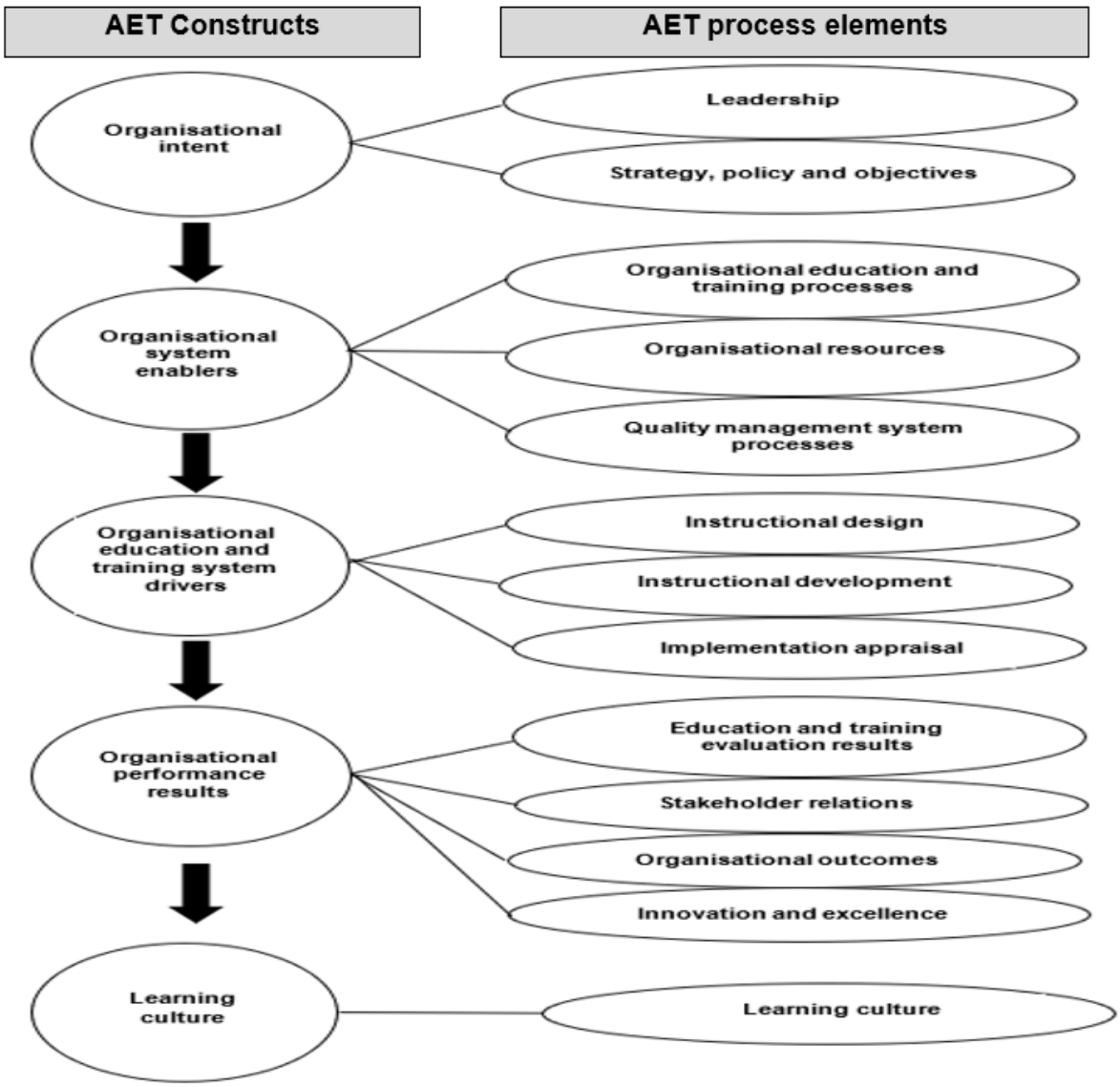

Figure 5.1: AET system evaluation constructs and process elements (Own illustration)

Leadership was identified as an important influence when an AET organisation designs and develops its strategic intent (CHE, 2016, 2004a, 2004f; SABPP, 2014; SAQA, 2001a). Leaders are responsible for identifying strategically critical positions, roles and capabilities that will determine the sustainability and growth of the AET organisation (SABPP, 2014). Literature links the role of leadership to strategic influence and organisational performance (Alagaraja & Egan, 2013; Moilanen, 2001). Leadership is regarded as a key factor in identifying an organisation's future, implementing strategies which are aligned to this focus, and improving organisational performance, effectiveness (Alagaraja & Egan, 2013; Moilanen, 2001) and continuous improvements (Watkins et al., 2009; Yang et al., 2004). Dewar et al. (2011) in McKinsey and Company (2011) and Dikmen et al. (2005) view leadership as being the catalyst for organisational performance. Davids and Waghid (2017) warn that AET organisations lacking good leadership are in a state of uncertainty. Leadership within South African AET

organisations has to be committed in order to perform key management duties which include, planning, leading, organising, assuring quality and evaluating results (Coetzee, Botha, Kiley & Truman, 2007). Within these AET organisations, leadership has to be accountable to determine strategic direction (CHE, 2016, 2004a, 2004f; SABPP, 2014; SAQA, 2001a) and responsible to direct and manage the various academic, support and administrative units of an AET organisation (CHE, 2016).

Leadership accountabilities and responsibilities have to consider compliance with national legislation by means of its organisational strategies, policies and directives (CHE, 2004b, 2004f). AET organisations have to provide evidence that strategy, policy and objectives have been evaluated in accordance with specific and measurable outcomes which illustrate legislative compliance (DHET, 2012). Literature stresses the importance of such compliance, and effective education has to meet national policies and directives criteria (Badat, 2010 & 2015; Jaafreh & Al-abedallat, 2013). Organisational strategies present objectives and plans to achieve these national defined goals (Fairholm, 2009). An organisation's strategy, policy and objectives describe accountabilities, responsibilities and concerns of importance to its performance (McClure & Jaeger, 2008). From the literature, it is evident that strategy, policy and objectives have to be evaluated within the context of the organisational system (Fejes & Nylander, 2015; Clemson, 2012; Funnell & Rogers, 2011; Larsson, 2010). Thus, AET evaluation efforts have to take account of context-directed organisational purpose, strategies, policies and objectives (Fejes & Nylander, 2015; Clemson, 2012; Funnell & Rogers, 2011; Larsson, 2010). The effectiveness, efficiency and impact of organisational strategies have to be verified in accordance with notable performance measures (Furst-Bowe, 2011). In the South African AET context, all organisations have to observe and conform with national legislative requirements (Coetzee et al., 2007). The researcher observed from the data that strategies, policies and directives had to be formulated, implemented, monitored and evaluated in order to guide and support operational actions (CHE, 2003; DHET, 2012; SAQA, 2001).

AET organisations are required to systemically conceptualise business and AET process inputs, enablers and outcomes, as system performance requirements (CHE, 2016, 2015, 2004b; SAQA, 2001a; SABPP, 2014). This systems-thinking links organisational AET processes in enabling and interconnecting operational procedures (Furst-Bowe, 2011). According to the literature, the success of an organisation's AET operations is found to be reliant on the management of the training and learning delivery system, as determined by organisational AET processes (Kulkarni, 2013; Aguinis & Kraiger, 2009). Zangiski et al. (2013) and Swan et al. (2010) suggest that organisational context characteristics and performance have to be collectively defined; not only to establish organisational AET processes, but also to allow evaluation of such processes. This systems-thinking obliges an organisation to critically

measure and review its performance, by considering existing organisational AET processes, and following up with remedial action and/or continued improvement as decided (Furst-Bowe, 2011). Within the South African AET context, operational managers have to determine, as systematically and objectively as possible, the relevance, effectiveness, efficiency and impact of processes and procedures in the light of specified organisational strategies and objectives (CHE, 2006, 2004f; DHET, 2012, ETDP SETA, 2018; APPETD, 2018). As a result of this requirement, leadership has to ensure that the applicability, usefulness and impact of all processes and procedures are evaluated (CHE, 2004f). The focus of such an evaluation has to also extend to the management of organisational resources (CHE, 2014a, 2004b; DHET, 2012).

The need for good resource management includes resource allocation, delivery and distribution (CHE, 2014a, 2004b; DHET, 2012). Resources consist of all aspects of technology, financial and human resources management which are applicable to academic and business matters in AET organisations (CHE, 2004b; DHET, 2012). Literature confirms that organisational resources need to describe inputs which facilitate both academic and administrative work in AET institutions (Asif & Searcy, 2014). Along with the business realm, the AET organisations have to apply structured methods for providing resources and support (Latorre-Medina & Blanco-Encomienda, 2013). Organisational activities identified by strategies, policies, procedures and objectives, rely upon the availability and utilisation of resources (Todorut, 2013). Glover and Levacic (2007) acknowledge that educational resource management requires an understanding of the organisational system, inclusive of strategic planning, budget management and evaluation of all inputs, processes and outcomes. Financial, human, educational, physical and information resources are required to achieve organisational goals (Demerouti & Bakker, 2011). Coetzee et al. (2007) state that South African AET organisations have to position and utilise their technology and resources in support of their competitive advantage. Within the South African AET context, human, financial, infrastructure and technology resources have to be made available and utilised to actualise the goals and priorities of the organisation (CHE, 2004b). The impact of organisational resources has to be viewed as an important performance consideration of the AET system evaluation (CHE, 2015; CHEQC, 2005). The management of resources rely on an AET organisation's quality management activities (CHE, 2004b; SAQA, 2001b).

AET organisational capability, facilities and resources, have to be performed and managed in accordance with a context-specific quality management system (CHE, 2016, 2015; CHEQC, 2005; QCTO, 2008). Quality management links to organisational performance evaluations and results (CHE, 2006b, 2004b, 2001b; SAQA, 2001a). According to the literature, strengthening this link means that AET organisations have to take responsibility for the improvement of

quality management system processes (Sallis, 2015; Oakland, 2014). The impact of such improvement could manifest in moving an organisation from a regular state to a state of excellence (Sallis, 2015; Oakland, 2014). Performance improvement actions which adhere to a quality management process perspective, could contribute to an organisation's competitive advantage (Jaafreh & Al-abedallat, 2013; Todorut, 2013). Macinati (2008) found that organisational performance is positively related to quality management variables. Organisational performance could thus improve, by utilising useful quality management practices (Sallis, 2014; Zu, 2009; Kaynak, 2003). Within the South African AET context, a fit-for-purpose quality management system is required and it has to be appropriately integrated with all facets of organisational operations (CHE, 2006b, 2004b, 2004e, 2001b). Quality management systems also have to consider context-specific activities such as procedures for the instructional design, development, approval, implementation and appraisal of AET programmes, courses and modules (CHE, 2004a, 2004b; DHET, 2011).

Core AET capabilities include learning programme research, design, development, implementation and assessment expertise (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). According to the literature, instructional design affords a systematic process for determining instructional events based on a systematic process of applying principles of AET (Chen, 2007). Coetzee et al. (2007) note that South African organisations in general evaluate learning programme design in terms of appropriate content, training methods and the design of syllabi and curricula, as well as learning materials. The emphasis of this type of evaluation is on the student's expected abilities once the learning experience has ended (Tam, 2014) and the ability to transfer this competence to the workplace (Helyer, 2015; Sun & Kang, 2015). Instructional development and implementation of AET procedures, systems and approaches have to align with the organisational needs and strategies to accomplish business objectives (Zahra, Iram & Naeem, 2014). Ford (2014) considers that AET development activities, as well as the evaluation of programmes, provide opportunities to deal with issues which could lead to new ways of comprehending learning effectiveness. Coetzee et al. (2007) and Meyer (1999) note that within the South African setting, a stakeholder approach is recommended during the instructional development phase, which requires continuous collaboration with organisational management, trade unions, learners, education authorities, professional organisations and other interested parties. Implementation appraisal includes an assessment of the quality of training, behaviour and productivity of trainees (Barnett & Mattox, 2010; Hartley & Virkus, 2003). Measuring AET results necessitates a comprehensive plan in order to discover the impact of learning interventions on organisational performance (Barnett & Mattox, 2010). AET organisational performance includes an appraisal of implementation practices (Bidabadi, Isfahani, Rouhollahi & Khalili, 2016). South African AET organisations have to ensure that learning programmes are designed, developed, implemented and evaluated according to a

formal documented instructional design process (CHE, 2014a, 2004e; DOL, 2008; SAQA, 2001a). An evaluation of these activities and processes requires an appraisal of the quality and success of the learning programmes (CHE, 2004e). These evaluation results have to also serve as important indicators of the effectiveness of an AET system (CHE, 2004a; Marock, 2000; SAQA, 2001a). Thus, regular evaluations of the effectiveness of systems and procedures for the design, development, delivery and assessment of AET programmes, courses and modules are needed (CHE, 2004b; ETDP SETA, 2018; SABPP, 2018, 2014).

AET evaluation has to include context-specific evaluation procedures, performance excellence outcomes and organisational results (CHE, 2012, 2006b, 2004b, 2004f; CHEQC, 2005; ETDP SETA, 2018; Marock, 2000; SABPP, 2014). Consistent with literature, improvement in education (Latorre-Medina & Blanco-Encomienda, 2013) demands the strategic management of learning along with effective educational leadership (Fairholm, 2009; Hargreaves & Goodson, 2006). Coetzee et al. (2007) warn that one of the main reasons why organisational learning efforts fail in South Africa, is due to the lack of a systematically developed education and training model. Within South African AET organisations, a systems-approach has to be introduced which includes an evaluation of legislative compliance, the outputs of services, effectiveness of resource management actions, and the achievement of organisational strategies, goals and objectives (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f, 2003). Such a context-specific evaluation also has to consider the influence of local, regional, national and international stakeholders (CHE, 2004b). AET system evaluations thus need to consider internal and external influences (CHE, 2016, 2014a, 2011b, 20056, 2001b; CHEQC, 2005).

Both internal and external stakeholders have some bearing on AET system performance (CHE, 2016, 2014a, 2011b, 20056, 2001b; CHEQC, 2005). According to the literature, stakeholder relation outcomes specifically refer to students, professional bodies, sponsors, society and interested parties (Erina, Ozolina-Ozola & Gaile-Sarkane, 2015; Guerci & Vinante, 2011; Prieto & Revilla, 2006). Performance targets which inspire continuous improvement in terms of sustainability have to be established, and stakeholders should be engaged and managed in terms of these measures (Bal, Bryde, Fearon & Ochi, 2013). Bal et al. (2013) suggest that a stakeholder system has to include measures which take account of stakeholder identification and its impact on performance in relation to different sustainability-related targets. Stakeholder goals and requirements are not consistently appraised in South Africa as part of an AET evaluation system (Coetzee et al., 2007). Within the South African AET context, the influences of internal and external stakeholders have to be analysed in order to determine what adjustments are required at a system-level and how organisational capabilities have to be evaluated in order to determine the extent of such changes (CHE, 2006b). These stakeholders include professional bodies and partnerships with government, industry, other AET institutions

and the broader society (CHEQC, 2005; Marock, 2000). An evaluation of stakeholder relations has to indicate to what extent inter-institutional collaboration has led to a collective impact within an AET organisation (CHE, 2014a).

AET evaluations of organisational capabilities have to include performance results of AET and business capabilities, processes and outcomes (CHE, 2004a, 2004b, 2004e; CHEQC, 2005). Literature suggests that organisational outcomes refer to a variety of financial and non-financial performance measures and results (Jasson & Govender, 2017). Performance measurement includes financial measures linked to the organisation's business strategy (Franco-Santos et al., 2012; Wang and Wilcox, 2006). Franco-Santos et al. (2012) and Pereira et al. (2007) found that organisational outcomes also consider the cumulative result of existing differentiating operational factors, synonymous with its explicit strategic purpose. Coetzee et al. (2007) refer to these factors as contributors of organisational success and competitiveness. Within the South African AET context, evaluation methods which are appropriate for business and AET activities have to be considered (CHE, 2016, 2004; SAQA, 2001a; QCTO, 2008). These include all financial and non-financial outcomes (CHE, 2004a, 2004b, 2004e; CHEQC, 2005). AET system evaluation results not only indicate performance results, but also identify opportunities for change, innovation and excellence (CHE, 2014a, 2012; QCTO, 2008).

Innovation, excellence and continuous improvement efforts have to facilitate an AET organisation's pursuit to become a competitive entity and a learning organisation (CHE, 2014a, 2012; QCTO, 2008). According to the literature, a beneficial relationship exists between innovation and organisational performance (Patel & Ward, 2011, Evangelista & Vezzani, 2010). Innovations are important factors in strengthening the competitiveness of an AET organisation (Teece, 2010; Bou-Llusar et al., 2008; Mele & Colurcio, 2006). AET organisations have to focus on creating future growth, operational excellence and sustainability, by development of people, systems and processes in enhancing organisational capabilities and competencies (Ziegler & Ramage, 2017). An idealised outcome of innovation is organisational excellence (Khandwalla & Mehta, 2004). AET organisations need to manage innovation by designing processes and indicators which guide, support and contribute to business excellence (Mele & Colurcio, 2006). Within the South African context, AET system evaluation has to provide organisations with unique and distinctive ways in which to enrich and add excellence to AET performance (CHEQ, 2005). These changes have to be directed at the achievement of performance excellence to become learning organisations (CHE, 2014a, 2012; QCTO, 2008). Innovation and continuous improvement efforts are essential in an organisation's pursuit to become a learning organisation (CHE, 2016, 2014a, 2004b; CHEQC, 2005; DOL, 2008).

A learning culture ensures that organisational attitudes, norms and behaviours are supportive of performance and success (Joo & Park, 2010; Škerlavaj & Dimovski, 2006; Watkins & Marsick, 2003). The CHE (2004b, 2004c), DHET (2014) and SABPP (2014) explained that a learning culture is preferred for it contributes to innovation. Literature supports this view, stating that a learning culture is aimed at the development and success of an organisation (Bersin, 2008; Rebelo, 2006; Marsick & Watkins, 2003). Learning culture plays a role in an organisation's readiness and willingness to incorporate organisational learning actions as a business imperative to develop and establish a learning organisation (Nikolova, Van Ruysseveldt, De Witte & Van Dama, 2014; Chadwick & Raver, 2012). The challenge for organisations is to generate, nurture and preserve a learning culture at the individual, group and organisational levels which will sustain their competitive advantage (Hellriegel & Slocum, 2011). A learning culture which optimises individual, team and organisation learning is preferred (SABPP, 2016; Schoonbeek & Henderson, 2011; Wu, Tennyson & Hsia, 2010; James, 2003; Tamkin et al., 2002). Within the South African AET context, the CHE (2004b) is of the opinion that the introduction of a learning culture may lead to innovation within an organisation. However, a favourable learning environment is also required which grants access to conventions, processes and practices that encourage the organisation as a whole to learn and increase its performance (CHE, 2006b, 2004b; SABPP, 2014). As a result of this consideration, the influence of a learning culture, as an enabler of transformation, change and innovation, has to be assessed as part of an AET organisation's system evaluation (CHE, 2014b, 2004f).

This discussion provided new insight into those system elements which had to be considered by South African AET organisations. The descriptive evidence provided by the research results for each process element was beneficial, for it not only answered the first research question, it could also be used to assist with the identification of measures and measurements which could be associated with each aspect of an AET system. However, due to AET organisational context differences and dynamics, a specific sequence and priority for each AET process element within a systems-context, was not presented.

5.4.2. Which AET process elements have to be used to define AET evaluation constructs?

Research results identified and described AET process elements which had to be used to define AET evaluation constructs. These results addressed the second research sub-question. A response to this question was important, for it had to provide process elements and characteristics for each AET construct. Furthermore, literature reviewed in Chapter 2 did not explain how AET process elements had to be clustered to form AET system evaluation

constructs. The AET process elements identified and described above, were thus used to define five AET evaluation constructs (Appendix H). These elements provided a new way to depict and understand AET evaluation constructs. The five AET evaluation constructs identified were: organisational intent, organisational system enablers, organisational education and training system drivers, organisational performance results and learning culture. Organisational intent came from two process elements – leadership and organisational strategy, policy and objectives. Organisational system enablers were derived from three process elements – organisational education and training processes, quality management system processes and organisational capabilities and resources. Organisational education and training system drivers originated from three process elements – instructional design, instructional development and implementation appraisal. Organisational performance results identified four process elements – education and training evaluation results, stakeholder relations, organisational outcomes and innovation and excellence. Learning culture as a process element was identified as an important AET evaluation construct. The relevance of these AET evaluation constructs is summarised below and supported by research findings and literature.

Organisational intent is about preserving the core function of the organisation and simultaneously stimulating progress (through the creation of an envisioned future) (Collins & Porras, 2005). Research results showed that the intent of an AET organisation is framed by its vision, mission, strategy, policy and objectives (CHE, 2014a, 2006b, 2004a). AET organisational leadership is responsible to design, develop and evaluate organisational strategy, policy and objectives in order to ensure the realisation of these ideals (CHE, 2018, 2016, 2004a, 2004f; SABPP, 2018, 2014; SAQA, 2018, 2001a). These focus areas and associated responsibilities of leadership are also described in literature. Leadership activities have to be guided by an organisation's vision, mission, strategy, policies and objectives (Lynch, 2006; Kazmi, 2002). These aspects refer to an organisation's intent (Kazmi, 2002) and it is about managing continuity and change (Collins & Porras, 2005; Collins, 2001) at all levels and units of an organisation (Kazmi, 2002). Within the South African AET context, an AET organisation has to evaluate, as systematically and objectively as possible, the relevance, effectiveness, efficiency and impact of activities in the light of its vision, mission, strategy and objectives (CHE, 2004f). In accordance with this requirement, organisational leadership, management, strategy, policies and objectives have to be evaluated (CHE, 2006b, 2004a; CHEQC, 2005).

Realisation of an organisation's intent is thus facilitated by means of system enablers (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014). Organisational system enablers refer to enabling and supporting factors which allow an AET organisation to align its internal capabilities,

processes and resources with its intent and context (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014). Organisational education and training processes, quality management system processes, and organisational capabilities and resources, serve as examples of system enablers (CHE, 2016, 2015, 2014a, 2011a, 2006b, 2005, 2004b, 2001a, 2001b; CHEQC, 2005; Marock, 2000; QCTO, 2008; SAQA, 2001a, 2001b). This internal view of an AET organisation's system enablers corresponds with the description provided by Stukalina (2013). According to Stukalina (2013), organisational system enablers include the integration and collaboration of the internal resources across the organisation (Stukalina, 2013). Research results also showed that organisational AET procedures, quality management system processes and resources, provided an enabling basis for core AET operations (CHE, 2015, 2007, 2004f, 2001a; SAQA, 2001a). The systemic nature of organisational system enablers, resonates with Hammer's (2015) view that business process management requires a comprehensive system for managing and transforming organisational operations. AET organisations should use operational processes to achieve institutional goals, and utilise their technology and resources in support of their competitive transformation (Coetzee et al., 2007). Quality management system processes have to be introduced in AET organisations (SABPP, 2014; Jaafreh & Al-abedallat, 2013; Pineda, 2010; Mele & Colurcio, 2006; Hartley & Virkus, 2003) to deal with the intricacies, responsibilities, procedures and processes of organisations (Slack, Chambers & Johnston, 2007). The purpose of a quality management system, established within an AET organisation, is to manage the complexity of AET services, whilst appreciating the importance of imposed policies and standards (Sallis, 2014). Smith, Bester and Moll (2014) and Sharma and Bhagwat (2007) point out that quality management criteria cannot be overlooked, for these should ultimately provide managers with feedback on the progress towards meeting organisational goals. The importance of quality management as a context-specific and fit-for-purpose system, which influences continuous improvement and organisational performance, was emphasised by the QCTO (2008) and SAQA (2001a). From an AET system evaluation perspective, the impact of organisational enablers on AET efforts have to be evaluated (CHE, 2004b, 2004e; QCTO, 2008). The purpose of such an evaluation is to determine what effect organisational resources and capabilities have on AET processes (CHE, 2009, 2004b).

Realisation of an organisation's intent is also facilitated by means of organisational education and training system drivers (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). These system drivers refer to the core capabilities, processes and resources which are unique to an AET organisation. Holton and Baldwin (2003) explain that organisational education and training system drivers embody a logical and systematic approach to formulating training. When core operations and undertakings are viewed by an organisation from a strategic point of view, it could directly contribute towards business goals and objectives (Hussein, Omar,

Noordin & Ishak, 2016; Niazi, 2011). Research results revealed that core AET operations include instructional design and the development and implementation of appraisal processes (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). According to Holton and Baldwin (2003), organisations that understand these organisational education and training system drivers, are better positioned to make effective decisions about education and training matters (Holton & Baldwin, 2003). Organisational education and training system drivers have to be regularly monitored, by reviewing all the organisational arrangements for planning, design and management of learning programmes (CHE, 2004a, 2004b, 2004e; DOL, 2008; QCTO, 2014, 2008). These results, following an evaluation of organisational education and training system drivers, have to serve as important indicators of the effectiveness of an AET system (CHE, 2004a; Marock, 2000; SAQA, 2001a).

Organisational performance evaluation consists of a regular review of the nature and extent of institutional responsiveness and associated outcomes, which are aligned to institutional goals and priorities (CHE, 2004a). Hussein et al. (2016) describe organisational performance as the outcomes of several related processes which take place within an organisation. Evaluating the efficiency and effectiveness of an AET system is indispensable (Bottyán, 2004). The development of performance measurement indicators which are specific to an AET organisation, is vital (Hussein et al., 2016). Research results indicated that AET systems performance outcomes had to consider AET evaluation results, stakeholder impact, organisational outcomes, innovation and excellence. Measuring inputs and outputs of processes and activities of an organisation helps to establish its efficiency (OpokuAnokye & Tang, 2013). Organisational performance is an important indicator of organisational success (Sethibe & Steyn, 2016; Stegerean & Gavrea, 2010). The use of any explicit measures of organisational performance should be clearly defined (Sethibe & Steyn, 2016; Gentry & Shen, 2010). Within the South African AET context, performance results have to be used to determine whether the intended purpose of the AET organisation was met, and whether the results are in accordance with these expectations (CHE, 2012, 2006b, 2004b, 2004f; CHEQC, 2005; Marock, 2000; SABPP, 2014). A systems-perspective is required, which means that all system inputs, enablers and outcomes required for organisational performance, have to be identified and evaluated (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f). Performance results also provide information which reflects upon the systemic integration and alignment of all processes within the organisation (CHE, 2004c, 2004f; CHEQC, 2005). However, explicit measures of organisational performance were not defined, as these are context-specific.

A learning culture is an organisational culture which supports an AET system, and it is aimed at advancing performance excellence and innovation (CHE, 2004b). According to the SABPP (2014), a learning culture is dependent on an environment which provides a favourable

organisational setting that advances learning. These results are supported by the literature. For example, Gibbons (2014) explains that the notion of a learning organisation embraces a culture of learning and teaching. A learning organisation culture increases the competitive advantage and is quick to respond to change, while encouraging learning in an organisation (Hussein et al., 2016). A learning culture could be linked to innovation and improved performance (Kieser & Koch, 2008; Power & Waddell, 2004). This means that a strategic learning mindset should become a key part of an organisation's competitive advantage (Cunningham, 2017; Hussein et al., 2016; Niazi, 2011). Research results pointed out that AET organisations have to establish a positive learning culture in order to work towards the achievement of excellence and to become learning organisations. These learning organisation culture qualities are presented, for they ensure that high performance and innovativeness are consistently attained within a learning organisation (Brown, 2014; Škerlavaj, Štemberger, Škrinjar & Dimovski, 2007; Senge, 1990). Organisational renewal, performance and innovation could be facilitated by a functional learning culture (Brown, 2014; Škerlavaj et al., 2007; Kieser & Koch, 2008; Power & Waddell, 2004; Senge, 1990). Within the South African context, research results suggest that the influence of a learning culture, as an enabler of transformation, change and innovation, has to be assessed as part of an AET organisation's system evaluation (CHE, 2014b, 2004f).

In conclusion, this discussion provided new insights regarding the clustering of AET process elements and the emergence of AET evaluation constructs, which were applicable to the South African AET context. In addition, the descriptive evidence provided by the research results was used to describe each process element and evaluation construct. These descriptions were beneficial, for they could be used to assist with the identification of outcomes and their measures, which could be associated with an AET system evaluation.

5.4.3. What are the systemic characteristics of these core AET evaluation constructs?

Research results identified and described the systemic characteristics of core AET evaluation constructs which had to be evaluated by South Africa's AET organisations. The systemic nature of an AET system accepts that the learning culture and intent of an AET organisation directs and guides the system enablers and drivers in order to achieve specific performance results. These systemic characteristics addressed the third research sub-question.

The researcher observed from the literature review in Chapter 2, and results in Chapter 4, that current systems-based models did not provide constructs which represent the dynamic interactions associated with AET performance excellence. AET organisations which strive for excellence (defined and framed in terms of a learning organisation) need these constructs as

part of their evaluation strategy (Zhang & Zheng, 2013). The purpose of a description and illustration of these constructs was to provide and explain new knowledge by means of a mental abstraction of an AET system evaluation. For this reason, systems-thinking was introduced in order to explain the interactions and the relationships between system constructs. These interactions and relationships had to be understood, as these influence an entity's organisation, functioning and outcomes (Mele et al., 2010).

By drawing attention to system links, a systems-thinking approach allowed for a close review of how the AET process elements interact within an organisational context. Systems-thinking appreciates the very nature of systems as dynamic and constantly changing, as governed by policies and influenced by organisational context. Systems-thinking thus helped the researcher to understand how AET process elements could be organised to generate the AET system evaluation constructs and links. This focus on system links also provided insight into feedback loops which could be used within an AET system. These feedback loops allow AET organisations to review and adapt processes and procedures if factors in the operational context have changed. Systems-thinking also promoted the development of a sophisticated and dynamic conceptual model, which explored the effects of different evaluation foci in the context of dynamic construct relations. For this purpose, a system had to be designed, developed, produced and delivered, based on fulfilling organisational needs and expectations (Bou-Llusar et al., 2008).

The integration of document and individual interview data, by means of triangulation, resulted in a useful iterative process, whereby the exploration of individual accounts and document data further enriched the conceptualisation of AET system evaluation. This conceptualisation gave rise to an initial model of the phenomenon. Furthermore, the identification of the South African contextual circumstances surrounding the phenomenon, added to the interpretation of the structure of a more detailed AET system evaluation model and archetype. As a result of this process, five evaluation constructs were identified from the data results. Organisational intent (CHE, 2004f, 2003; SABPP, 2018), learning culture (CHE, 2014a, 2012; DHET, 2018, 2014; DOL, 2008), system enablers (CHE, 2004f; DHET, 2012; QCTO, 2008; SAQA, 2001a), drivers (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a) and outcomes (CHE, 2004f, 2003; SABPP, 2018) were identified as AET evaluation constructs. In compliance with systems-thinking, these constructs were categorised in terms of their associations. In this study, organisational intent directs work and quality procedures, which guide AET specific drivers. All these constructs have to be critically evaluated by collecting and analysing information about activities and outcomes in order to determine organisational performance results (CHE, 2016, 2004f; SAQA, 2001a). However, these four constructs (organisational intent, enablers, drivers and outcomes) have to function within a conducive learning culture and environment (CHE,

2004b, 2004c; DHET, 2014; SABPP, 2014). According to this explanation, links were evident between organisational intent, enablers, drivers and performance outcomes within a learning culture setting. From these associations, the constructs suggested relationships with other and related constructs, as well as the constructs' relation to the overall theoretical line of reasoning. This theoretical line of reasoning thus referred to the logical sequence of events within an organisation's system and processes. Essential properties and characteristics of each construct were deliberated by the researcher. The constructs could be illustrated as a basic model which demonstrated the steps of AET system evaluation. The researcher did not specify the exact criteria and measures associated with each construct, for organisations could elect different methods or content to evaluate a given construct. Despite this limitation, constructs were offered to serve as practical aids to decision-making about the design, development and interpretation of AET evaluation in the South African context. The AET system evaluation constructs that were obtained from the results are depicted in Figure 5.2 and discussed below.

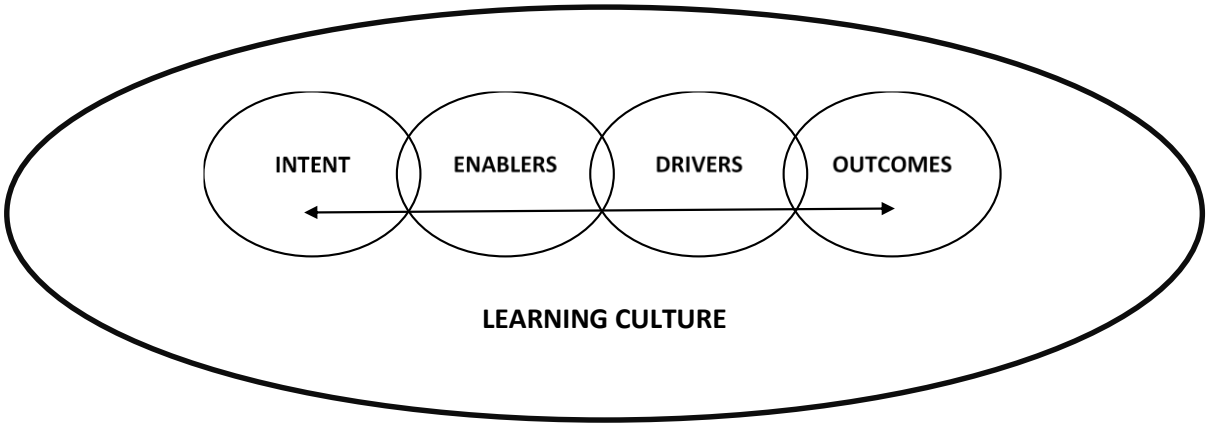

Figure 5.2: Basic Model depicting the AET system evaluation constructs (Own illustration)

The following discussion attempts to explain in more detail, from the data results, how a more advanced AET system evaluation model was developed. This discussion details all five AET system evaluation constructs in order to motivate the construction of the model presented in Figure 5.2. The organisational intent construct refers to the direction and goal of the AET organisation, as well as which outcomes it would like to achieve in the future (CHE, 2014a, 2006b, 2004a). This intent should be prominent in all organisational enablers, drivers and performance results (Sârbu et al., 2009; Hord & Sommers, 2008). The researcher recognised that the roles and responsibilities of leadership within AET organisations were aimed at designing, developing and evaluating the strategic intent of an AET organisation (CHE, 2016,

2004a, 2004f; SABPP, 2014; SAQA, 2001a). High quality leadership connects with other key organisational processes, activities, goals, procedures and practices (Sârbu et al., 2009; Hord & Sommers, 2008). This connectivity is often found to be dependent on the ability of leadership to influence organisational intent and processes (Sârbu et al., 2009; Hord & Sommers, 2008). Watkins et al. (2009); Dikmen et al. (2005) and Watkins and Marsick (1997) state that leadership is a critical component of an AET organisation. Organisational processes are described as organisational system enablers which contribute to the success of an AET organisation (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014). Specific AET processes are defined as organisational education and training system drivers (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). According to Sârbu et al. (2009) and Lagrosen et al. (2004), these AET processes include instructional design, curriculum development, programme implementation and associated management processes. System drivers were presented as the fundamental elements of a system which have a major or critical effect on the related elements or the entire system (CHE, 2015, 2014a, 2004a, 2001a; CHEQC, 2005; DHET, 2011). These drivers dealt with an indispensable AET function, being the instructional system.

Organisational performance outcomes include business, AET and excellence performance requirements (Kools & Stoll, 2016). Actual measures used within an organisation for AET evaluation are influenced by the organisational strategy (Barnett & Mattox, 2010). AET organisations have to produce the best business results, demonstrating a strong commitment to learning and a learning culture (CHE, 2012, 2006b, 2004b, 2004f; CHEQC, 2005; Marock, 2000; SABPP, 2014). King and King (2013) acknowledge that a suitable cultural foundation is necessary for organisational performance. Tran (2008) and Bates and Khasawneh (2005) observe a link between learning culture and innovation. Learning organisation culture is encapsulated in the notion of a learning organisation (Gibbons, 2014). A learning organisation culture increases the competitive advantage and is quick to respond to transformation (Hussein et al., 2016), while encouraging consistent achievement of high performance and innovativeness. Kools and Stoll (2016) add to this view by stating that a vision centred on learning, creation of continuous learning opportunities for all stakeholders, promotion of team learning and collaboration, fostering a culture of inquiry, managing knowledge, learning within a larger learning system and nurturing learning leadership, constitute the dimensions and underlying key characteristics which are necessary to evolve into a learning organisation. Within an AET organisation a learning culture may lead to innovation and transformation of the AET system (CHE, 2004b).

The basic model presented in Figure 5.2 served as an initial conceptual effort of what it takes to evaluate AET system performance, and provided a starting point for learning and debating the need for a more integrated conceptual orientation. Zinovieff (2008) and Rossi et al. (2004)

maintain that the importance of such integration for a systematic evaluation of education and training is necessary for continuous improvement of organisational systems. Systems-thinking acknowledges that systems are dynamic, and emphasises structures, components and the development of processes within systems (Monat & Gannon, 2015; Banathy & Jenlink, 2004). Due to the transformative and integrative nature of systems, all occurrences, actions and role-players are reciprocally dependent, mutually constitutive and materialise collectively in dynamic structures (Fenwick & Edwards, 2013). For example, an integration of the constructs of an AET system describes the transformation of organisational objectives into system inputs via strategic planning, which is performed by leadership. Strategic planning guides organisational policies, procedures and management decisions (CHE, 2018; ETDP SETA, 2018; QCTO, 2018). Transformation of inputs to outputs rely on organisational system enablers and AET drivers. Transformation of outputs to organisational performance results indicate system efficiency. Performance results are used to determine whether organisational system enablers and AET system drivers met organisational objectives (CHE, 2016, 2004f; SAQA, 2001a). Differences between planning and implementation can be important sources of information for improving implementation because they help to identify weaknesses, suggest possible alternatives, or lead to innovative changes (Williams & Hummelbrunner, 2011). Performance results also identify opportunities for continuous improvement, innovation, system changes and future organisational objectives within an AET organisation (CHE, 2004b, 2004e, 2001a).

Systems-thinking acknowledges that all processes in an organisation are interconnected (Furst-Bowe, 2011). Verhoeff et al. (2008) explain that these connections can best be understood by thinking backward and forward between general system constructs and processes. This backward and forward thinking is thus an explicit element of systems-thinking (Verhoeff et al., 2008). However, the CHE (2016, 2004b, 2004e, 2004f) and SAQA (2001a) do not state how this type of thinking has to be applied to AET system constructs and their connections. Understanding these connections is imperative to obtain envisaged results, make targeted improvements and accomplish organisational success (Furst-Bowe, 2011). According to Dutta (2017), this insight is a determining factor both in gaining an understanding of a system and finding a solution for any difficult problem within a system. Grafton, Lillis and Widener (2010) state that system performance feedback supports the exploitation of current capabilities. This system evaluation focus refers to efforts aimed at describing performance results at the end of the systemic process. Another evaluation option available is a performance-directed focus. This is a proactive approach which is used to search for and identify new capabilities, opportunities and objectives during the systemic process. The benefits of a planning focus are that it aids in organisational decision making, is proactive and provides input to decisions about resource allocation (Basarab, 2011). This means that the

performance-directed evaluation focus considers efforts aimed at describing expected performance results at the beginning of the systemic process (Shenge, 2014; Nickols, 2000). The model proposed by the researcher (Figure 5.3) allowed for both approaches, incorporating a planning (performance-directed focus) and review (system evaluation focus) approach. This proposed dual approach allows an organisation to plan AET activities and it allows for review, which is an after-the-fact measurement, against the planned activities within a defined system. Thus, in the proposed model, the review focus considers the direct impact on and value to the organisation which can be traced to AET planning (Basarab, 2011). These planning (performance-directed focus) and review foci (system evaluation focus) are additional to the model presented in Figure 5.2. By introducing system evaluation and performance-directed foci, a holistic and pragmatic interpretation of the AET system evaluation process became achievable (Figure 5.3).

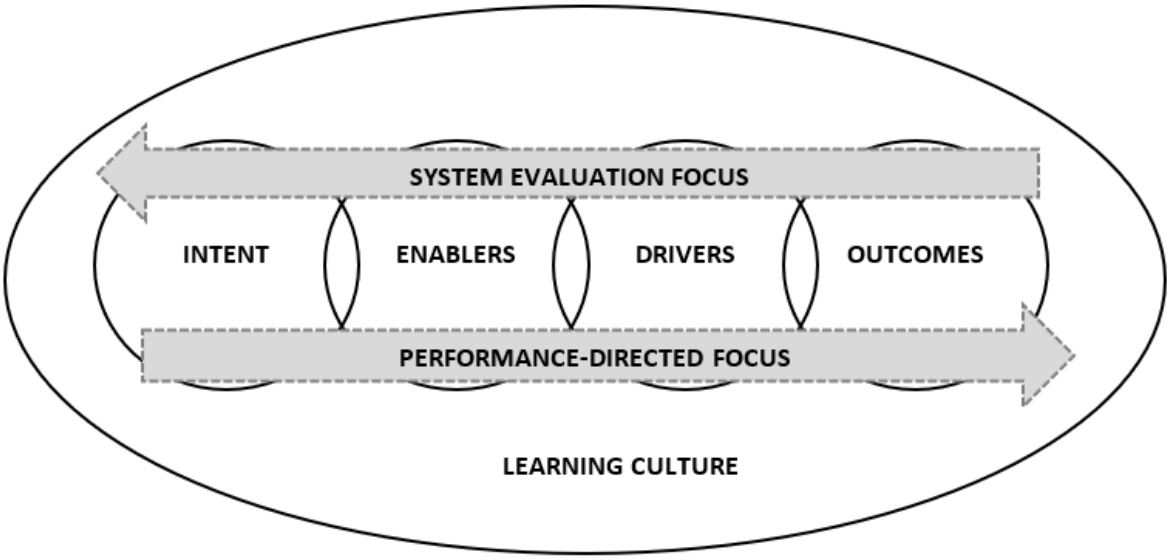

Figure 5.3: AET system evaluation model (Own illustration)

Hammond (2002); Sterman (2002); Richmond (2000) and Senge (1990) propose that systems-thinking is often synonymous with a specific model. In the case of this study, systems-thinking provided a conceptual framework and model which could be used to understand and facilitate AET system evaluation. Systems-evaluation constructs which had to be considered by AET organisations in South Africa, referred to organisational intent, enablers, drivers and outcomes. These constructs are embedded in and influenced by an organisation's learning culture. South African AET organisations are presented with a performance model, which acknowledges internal and external systemic requirements, but which is sensitive to context differences. Identified AET system-evaluation constructs, which compared favourably to a performance

excellence concept, were advanced. The concept of performance excellence within an AET organisational context could be associated with characteristics associated with a learning organisation. This association refers to evaluation strategies which provide feedback regarding professional practice, inform commercial advances, reflect on planning and offer best organisational performance practices (Preskill & Mack, 2013; Louw, 2012; Preskill & Boyle, 2008a & b; Rossi et al., 2004; Duignan, 2003). Extending the evaluation foci to include learning organisation characteristics is thus a step towards performance excellence (Mohd-Zainal et al., 2016). However, Anderson (2014) suggests that there is a lack of structured processes to create a strategy which links business objectives and organisational effectiveness. According to the CHE (2004f), AET system evaluations should become more action-oriented and informed by organisational strategies.

Identified AET system evaluation constructs present a summary of aspects, derived from the data analyses, which ought to be evaluated by AET organisations. However, according to the systems-thinking rationale, these constructs and associated elements should not be viewed in isolation. Following a systems-thinking approach allowed AET constructs to be visible as a whole (Arnold & Wade, 2015; Mele et al., 2010; Banathy, 1992). This discussion provided new insights regarding the systemic characteristics of the core AET evaluation constructs. These new insights contributed towards advancing existing knowledge of systems-based models, by providing AET system constructs, which represented the dynamic interactions associated with organisational performance excellence within the AET South African context. Disregarding these constructs could exacerbate the process of determining which components had to be considered during the design and development of an AET system evaluation process. It should be noted that the constructs only produced broad categories and they should not be viewed as excessively reduced, narrowed or constrained. South African AET organisations could describe their own context-specific organisational AET system evaluation process elements by reflecting on the revealed AET system evaluation constructs. This means that these constructs have to be further defined in an explicit manner by individual AET organisations. Each construct should be provided with process element measures which are defined, reliable, interpretable, computable and comparable (CHEQC, 2005; DHET, 2012; QCTO, 2008). These measures have to be context-specific and aligned to performance excellence in order to support a learning organisation intent (Brown, 2014; Škerlavaj et al., 2007; Senge, 1990).

5.4.4. How can AET organisations use these core AET evaluation constructs to ensure performance excellence?

Research results were used by the researcher to suggest how core AET evaluation constructs could be used by AET organisations to ensure performance excellence. The research data acknowledged that AET organisations had to be ready to continuously improve, change and transform in order to achieve excellence and to become learning organisations (CHE, 2014a, 2012; QCTO, 2008). AET organisations planning to implement a comprehensive systemic evaluation (DHET, 2012) may benefit from a process which details organisational transition and focuses attention on areas of planned improvement (CHE, 2012, 2004f, 2004b). Research results added to existing knowledge of organisational change by providing a process that could be used to address the fourth research sub-question.

From the literature review in Chapter 2 and the results in Chapter 4, the researcher recognised that AET excellence in organisational performance had to be linked to the notion and characteristics of a learning organisation. Ellinger, Ellinger, Yang and Howton (2002) and Jashapara (2003) acknowledge positive associations between learning organisation characteristics and organisational performance. In this study, data from documents acknowledged that continuous improvement efforts have to be aimed at becoming a learning organisation. Watkins et al. (2009); Dikmen et al. (2005) and Watkins and Marsick (1997) describe continuous improvement as an indispensable component of a learning organisation. These improvements are important factors in strengthening the competitiveness of any organisation (Teece, 2010; Bou-Llusar et al., 2008; Mele & Colurcio, 2006). Improvement is thus future-focused and encourages growth, operational excellence and sustainability by the development of systems and processes to enhance organisational capabilities and competencies (Ziegler & Ramage, 2017). Organisational improvement is guided by initiating an idea, planning change, implementation actions, monitoring achievements and controlling transformation (Sârbu et al., 2009; Katou, 2008; Mele & Colurcio, 2006; Senge, 2006). These system connections translate thoughts into actions (Hussein et al., 2016). The use of a system archetype can enable an organisation to deal with system complexities, aid decision-making, and implement continuous improvements (Bures & Racz, 2016). A system archetype identifies and explains the idea, plans, implementation and monitoring actions which could support organisational transformation (Bures & Racz, 2016; Nguyen & Bosch, 2013; Maani & Cavana, 2007). For this reason, a system archetype can be used to describe and portray dynamic processes which organisations adopt during system changes (Bures & Racz, 2016; Nguyen & Bosch, 2013; Maani & Cavana, 2007).

The CHE (2006b, 2004b, 2001a); QCTO (2008); SABPP (2018) and SAQA (2001a) agree that AET organisations have to ensure, achieve and evaluate performance excellence in accordance with a systems-approach. A key aspect of such an AET system-based evaluation is that it has to be designed according to standards which clearly define inputs, processes and outputs associated with organisational performance excellence (Venter & Bezuidenhout, 2008). However, the CHE, QCTO, SABPP and SAQA did not provide a guide to AET organisations which could be used to direct such a system design and transformation. The possible significance in using an archetype is thus discussed as a way of ensuring performance excellence within an AET organisation. The purpose of this research study was to offer an archetype which was based on data, acknowledged theoretical constructs and excellence principles, keeping in mind that a specific model could not be found in the literature which comprehensively described AET constructs as an archetype for excellence in organisational performance. Such an archetype needs to recognise distinctive patterns and activities, placing emphasis on feedback, influence and interdependencies, which are incorporated in the discipline of systems-thinking (Novak & Levine, 2010; Senge, 1990). The aspired benefits of system evaluation can be hindered by organisational complexity problems and implementation challenges (Adam & De Savigny, 2012; Sterman, 2006). Systems-thinking can offer a more holistic perspective and solution to these problems (Adam & De Savigny, 2012) by introducing a system archetype. Senge (1990) views a system archetype as processes which can bring greater understanding of organisational system pressures and issues.

The merit and applicability of an archetype for this study was promoted, for it served as a basic mechanism for diagnosing, organising, summarising and generalising information which was representative of an AET system evaluation concept. The research results confirmed the unavailability of proclaimed *modus operandi* to be used by AET organisations for system evaluation. By using an archetype, the researcher recognised and depicted current system-patterns which could be present within organisations which had failed to establish an AET system evaluation. Failure to establish a system evaluation may occur within an AET organisation due to a lack of systemic links and relationships. This implies that the AET organisation would probably not progress towards the desired learning organisation outcome, if its operational system was not aligned and configured to achieve such a goal. According to the CHE (2004f) and QCTO (2008), achieving such a goal requires an AET organisation to introduce system monitoring actions which respond and react, in a timely manner, to internal and external influences. Without these actions, an AET organisation may not be able to successfully transform its current organisational reality towards the anticipated learning organisation state (CHE, 2016, 2014a, 2004b; CHEQC, 2005; DOL, 2008).

An archetype can be used to illustrate the fundamental patterns and relationships which are required between system evaluation constructs and performance-directed constructs. The archetype depicted below (Figure 5.4), served to consolidate underlying system constructs (organisational intent, organisational system enablers, organisational education and training system drivers, learning organisation performance results and learning organisation culture) from which the archetypal activities were derived. This consolidation may help organisations to take account of the requirements demanded by prevalent business realities (Enquist et al., 2015). This Balancing Loop Archetype aims to depict and explain how an AET organisation could change its current AET system in order to become a learning organisation. The archetype was used to illustrate and describe this process of change. For this reason, this archetype portrays the change from the current to the envisaged AET system.

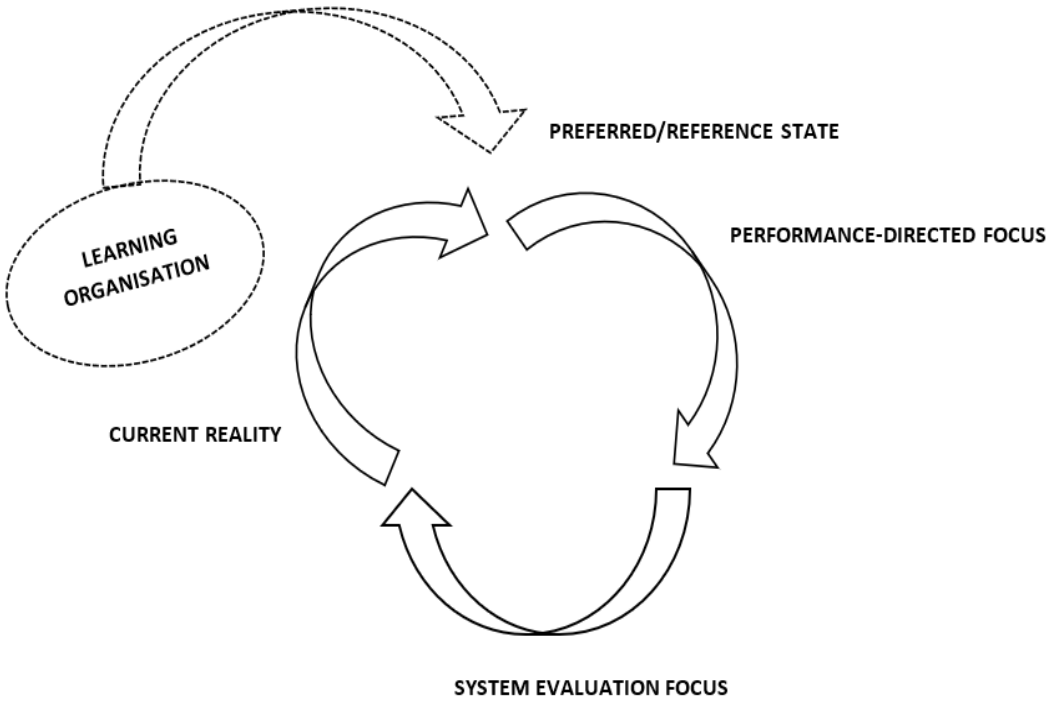

Figure 5.4: Archetype for AET system evaluation (Own illustration)

Research results suggested that the overall system and processes which are particular to an AET organisation have to be considered when performance improvement and excellence serve as strategic goals (CHE, 2016, 2004; SAQA, 2001a; QCTO, 2008). The researcher noted that the depicted Balancing Loop Archetype introduced reinforcing structures and identified a need for systemic balance. Based on the following explanation by Novak and Levine (2010), regarding the characteristics of a Balancing Loop Archetype, the researcher drafted an archetype for AET system evaluation. According to Novak and Levine (2010), a

Balancing Loop Archetype attempts to illustrate how an organisation transforms from a current state to a preferred or reference state, through some action. Novak and Levine (2010) explain that the preferred state in this mechanism interacts with the current state (current reality) to produce a variation. The greater the variation, the stronger the need for required remedial action (Novak & Levine, 2010). The action taken then aligns the current state towards the preferred state by decreasing the variance (Novak & Levine, 2010). When the action succeeds in moving the current state to the preferred state, the variance could be decreased and even eradicated (Novak & Levine, 2010).

According to this Balancing Loop Archetype, illustrated by the researcher, a self-correcting process keeps organisational efforts and performance aligned to an explicit goal, by making adjustments in pursuit of the goal. This means that attempts to move an AET organisation to an anticipated learning organisation outcome requires some action. The CHE (2004f) and the QCTO (2008) noted that such actions include system monitoring, reacting to internal and external influences, and improving processes and structures. These actions have to be aimed at improving both current activities and future planning, programming and decision making (CHE, 2004e). The action taken by an AET organisation has to align the current organisational reality towards the anticipated (or preferred) learning organisation state by decreasing the performance gap (CHE, 2016, 2014a, 2004b; CHEQC, 2005; DOL, 2008). When the remedial action (stemming from system evaluation constructs and performance-directed constructs) has succeeded in moving the organisation toward the anticipated learning organisation state, the performance gap is decreased and could even be eradicated.

The presented archetype (Figure 5.4) provided an original pattern of systemic actions which are applicable to AET organisations. Although this archetype suggests specific ordering and structuring principles, it exhibits natural variability and could therefore change its form to adapt to internal and external influences, as well as changing or different organisational contexts. However, the core concept of the archetype remains fixed, for it depicts a specific procedure to follow, which introduces reinforcing structures and identifies a need for systemic balance (Martínez-Costa, Choi, Martínez & Martínez-Lorente, 2009b).

The researcher acknowledged that an archetype could be presented as an essential and ideal pattern of relationships among concepts. The value of this archetype could be related to Wankhede and Gujarathi's (2012) view that information should be collected on a continuous basis to determine whether training is assisting the organisation to improve its overall performance. The CHE (2012, 2006b, 2004b); DOL (2008) and QCTO (2008) stressed that AET organisations should strive for excellence in terms of performance. The depicted archetype could be used to encourage thinking beyond the current organisational reality. An

ideal situation could be illustrated by considering the archetype characteristics, the envisaged outcome and the two concepts (system evaluation constructs and performance-directed constructs). Such an ideal situation is characterised by no variance or gap (Figure 5.5). This means that an AET organisation could successfully align its system evaluation constructs and performance-directed constructs in such a way that it functions as a learning organisation (admitting that such a process will be context-derived and probably organisation specific).

Figure 5.5: An envisaged ideal situation (Own illustration)

In terms of systems-thinking, the functional value offered by the depicted archetype is found in its ability to provide a basic structure or foundation upon which the AET system evaluation model could be further developed. This development would have to ensure that performance excellence could be attained and maintained within a learning organisation (Brown, 2014; Škerlavaj et al., 2007; Senge, 1990). Furthermore, the archetype could be used to assist with the setting of AET organisational objectives, facilitating decision-making and reflecting upon performance excellence.

In conclusion, this section explained how AET organisations could use the core AET evaluation constructs to promote performance excellence. As already specified, this new insight is specific to the South African AET organisational context, and should not be generalised without considering differences in organisational settings and circumstances. A system archetype can thus potentially help organisations to understand generic patterns of interaction that can be applicable to their environment and operations (Peters, 2014). Understanding the wider

organisational environment within which an AET system functions is important, because attention is focused on identifying enabling and disabling assumptions of the dynamics of interdependent and interacting processes. An archetype could be used to provide images of action and feedback associated with these assumptions. An archetype draws on an organisation's understanding of how elements of a problem are related to each other, by outlining how one occurrence causes systemic movement in either a positive or negative direction (Peters, 2014). Systems-thinking thus presents a comprehensive way in which the solution is visualised and applied (Adam & De Savigny, 2012; De Savigny & Adam, 2009).

5.5. Recommendations and suggestions for future research

5.5.1. Recommendations

This study provided an evidence-derived and theory-rooted approach to presenting AET system evaluation constructs, culminating in an archetype for excellence in organisational performance. It is recommended by the researcher that the envisaged AET system constructs, features and measures, consisting of (1) organisational intent, (2) organisational system enablers, (3) organisational education and training system drivers, (4) organisational performance results and (5) learning organisation culture, could be qualifiable and quantifiable. Qualifiable descriptors may possibly help to identify, define and explain the characteristics of each AET system construct, feature and measure. Quantifiable descriptors could be used to determine, indicate and express numerical values for each AET system construct, feature and measure.

From an organisational perspective, the AET system evaluation model and archetype may be used to: predict the impact of education and training initiatives, measure against those predictions, and report in a business format that management can easily understand. According to the CHE (2016, 2015, 2004b), SAQA (2001a) and SABPP (2014), these activities would be possible for the reason that data could be collected in a timely manner, and compared with predetermined performance explanations. Furthermore, it may also be possible to take corrective actions to address discrepancies, and to take advantage of new insights and opportunities. These actions could be of value to organisational policy makers for decision-making and considering support for economic development, educational opportunity, social integration of communities, competitiveness and academic excellence. System-based results could be presented by AET organisations as trustworthy and factual evidence of accomplishment aimed at overall performance excellence, that is aligned to learning organisation structures and principles.

With regard to AET organisational leadership, it could even be necessary for leaders to address, promote and manage system-level governance complexities and resilience which include principles of governance, effectiveness and efficiency. According to APPETD (2018); CHE (2016, 2015, 2004b); ETDP SETA (2018); SAQA (2001a) and SABPP (2014), AET organisations could rely upon operative leadership for the formulation of priorities, policy and strategy as well as institutional planning, quality assurance and management of operations. Leadership may possibly need to determine which organisational strategy, policies, procedures and objectives have to be considered, in order to include all aspects of business as well as AET management aspects (CHE, 2018, 2016, 2004a, 2004f; SABPP, 2014; SAQA, 2001a).

AET management actions, aimed at resource management, could include activities such as resource allocation, delivery and distribution, which are context-specific as well as infrastructure and technology undertakings (CHE, 2016, 2015, 2014a, 2011a, 2006b, 2005, 2004b, 2001a, 2001b; CHEQC, 2005; Marock, 2000; QCTO, 2008; SAQA, 2001a, 2001b). Another important consideration is competence for service and product delivery, which depends upon a competent workforce (CHE, 2004b; DHET, 2012; ETDP SETA, 2018). Workforce competence may well encompass technical, support and academic services with reference to employee capacity, proficiency, expertise and continuous personal and professional development (CHE, 2004b). Furthermore, organisational processes, for example quality management systems, could be introduced to facilitate all organisational activities (CHE, 2004b; SAQA, 2001a). Quality management systems could be used to provide quality procedures and to review mechanisms (CHE, 2016, 2015; CHEQC, 2005; ETDP SETA, 2018; QCTO, 2008). Context differences within these systems will possibly necessitate a specific policy statement and a fit-for-purpose approach (CHE, 2016, 2015; CHEQC, 2005; ETDP SETA, 2018; QCTO, 2008). Such an approach may well need to detail all the organisation's internal sub-systems and illustrate compliance with international and professional practices (CHE, 2016, 2015; CHEQC, 2005; ETDP SETA, 2018; QCTO, 2008).

Quality management has the potential to encompass instructional design, development and implementation appraisal (CHE, 2016; CHEQC, 2005; SABPP, 2014; SAQA, 2001a). These AET activities are described as organisational system drivers in this study. AET instructional design activities, which follow a systems-approach, may be required in order to ensure that learning programmes are accredited, credible, legitimate, structured and purposeful (CHE, 2014a, 2004e). It is recommended that the design of qualifications and curricula be addressed as a subdivision of a quality management system (CHE, 2016, 2004b; SAQA, 2001a; QCTO, 2018). Such an arrangement may be necessary in order to meet stringent academic quality and accreditation prerequisites. Instructional development objectives could allow for a practical

approach, ensuring that AET efforts are focused on vocational competencies, attend to the development of useful skills and make use of work-integrated learning practices (CHE, 2016, 2004b; SAQA, 2001a; QCTO, 2018). AET organisations also may wish to establish ethical and effective student assessment protocols, programme evaluation schemes and training review systems (CHE, 2015, 2014a, 2004a; DHET, 2011). The usefulness and benefits associated with these initiatives could be measured and presented as part of the organisation's business results (CHE, 2009).

A focus on organisational business results possibly needs to involve financial outcomes and achievement of the corporate purpose (Collins, 2009). Context-specific financial measures applicable to AET organisations, which link with business strategies, could accentuate non-financial aspects as well as financial controls and results (CHE, 2004a, 2004b, 2004e; CHEQC, 2005). Stakeholder satisfaction indicators may have to be determined as measurable performance outcomes (CHE, 2016, 2014a, 2011b, 20056, 2001b; CHEQC, 2005). These internal and external stakeholders may need to be clearly defined (keeping the AET organisational context in mind). Furthermore, it may be beneficial to determine the contribution provided by organisational expertise (CHE, 2016, 2004b, 2003). Evidence of such expertise may be found in processes which reveal that an AET organisation successfully provides services and/or products of quality or value, by exploiting its actual capabilities and resources. The impact of innovation on organisational performance could also be considered (Collins, 2009). Operating practices and business strategies may have to change constantly in response to a changing environment (Collins & Porras, 2005; Collins, 2001). These changes may require process innovations, which could include aspects such as idea generation, planning of change, implementation actions, change management, examining achievements and overseeing transformation. These process innovations may possibly have to be designed, developed and implemented in order to ensure performance excellence (CHE, 2012, 2004f).

Performance excellence resonates with the characteristics of a learning organisation (CHE, 2004b, 2004e, 2004f). Therefore, situational aspects linked to learning culture, as well as psychological aspects of a learning climate, could be determined and consistently measured (SABPP, 2014). Dimensions such as national transformation, equity and social redress priorities may have to be considered and included in defining learning organisation strategies, objectives and measures within the South African context (CHE, 2004b; SABPP, 2014). In addition to these strategies, a learning culture may be required. Such a learning organisation culture could increase the success and competitive advantage of an organisation (Horsford et al., 2018; Hussein et al., 2016). Furthermore, such a culture could respond to transformation as well as encouraging learning in an organisation (Horsford et al., 2018; Hussein et al., 2016).

Collins (2001) observes that organisations have to realise why they are successful. This means that organisations may have to perform system analyses in order to identify their areas of strength and success factors. Hamel (2006) proposes a pragmatic approach for such an analysis, whereby organisations review existing management processes by answering specific questions. These questions were subsequently aligned to AET organisational settings by the researcher. By posing and answering the following questions, an AET organisation may gain greater insight into each AET system construct's features and characteristics. The following questions could be posed and answered:

- Which subject matter could be included in each construct process and process elements to ensure compliance and conformance with regulatory and professional necessities? The purpose of this question is to establish regulatory and professional requirements which are applicable to each system construct and the entire system. These requirements outline compliance necessities, rights and responsibilities of individuals and organisations within South Africa's AET environment.
- In which manner could each construct be defined in terms of learning organisation principles and standards? The intention of this question is to identify best learning organisation practices which could be considered by an AET organisation. By introducing these considerations, AET organisations could establish and ensure a process of continuous improvement and innovation of its services and products.
- Who owns each construct process and process elements? The objective of this question is to identify critical role-players and stakeholders for each activity within an AET system. This information could be used to recognise, develop, train and empower these role-players and stakeholders in order to achieve system and organisational goals.
- Who possibly has the power to change the construct's process and process elements? The intention of this question is to identify, evaluate and review management structures and systems in order to easily facilitate change management initiatives within a construct's processes.
- What are the possible success or performance metrics for each construct process and process elements? The purpose of this question is to establish detailed performance metrics for each construct process and process element and to systemically link performance metrics across the entire AET system. By following such a holistic approach, an AET organisation could ensure valid and reliable measurement and evaluation of all its system deliverables.
- Who are the stakeholders for each construct process and process elements? The intention of this question is to identify, evaluate and review stakeholder structures and

systems in order to easily facilitate change management initiatives within a construct's processes.

- Who could participate in change management? The objective of this question is to identify critical role-players and stakeholders for each activity within an AET system. This information could be used to recognise, develop, train and empower these role-players and stakeholders in order to effectively participate in change management initiatives, which are aimed at achieving system and organisational goals.
- What is the data or information input for each construct? The purpose of this question is to identify and verify data or information inputs for each construct, which have to be considered within a specific AET system. This information not only identifies construct parameters, it also has to illustrate how the output of one construct serves as the input for the next construct.
- Which analytical tools could be used to ensure trustworthy and factual evidence of accomplishment aimed at overall performance excellence for each construct process and process elements? The intention of this question is to link AET organisational strategy with performance excellence measures. Such an arrangement is aimed at providing trustworthy and factual evidence of strategic accomplishments aimed at overall performance excellence for each construct process and process element.
- How do each construct process and process elements link to other constructs? The purpose of this question is to define and describe context-specific AET system design, development and evaluation considerations and goals. This information is used to communicate the rationale and intent of an AET organisation's operational system.

5.5.2. Suggestions for future research

Continuous AET system evaluation is imperative to ensure that quality assurance in vocational education is maintained. Such a continuous process requires that the actual performance outcomes or results of an organisation are measured against its intended goals. Detailed performance measures are needed in order to provide metrics which can be used by an AET organisation to evaluate its entire AET system. However, this study did not investigate detailed organisational AET performance measures. New knowledge concerning detailed organisational AET performance measures was thus not presented. Therefore, future research could deal with the following topics:

- Determining the impact of system-based evaluation which was employed by AET organisations to measure actual performance outcomes or results against its intended goals.

- Identifying and describing organisational performance measures (specific to a pre-defined context) which were used to comply with system-based evaluation of AET.
- Explaining how system-based evaluation could be used by an AET organisation to facilitate its transformation towards becoming a learning organisation.

5.6. Conclusion

This thesis provided research-based evidence structured along the following five chapters:

- Chapter 1 provided an overview of the study. This chapter offered an introduction to the study and the rationale for this research. The research problem was delineated and described. Relevant concepts and terminology were explained to serve as an introduction and orientation to the specific aspects relevant to this research project and study.
- Chapter 2 presented a theoretical framework and was supported by a literature review relevant to the research problem. This allowed for insight regarding conceptual and contextual factors which influenced and framed this research project.
- Chapter 3 offered a comprehensive discussion, explanation and motivation of the research methodology as applicable to this research study.
- Chapter 4 presented detailed accounts of the research results.
- Chapter 5 concluded the thesis by thoroughly dealing with the findings before making recommendations.

The researcher aimed to identify and describe AET system evaluation constructs which could be adaptable to different AET contexts and aimed at performance excellence. The rationale was that AET system evaluation constructs could provide for consistency and facilitate the creation of standard measures against which an AET organisation's performance may be evaluated in terms of excellence. This rationale was supported by the literature review which indicated the necessity to find and describe AET system enablers and associated results, understand training system evaluation methodologies, and determine how education excellence, in support of professional organisational performance, should manifest.

The salient points drawn from the analysis and results yielded relevant results. An analysis of document and interview data identified organisational intent, organisational system enablers, organisational education and training system drivers, learning organisation performance results and learning culture as AET evaluation constructs. Furthermore, by following a systems-thinking approach, the researcher identified and described a conceptual framework which may well be used to facilitate an AET system evaluation. The researcher identified AET

evaluation constructs which could be used to enhance organisational performance and excellence, as a result of an analysis of South African regulatory and professional conventions. A model and an archetype, which acknowledged theoretical constructs and excellence principles, were also designed, developed and explained by the researcher. These results thus support the stated rationale of this study. These results also inform a need for future research, which has to identify and describe detailed and organisation-specific AET system evaluation performance measures and metrics.

Finally, a presentation of core system constructs applicable to AET organisations, which will affect the progress of a leaming organisation, was advanced. This research contributed to AET theory by presenting a core AET system evaluation which supports performance excellence in the South African context.

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APPENDIX A: DATA COLLECTION INSTRUMENTS

Data collection instrument: Document analysis focus

Analysis focus – Education Authorities and Professional Organisations
1. Measurement processes which determine training system successes.
2. System elements which are used to evaluate AET.
3. Definitions and descriptions of training system excellence.
4. Internalising the concept of training system excellence in internal quality systems and culture.
5. Training system enablers and results.
6. Optimising continuous improvements within a training system.
7. Links between AET system evaluation results and organisational performance.

Data collection instrument: Interview questions

Interview – Education Authorities and Professional Bodies
1. How would you describe the processes your organisation recommends to determine AET system success?
2. How would you describe system elements your organisation recommends to evaluate AET?
3. Tell me which system enablers your organisation recommends to evaluate AET?
4. How would your organisation define training system excellence, and how such excellence could be enhanced?
5. How would you describe your organisation's recommendations with respect to continuous improvements within an AET system?
6. How would you describe your organisation's recommendations which will help organisations to link AET system evaluation results to organisational performance?

APPENDIX B: RESEARCHER TASK/ACTIVITY GUIDE: INDIVIDUAL INTERVIEWS

Pre-interview activities

Ensure that the participant has voluntarily provided his/her consent by means of a completed CPUT CONSENT TO PARTICIPATE IN A RESEARCH STUDY document.
Provision of writing materials.
Prepared questions.
Eliminate disturbances during the interview.
Ensure the audio recorder is ready to record the interview.
Register:

- date and time.
- participant number.

Interview

Thank the participant for his/her attendance.
Provide the following information to the participant:

> "This is an in-depth, face-to-face interview that will enable me to gather current views held by you with regarding AET system evaluation constructs. Open-ended questions allowing for a limitless response from you will be asked. The same questions will be asked to other participants. It will allow for reliability, consistency and ease of data analysis. This individual interview will allow me to gain a deeper understanding of AET evaluation system enablers and results, implemented systems evaluation constructs and performance excellence theory. Interview results (qualitative data) will assist in creating a deeper understanding. This interview should not exceed 20 minutes. All interviews will be recorded and I will prepare transcripts of these confidential interviews."

Emphasise the following:

> There are no correct answers to the questions.
> You are welcome to make notes on the paper provided to guide your thoughts and conversation, prior to and during the discussion.
> You will receive a written version of the question posed and you will be allowed to study the question prior to providing a response.
> Your honest responses are requested.

Identity of participants and the site will remain confidential.

Transcribed information will be made available to the participant for validation purposes.

Obtain and note the following demographic information in the field notes:

- Date and time of interview.
- Name of the organisation.
- Participant name and surname.
- Participant's position in the organization.

Activate the audio recorder.
Ask the first question and hand the question to the participant.
Note all own prompts and notes as field notes.
Do not interrupt (unless necessary).
Seek clarity when required and probe for depth when required.
Continue with the next questions, conduct to be similar to that for question 1.
Note all own prompts and notes in the field notes.

Questions

Each participant will be handed a sheet with the questions that will receive attention.

Interview questions
1. How would you describe the processes your organisation recommends to determine AET system success?
2. How would you describe system elements your organisation recommends to evaluate AET?
3. Tell me which system enablers your organisation recommends to evaluate AET?
4. How would your organisation define training system excellence, and how such excellence could be enhanced?
5. How would you describe your organisation's recommendations with respect to continuous improvements within an AET system?
6. How would you describe your organisation's recommendations which will help organisations to link AET system evaluation results to organisational performance?

Thank the participant.
Deactivate the audio recorder.

Obtain contact details from participants to which transcribed info can be forwarded and note in the field notes.

Collect question sheets.

APPENDIX C: DOCUMENT ANALYSIS: SOURCES CONSULTED

Council on Higher Education. 2001a. *A New Academic Policy for Programmes and Qualifications in Higher Education*. Pretoria: Council on Higher Education.

Council on Higher Education. 2001b *Founding document*. Pretoria: Council on Higher Education.

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Council on Higher Education. 2014b. *Quality Enhancement Project – The Process for Public Higher Education Institutions*. Pretoria: Council on Higher Education.

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Council on Higher Education. 2016. *South African Higher Education Reviewed: Two decades of Democracy*. Pretoria: Council on Higher Education.

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Marock, C. 2000. *Quality Assurance in Higher Education: The Role and Approach of Professional Bodies and SETAs to Quality Assurance*. Pretoria: Higher Education Quality Committee.

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South African Qualifications Authority. 2001b. *Quality Management Systems for Education and Training Quality Assurance Bodies (ETQAs)*. Pretoria: SAQA.

APPENDIX D: CPUT LETTER OF CONSENT

Faculty of Education and Social Sciences, Faculty Office, Mowbray Campus, Main Road, 7705
Tel. 021-6801539/0710701266

08 FEBRUARY 2018

TO WHOM IT MAY CONCERN

This is to certify that Christiaan Gerhardus Joubert is pursuing a Doctoral Degree in Education (D.Ed) at CPUT under my supervision. The title of his D.Ed thesis is: Training system evaluation constructs as an archetype for performance excellence. He plans to collect data for this study (focusing on quality management pertaining to education and training system evaluation) from:

a. The Council on Higher Education
b. Department of Higher Education and Training
c. Quality Council for Trades and Occupations
d. Department of Labour
e. South African Qualifications Authority
f. Education, Training and Development Practices Sector Education and Training Authority
g. Association of Private Providers of Education, Training and Development
h. South African Board for Personnel Practice

I support Christiaan Gerhardus Joubert's request to seek permission from the aforementioned institutions to conduct this study. Thank you.

Yours faithfully,

[Signed electronically]

Prof. Zilungile Sosibo

APPENDIX E: CODES AND SUB-THEMES

1. Document analysis

1.1. Document analysis: Becoming familiar with the data

Each document considered, is listed and its focus areas are briefly summarised below.

1.1.1. "South African Higher Education Reviewed: Two decades of Democracy"

The CHE (2016) reflects on the state of education in its publication titled "South African Higher Education Reviewed: Two decades of Democracy", whereby educators are acknowledged as being co-responsible to aid national transformation, equity and redress priorities. This publication identifies South Africa's continuous determination to improve its AET standards in pursuit of an improved international ranking by unrelenting development AET professionals. Furthermore, a need for institutional identity, accreditation, culture, resources, reputation and relentless comparisons with international best practices in order to advance to a state of educational excellence is explained. This advancement towards organisational performance excellence relies upon the design, development and implementation of system-based organisational focus and enablers which are supported by organisational leadership, governance and information management systems.

1.1.2. "A New Academic Policy for Programmes and Qualifications in Higher Education"

The CHE (2001a) mentions in a document titled "A New Academic Policy for Programmes and Qualifications in Higher Education", that AET evaluation should follow a systems-approach. A need to identify specific system inputs, outputs and processes within an AET organisational setting is highlighted. This document mentions that these organisational systems have to pay attention to AET priorities such as responding to social needs, recognising prior learning, providing vocational competencies, maintaining high standards of teaching and assessment, motivating lifelong learning, ensuring institutional transformation and undertaking benchmarking.

1.1.3. "Research Bulletin on Post-School Education and Training – Number 2"

The DHET (2014) states in its publication titled "Research Bulletin on Post-School Education and Training – Number 2", that curricula need to align education, training and development demands emanating from vocational changes.

1.1.4. "Occupational Qualifications Sub-Framework (OQSF) Policy"

The QCTO (2014) explains in its "Occupational Qualifications Sub-Framework (OQSF) Policy", that organisational leadership assumes responsibility to formulate, introduce and review all AET policies, practices and procedures required to offer occupational qualifications. These organisational efforts have to be supported by benchmarking efforts and AET curricula evaluation.

1.1.5. "Kagisano Issue Number 4"

A need for education evaluation which is supportive of the ideals of excellence is proposed in the CHE (2006b) "Kagisano Issue Number 4". This objective should rely upon sound leadership, oversight and an organisation's ability to design, develop, implement and maintain policies, strategies and resources which support all aspects of AET. Education management is aimed at planning, monitoring and evaluation of system performance within a defined organisational context. These organisational activities are aimed at facilitating equity, redress, transformation and striving towards continuous improvement. Following an integrative education management approach aimed at inclusion and evaluation of these requirements, may contribute towards a more comprehensive AET system evaluation. Overall organisational achievement could benefit from strategies prescribing activities and performance and following an integrated systems-approach. A need for valuable AET systems is stressed.

1.1.6. "Framework for the Monitoring and Evaluation of South African Higher Education"

The CHE (2004f) discusses AET evaluation in its report titled "Towards a Framework for the Monitoring and Evaluation of South African Higher Education". In this report AET evaluation systems are described as being action-oriented, informed by organisational strategies and include all aspects of the business. This report suggests to AET organisations striving for excellence in terms of system performance, to consider all system elements and links associated with policy requirements, organisational strategy, academic and educational standards, process management, teaching and learning operations, research projects, financial accountabilities, benchmarking, organisational culture and change/transformation management initiatives.

1.1.7. "Academic Freedom, Institutional Autonomy and the Corporatised University in Contemporary South Africa"

A research report titled "Academic Freedom, Institutional Autonomy and the Corporatised University in Contemporary South Africa" issued by the CHE (2006a) addresses higher education transformation. This report identifies institutional autonomy, organisational integrity and academic freedom as transformation foci. Academic entrepreneurialism as transformative motivation is also stressed in this report.

1.1.8. "Review of Higher Education in South Africa"

The report titled "Review of Higher Education in South Africa", from the CHE (2007) indicates that system evaluations, reviews and changes have to address organisational funding, governance, leadership, culture and technology facets. This report also draws attention to the role of quality management processes when performing AET evaluation.

1.1.9. "Quality Management Systems for Education and Training Quality Assurance Bodies"

The SAQA (2001b) stresses in a document titled "Quality Management Systems for Education and Training Quality Assurance Bodies", that quality management depends on creating a quality-focused institutional culture. Such a quality management system encompasses all the activities and information an organisation uses to enable it to improve and more consistently deliver products and services, which meet, and exceed the needs and expectations of its customers and beneficiaries. This report explains that AET organisations have to understand the purpose in establishing a quality culture and why it is important to manage all aspects of quality which maximise effectiveness.

1.1.10. "Quality Management Systems for Education and Training Providers"

The SAQA (2001a) emphasises in its publication titled "Quality Management Systems for Education and Training Providers", that it is of importance that AET providers develop quality management systems. A quality policy, review mechanisms, programme delivery, staff policies, learner policies, assessment policies and management system policies are mentioned as core criteria for AET quality management. This publication stresses the role of total quality management as a context-specific and fit-for-purpose system which influences continuous improvement and organisational performance.

1.1.11. “Good Practice Guide for Quality Management of Research”

The “Good Practice Guide for Quality Management of Research”, published by the CHEQC (2005), emphasises the importance of developing a quality management capacity within an education institution which complies to international accepted criteria. Such a quality management effort typically supports the unique and specific business and social transformation commitments of an AET organisation. According to this publication, a quality management system has to address an organisation’s strategic intentions, policies, design and delivery activities, employee performance, regulatory compliance, integrity of internal system enablers and the achievement of sought after organisational performance outcomes.

1.1.12. “Content Analysis of the Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project”

The CHE (2015) addresses the improvement of teaching and learning in both public and private higher education institutions by means of a document titled “Content Analysis of the Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project”. This document discusses quality management audits as a process to evaluate organisational policies, procedures and practices. A need for more effective organisational performance management and improvement-based processes is also explained.

1.1.13. “Government Gazette 558 (34883)”

The “Government Gazette 558 (34883)” (DHET, 2011) consolidates regulatory requirements specified by the National Qualifications Framework Act, 2008 (Act 67 of 2008), General and Further Education and Training Quality Assurance Act, 2001 (Act 58 of 2001), Higher Education Act, 1997 (Act 101 of 1997), and the Skills Development Act, 1998 (Act 98 of 1998). This Gazette stipulates that learning has be structured, purposeful and guided by acceptable prescribed curricula. Furthermore, AET programmes have to be credible, legitimate, accredited and registered to ensure national recognition of learning. A need to subject AET systems and programmes to benchmarking and review in order to confirm continued recognition, relevance and quality is also explained. This need calls for organisations to ensure the autonomy, integrity and credibility of its quality assurance and management systems.

1.1.14. “Quality Assurance Framework”

The DOL (2008) advises that a quality management system needs to be purposeful and in support of continuous improvement in a document titled “Quality Assurance Framework”. Relevance, flexibility, articulation, progression and portability in the design of occupational qualifications are also emphasised. This document explains the importance of adhering to best practice guidelines and standards which encourage AET providers to work towards the achievement of excellence. Implemented best practice improvements have to be monitored to determine the impact of learning interventions and implementation of measures in order to improve organisational effectiveness.

1.1.15. “Information on Education and Training Quality Assurance”

The Media, Information and Communication Technologies Sector Education and Training Authority (MICT SETA, 2012) provides insight into quality management in its publication titled “Information on Education and Training Quality Assurance”. It is stated within this document that AET organisations have to uphold well-defined academic standards. These standards are required for AET efforts need to enhance the skills of the current work force as well as enforcing new entrants to the labour market.

1.1.16. “Work-Integrated Learning: Good Practice Guide”

The CHE (2011b) prompts organisations in its “Work-Integrated Learning: Good Practice Guide”, to consider the educational purpose, importance and role of work-integrated learning. This document explains that AET organisations have to prepare students as knowledge workers in the global economy. A description of work-integrated learning stresses organisational requirements which include aligned curricula, improved general academic performance, enhanced interdisciplinary thinking, increased motivation to learn and improved competence, technical knowledge and skills.

1.1.17. “Quality Council for Trades & Occupations (QCTO)”

In a presentation by the QCTO (2008) titled “Quality Council for Trades & Occupations”, the use of a systemic approach for quality management and assurance tasks is illustrated and explained. Concepts and characteristics of occupational curricula are also discussed in this presentation.

1.1.18. “Introduction to the Quality Council for Trades and Occupations (QCTO)”

The importance of work-integrated learning and complimentary requirements in terms of AET evaluation and quality management is explained by the QCTO (2008) in its publication titled “Introduction to the Quality Council for Trades and Occupations (QCTO)”. Quality management is viewed as a mechanism used to assure compliance to predefined and stringent academic standards and conditions. Compliance is described in organisational policies, procedures, systems, processes and mechanisms which encompass all the AET system elements. A need to determine the impact of a quality management system on organisational performance is also emphasised in this publication.

1.1.19. “Integrated Quality Management System (IQMS) for School-based Educators”

The “Integrated Quality Management System (IQMS) for School-based Educators”, published by DHET (2005) explains that an effective and efficient AET system have to be supported by an organisational quality management system.

1.1.20. “HEQC aligned with INQAAHE good practice guidelines for external quality agencies”

The CHE (2011a) provides and describes practice guidelines for external quality agencies which emphasises the development and promotion of standards of professional practice in quality assurance in its document, titled “HEQC aligned with INQAAHE good practice guidelines for external quality agencies”.

1.1.21. “Founding Document”

The CHE (2001b) acknowledges in its publication, titled “Founding Document”, that great attention to capacity development in terms of quality management, evaluation systems and accreditations are required by organisations in pursuit of AET excellence.

1.1.22. “Criteria for Institutional Audits (April 2004 version)”

“Criteria for Institutional Audits (April 2004 version)” published by the CHE (2004a) stresses quality management, audit foci and processes. According to this document, education audits need to scrutinise organisational policies, systems and resources. The CHE (2004a) explains that a quality management audit includes institutional arrangements for quality assurance.

1.1.23. "Criteria for Institutional Audits (June 2004 version)"

"Criteria for Institutional Audits (June 2004 version)" published by the CHE (2004b) states that quality monitoring aims to monitor, evaluate and act on quality issues which should be incorporated in policies, systems, strategies and resources used by the institution to monitor, evaluate and act on quality issues. This document also explains that contextual imperatives have to be considered during a quality management audit. These imperatives include institutional intent, alliance choices, extent of operations (domestic and/or international), institutional prestige as well as asserting value and continuous advances towards AET excellence.

1.1.24. "Green Paper for Post-School Education and Training"

The DHET (2012) states in its "Green Paper for Post-School Education and Training", that AET institutions have to develop appropriate programmes, upgrade lecturer qualifications, build capacity for management and governance, improve learner support, maintain accreditations, perform quality assurance, utilise appropriate information technology systems for both learning and management, as well as facilitate strong partnerships between organisations in public and private sectors. In addition to these aspects, institutions require suitable resource management systems, necessary infrastructure and human resource capacities. Furthermore, curriculum design, assessment protocols, materials development and flexible modes of delivery, are explained as critical organisational undertakings.

1.1.25. "Framework for Institutional Audits"

The "Framework for Institutional Audits" available from the CHE (2004c), displays a common institutional audit policy framework to the public and private AET providers. This framework addresses quality-related matters pertaining to the transformation, flexibility, receptiveness, continuous change and innovativeness of institutions in the production of new knowledge and skills and the utilisation of new modalities of learning, design, development and delivery. Specific attention is afforded in this document to institutions' policies, systems, procedures, strategies, resources and culture, which guide quality management in the central functions of teaching and learning, including the related academic support services.

1.1.26. "Higher Education Qualification Framework Handbook"

The CHE (2010), states in its "Higher Education Qualification Framework Handbook" that the purpose of an institutional audit is to encourage systematic and continuous quality

improvements as appropriate to its context, mission and strategic goals. Institutional audits have to be used to determine whether organisations meet their specified missions, goals, objectives, expectations and the needs of various internal and external constituencies. This document explains that quality management frameworks need to be fit-for-purpose, considering contextual differences, such as mission differentiation and diversity.

1.1.27. "Improving Quality in Higher Education: Who's Responsibility?"

The CHE (2004d) advocates that organisational education evaluation relies upon self-assessments, in its document "Improving Quality in Higher Education: Who's Responsibility?". Self-assessments are used as evaluative tools by organisations to determine institutional indicators of quality and quality management. Self-assessment results serve as incentives for quality improvement.

1.1.28. "Higher Education Quality Committee Self-Review Report"

The "Higher Education Quality Committee Self-Review Report", prepared by the CHE (2008), stresses that the primary purpose of an institutional audit is to facilitate systematic and continuous quality development, improvement, enhancing organisational capacity to plan, act and report on AET objectives and achievements. AET audits have to assess learning, research, culture and stakeholder engagement enablers and results. This document explains that the type, format and focus of these audits are influenced and framed by the specific organisational context, internal procedures and external policies.

1.1.29. "Criteria for Programme Accreditation"

The "Criteria for Programme Accreditation" provided by the CHE (2004e) stresses the need for a national education quality management system to perform training evaluation. In pursuit of evaluation, adherence to programme and institutional accreditation and reaccreditation requirements are underlined. Education evaluation emphasises accreditation results. These requirements are deliberated as part of the AET system evaluation. Institutional context is acknowledged due to its potential impact on AET evaluation focal points. These areas of attention include system enablers and results associated with organisational management and leadership, adult teaching and learning strategies, research activities and training policies. Partnerships, cross-border operations, modes of training delivery and assessment, infrastructure considerations and budgetary allocations also have to be incorporated as additional areas of interest. This document explains that programme access and admission, recognition of prior learning, employee proficiency, student and staff support services,

programme marketing, information management and learner data systems have to be included in an AET system evaluation.

1.1.30. "Quality Assurance in Higher Education: The Role and Approach of Professional Bodies and SETAs to Quality Assurance"

In Marock's (2000) report titled "Quality Assurance in Higher Education: The Role and Approach of Professional Bodies and SETAs to Quality Assurance", he states that the purpose of an evaluation is to assure all stakeholders of the quality of policies, processes and practices associated with an AET system. The need for an effective quality management system is highlighted in this document as it serves as a precondition for programme accreditation. Learning programmes (development, delivery and evaluation), policies and practices for managing practical or work components of training, learner policies and practices (aimed at learner entry, guidance and support systems), staff competence, resources (financial, administrative and physical), management of learner assessments and organisational management serve as foci of AET quality assurance and audits.

1.1.31. "Framework for Institutional Quality Enhancement in the Second Period of Quality Assurance"

The CHE (2014a) acknowledges that AET play a vital role to in contributing to the reconstruction and development of all aspects of South African society in its publication titled "Framework for Institutional Quality Enhancement in the Second Period of Quality Assurance". All aspects of adult teaching and learning are emphasised to improve student success. This document explains that the quality of AET ensures that minimum standards are met in organisations' programmes. This commitment requires a comprehensive framework and process to be developed and implemented to audit the quality of an organisation's policies and practices in relation to the core functions of adult teaching and learning, research and community engagement as well as management, governance and administration. Meeting this objective necessitates a change from quality assurance to quality enhancement. Quality assurance consists of measuring performance and quality, in order to comply to the specific requirements as prescribed by quality standards and criteria. Whereas, quality enhancement is described in terms of efforts aimed at creating different benchmarks, new standards of quality, along with continuous improvement and development within a context-specific setting.

1.1.32. "Quality Enhancement Project – The Process for Public Higher Education Institutions"

The CHE (2014b) mentions that quality enhancement and continuous improvements have to become a mind-set for organisations in the document titled "Quality Enhancement Project – The Process for Public Higher Education Institutions". This document stresses that it is vital for AET organisations in pursuit of change and excellence to possess information and resources for improving student achievements. Furthermore, the need and role of a supporting organisational culture of quality enhancement is emphasised.

1.1.33. "Guide for Evaluators: Accreditation and re-accreditation of programmes submitted to the Higher Education Quality Committee"

The "Guide for Evaluators: Accreditation and re-accreditation of programmes submitted to the Higher Education Quality Committee" and promulgated by the CHE (2009), views quality management as an evidence-based process. Such evidence relies upon organisational self-assessments which are framed by context-specific attributes. Compliance in regulatory, accreditation, governance and organisational standards serve as evidence. This document describes system-based benchmarking activities which consider system enablers and results. Continuous improvements in terms of organisational strategy, process management, employee capacity and competence, programme management, teaching and learning environment and learner assessment schemes are also deliberated in this document.

1.1.34. "Good governance in higher education; reflections on cooperative governance in South African higher education"

The CHE (2003) debates issues pertaining to governance in its publication titled "Good governance in higher education; reflections on cooperative governance in South African higher education". This publication proposes that good corporate governance is a mechanism to achieve business transformation. Good corporate governance is aimed to enhance a "collective good" and relies upon leadership accountability. This "collective good" includes initiatives aimed at meeting all regulatory requirements, furthering organisational intentions, encouraging employee development, providing required resources, ensuring stakeholder satisfaction, meeting student needs, adhering to financial controls and confirming democratic consultation and transparency. Envisaged benefits of good corporate governance described in this document include the promotion of virtuous business standards, organisational competitiveness, performance excellence and student-centeredness.

1.1.35. "Teaching Excellence Awards in South Africa: A National Study"

The CHE (2012) emphasises the need for performance excellence in its publication titled "Teaching Excellence Awards in South Africa: A National Study". Indicators of excellence described, include high quality, innovative adult teaching and learning practices, the use of techniques and approaches for training and suitable assessments. Creativity and innovation in the design and planning of adult learning and assessment activities are also mentioned.

1.1.36. "SABPP HR Management System Standards Model"

The SABPP (2014) details education, training and development standards to consider in pursuit of performance excellence in its "South African Board for Personnel Practice Human Resource (SABPP HR) Management System Standards Model". A systematic approach to developing and implementing AET strategies, policies and plans aligned to the intent of the organisation which enable the organisation to achieve its objectives, is illustrated in this model. According to this model, achieving organisational objectives relies upon systems and sub-systems to collect data which enable impact measurements to be carried out.

1.1.37. Data summary from the document analysis focus areas

A data summary from the document analysis focus areas is listed and explained in Table E.1. Seven focus areas which identify and describe system elements, enablers, results and performance excellence were derived from the research sub-questions. Each document was thoroughly examined in accordance with the seven focus areas to identify meaningful and relevant data summaries.

Table E.1: Data summary from the document analysis focus areas

Focus and findings from the document analysis
Analysis focus: Measurement processes which determine training system successes in order to identify input, process and result elements. The CHE (2001a) mentions that AET evaluation should follow a systems-approach. This means that specific inputs, outputs and processes need to be identified within an organisational setting (CHE, 2001a). These systems have to be aimed at education priorities such as responding to social needs, recognising prior learning, providing vocational competencies, maintaining high standards of teaching and assessment, motivating lifelong learning, ensuring institutional transformation and undertaking benchmarking (CHE, 2001a). In addition to these requirements, AET organisational efforts

have to be aimed at providing occupational training which is legitimate, credible and well-understood (DHET, 2014). Measuring these prerequisites could also serve as impetus for AET evaluation (DHET, 2014).

AET management has to be aimed at planning, monitoring and evaluation of system performance within a defined organisational context (CHE, 2006b). These organisational activities have to be aimed at facilitating equity, redress, transformation and striving towards continuous improvement (CHE, 2006b). Following an integrative AET management approach aimed at inclusion and evaluation of these requirements, may contribute towards a more comprehensive AET system evaluation (CHE, 2006b). AET providers, thus have to be evaluated in terms of the supporting curricula and valid, reliable assessment strategies and tools (both formative and summative assessments) (DHET, 2014).

Analysis focus: System elements which are used to evaluate AET with the intention of identifying input, process and result elements and possible constructs.

The necessity for organisational focus (when considering system elements which are used to evaluate AET) is observed in terms of references to management, leadership (CHE, 2016, 2006b, 2004b; DOL, 2008; SABPP, 2014; SAQA, 2001a) and the strategy, policy and objectives of an organisation (CHE, 2015, 2012, 2010, 2008, 2007, 2004e, 2004f; DHET, 2014; QCTO, 2014). As an example, the importance of having professional managers which facilitate the design, development and implementation of system-based organisational focus and enablers, in pursuit of AET excellence, are accentuated by the CHE (2016). This organisational focus emphasises the need for organisational processes, activities, goals (CHE, 2004e; CHEQ, 2005; SAQA, 2001a), quality management activities (CHE, 2016, 2014a, 2004a, 2004b, 2004e, 2001a; SABPP, 2014; SAQA, 2001a, 2001b) and strategic objectives (CHE, 2016, 2006b, 2004e, 2003; SABPP, 2014). Furthermore, the DHET (2014) expands on this focus by explaining that organisational leadership has to assume responsibility to formulate, introduce and review all AET policies, practices and procedures required to offer occupational qualifications.

These aforementioned objectives require from AET organisational management to ensure that all aspects of the business are conducted according to accepted social and commercial standards, by adhering to a systems-approach (CHE, 2004f), seeing that AET organisations strive for excellence in terms of system outputs. AET evaluations consequently have to consider all system elements and links associated with policy requirements, organisational strategy, academic and educational standards, process

management, teaching and learning operations, research projects, financial accountabilities, benchmarking, organisational culture and change/transformation management initiatives (CHE, 2004f).

Analysis focus: Definitions and descriptions of training system excellence with the purpose of describing performance and excellence criteria/indicators.

According to the CHE (2016), progression to a state of educational excellence is important to organisations and their stakeholders and relies upon relentless comparisons with international best practices. International comparison was thus acknowledged as a strategic enabler which rely upon effective organisational leadership, governance and information management systems (CHE, 2016). Furthermore, great attention to capacity development in terms of quality management, evaluation systems and accreditations are required by organisations in pursuit of education and training excellence (CHE, 2001b).

Analysis focus: Internalising the concept of training system excellence in internal quality systems and culture, so as to describe performance and excellence enablers.

Within the South African context, considerable attention should be afforded to quality management and assurance (CHE, 2016, 2014a, 2007, 2006b, 2004a, 2004b, 2004e, 2004f, 2003; DHET, 2012; Marock, 2000). For example, the CHE (2007) indicates in its system evaluations, reviews and changes that AET evaluation rely on quality management. Within the South African context, considerable attention has to be afforded to quality management and assurance (CHE, 2016, 2014a, 2007, 2006b, 2004a, 2004b, 2004e, 2004f, 2003; DHET, 2012; Marock, 2000). This quality management responsibility was found to be connected to the organisation's mission and purpose (CHE, 2016, 2014a, 2007, 2006b, 2004a, 2004b, 2004e, 2004f, 2003; 2001a; DHET, 2012; SABPP, 2014; SAQA, 2001a, 2001b; Marock, 2000).

The SAQA (2001a, 2001b) expands on this quality management need and explains that a quality management system has to include a combination of processes used to ensure that the degree of excellence specified is achieved. A quality management system has to encompass all the activities and information an organisation uses to enable it to improve and more consistently deliver products and services (CHEQC, 2005; SAQA, 2001b). In order to foster a quality culture, activities which include the direct auditing of reports, systems, processes, outcomes and the judicious use of technically sound external evaluation are required. Organisations which adopt quality management systems, assume that everyone in the organisation impacts on the quality of services or products (SAQA,

2001b). Adult education and training providers have to understand the purpose in establishing a quality culture and managing all aspects of quality (SAQA, 2001b). A challenge is to generate and operate quality management systems which maximise effectiveness within an organisation (SAQA, 2001b).

According to the CHEQC (2005), a quality management system has to address the appropriateness of the organisation's adult education and training strategic intentions, significance of its policies, quality of education and training designed and delivered. Such a system has to address employee performance, compliance with regulatory, accreditation, governance and organisational standards, value of teaching and learning practices (CHE, 2015; CHEQC, 2005). The impact of partnerships, knowledge management contributions, aptness of the learning environment, student pass and success rates, allocation of the institution's resources, integrity of internal system enablers and the achievement of desired organisational performance outcomes have to be contained within a quality management system (CHEQC, 2005; DOL, 2008). Financial and non-financial results which constitute organisational performance indicators, have to also be included (CHEQC, 2005).

Analysis focus: Training system enablers and results which can help to identify input, process and result elements and possible constructs.

AET is a catalyst for continuous improvement, change and innovation within AET organisations (SABPP, 2014). AET initiatives have to be aligned to suitable people development and management practices within the governance, risk, reporting, governance and compliance frameworks of the organisation (SABPP, 2014). Resources ensuring capacity and capability in shaping and implementing the desired strategic mandate, are thus fundamental (SABPP, 2014). Furthermore, a learning culture which defines the organisation's philosophy, principles and integrated approach to AET has to be entrenched within an organisation (SABPP, 2014). Achieving organisational objectives has to rely upon systems to collect data which enable impact measurements to be carried out (SABPP, 2014). Evaluating the impact of AET requires a system-based and directed approach which considers AET alignment with the strategy and its impact on the organisational capability and service realisation (SABPP, 2014).

Structured service realisation encompasses all product and/or service aspects central to an organisation's strategic direction (CHE, 2016, 2015, 2014a, 2004a, 2004b, 2004e, 2001b; SABPP, 2014) and competitive advantage (CHE, 2012, 2007; DHET, 2014; SABPP, 2014; SAQA, 2001a, 2001b). Education and training analysis (CHE, 2014a, 2015, 2004a, 2004b, 2004e, 2001b; MICT SETA, 2012), instructional design (CHE, 2009, 2004b,

2004e; SABPP, 2014; SAQA, 2001a), instructional development (CHE, 2009, 2004b; SABPP, 2014; SAQA, 2001a) and implementation appraisal (CHE, 2014b, 2011a, 2004b, 2001a; QCTO, 2008) are detailed in the documents consulted. These aspects are portrayed as essential education and training functions (SABPP, 2014; CHE, 2015, 2012, 2011a, 2011b, 2004c, 2001a, 2001b; DHET, 2012, 2011, 2005; MICT SETA, 2012; DOL, 2008, 2009; QCTO, 2008; SAQA, 2001a; Marock, 2000).

AET organisations thus have to consider the educational purpose, importance and role of work-integrated learning (CHE, 2011b). These considerations imply that AET organisations have to prepare students as knowledge workers in the global economy (CHE, 2011b). According to the DOL (2009), it is postulated that work-integrated learning requires aligned curricula, improves general academic performance, enhances interdisciplinary thinking, increases motivation to learn and improves competence, technical knowledge and skills. The importance of work-integrated learning and complimentary requirements in terms of education and training evaluation and quality management is also acknowledged by the Quality Council for Trades and Occupations (QCTO, 2008).

Furthermore, an enabling environment is described in terms of organisational and institutional culture (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SABPP, 2014; SAQA, 2001b). A learning organisational climate and culture emerged as prerequisites for organisational success, performance and excellence (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SABPP, 2014; SAQA, 2001b).

Education evaluation is thus shaped by the organisational context and leadership influences which in turn dictate the system enablers, performance focus, climate, culture and results (CHE, 2004a, 2004b).

Analysis focus: Optimising continuous improvements within a training system in order to describe performance and excellence enablers.

Compliance to best practice guidelines and standards, has to encourage adult education and training providers working towards the achievement of excellence (DOL, 2008). All improvements have to be monitored to determine the impact of learning interventions and implementation of measures in order to improve its effectiveness (DOL, 2008). It is vital for AET organisations in pursuit of change and excellence to possess information and resources for improving student achievements (CHE, 2014b). Individual and group attitudes, perceptions and values which inspire adult learning (CHE, 2015, 2011b, 2009,

2004e, 2001a; DHET, 2012; QCTO, 2014, 2008; SABPP, 2014; SAQA, 2001a) are vital in ensuring that high performance and innovativeness are consistently attained within AET organisations (CHE, 2015, 2011b, 2009).

Continuous improvements in terms of organisational strategy, process management, employee capacity and competence, programme management, teaching and learning environment and learner assessment schemes are proposed by the CHE (2009). AET evaluations have to include all these items as well as system criteria, such as employee development, access to education and training, ethical conduct, delivery modes and sites, process integrity, programme relevance and results and a variety of financial result indicators (CHE, 2009).

A planned systemic evaluation and change process to continually improve an organisation's effectiveness and efficiency is cardinal in pursuit of AET excellence (SABPP, 2014). Utilisation of diagnostic data, supported by the design and implementation of appropriate solutions and interventions to measurably enable the organisation to optimise its purpose and strategy, is acknowledged (SABPP, 2014). This necessitates the development of an integrated AET measurement and reporting framework which is linked to organisational performance (SABPP, 2014).

Analysis focus: Links between AET system evaluation results and organisational performance which may help to discover a possible model and an archetype to enhance performance and excellence.

A need for comprehensive AET system evaluation practices is identified (CHE, 2016, 2015, 2014a, 2014b, 2008, 2004b, 2004f; SABPP, 2014). Furthermore, institutional context is acknowledged due to its potential impact on AET evaluation focal points (CHE, 2004e). In addition to the AET organisational context, a learning organisational climate and culture emerged as prerequisites for organisational success, performance and excellence (CHE, 2016, 2015, 2014a, 2014b, 2007, 2006a, 2006b, 2004b, 2004c; DHET, 2014, 2012; SABPP, 2014; SAQA, 2001b). System-based evaluation areas of attention include system enablers and results associated with organisational management and leadership, adult teaching and learning strategies, research activities and training policies (CHE, 2004e). In the documents consulted, the researcher found that adult education and training organisations need to provide evidence of institutional results achieved (CHE, 2016, 2015, 2014a, 2014b, 2008, 2004b, 2004f; SABPP, 2014), in relation to organisational efficiency and effectiveness (CHE, 2015, 2004f, 2003; DHET, 2011, 2005; QCTO, 2008; SAQA, 2001b). Attention to and focus on organisational performance-based results have to be

accentuated by AET organisations (CHE, 2016, 2014a, 2014b, 2010, 2009, 2008, 2006b, 2004a, 2004b, 2004d, 2004e, 2004f, 2001a, 2001b; DHET, 2014; QCTO, 2014, 2008; SABPP, 2014; DOL, 2008; CHE, 2005; Marock, 2000).

1.2. Document analysis: Generating initial codes

Examples of the initial codes are presented below. These are text segments which were harvested from the document contents.

1.2.1. Code 1: Influence of quality management

"Quality enhancement processes raise the standards, creating different benchmarks and new standards to be quality assured" (CHE, 2014a: 12).
"Enhancing institutional capacity to plan, act and report on quality-related objectives and achievements" (CHEQC, 2005: 3).
"Encourage higher education institutions to engage in systematic and continuous quality improvement appropriate to their context as well as to their mission and strategic goals" (CHE, 2004c: 9).

1.2.2. Code 2: Purpose of quality management

"The criteria are intended to enable institutions to analyse and reflect on their quality management arrangements" (CHE, 2004e: 1).
"Effective structures and processes that quality assure, and monitor education are required" (CHE, 2004b: 18).
"Need to be evaluated to ensure that their work meets stated objectives and quality imperatives"; "will build trust in the system, assist with the overall functioning and credibility of the system and act as an important developmental tool" (Marock, 2000: 81).

1.2.3. Code 3: Quality management structure

"The development and operation of quality management policies and systems, the extent of institutional knowledge about and engagement with them, and their effective use in promoting, developing and improving quality" (CHE, 2004b: 1).
"For an integrated quality assurance process, core quality specifications or quality indicators should relate to educational standards"; *"these quality indicators will need to satisfy the*

requirements of the different players and will need to balance the different imperatives that drive each of the quality assurance systems" (Marock, 2000: 56).

1.2.4. Code 4: Quality management system performance

"W*ill focus on an institution's policies, systems, procedures, strategies and resources for the quality management of the core functions of teaching and learning, research and community engagement, including the relevant academic support services"* (CHE, 2001a: 1; CHE, 2004b: 4).

"Address the different stages of academic planning and operations at institutional level where quality considerations should play a role. These stages include policy development, resource allocation, policy implementation, the evaluation of the extent and impact of implementation, and the identification of interventions for improvement and enhancement" (CHE, 2004b: 2).

1.2.5. Code 5: Quality management audits

"Criteria are intended to enable institutions to analyse and reflect on their quality management arrangements and to guide the production of institutional self-evaluation reports" (CHE, 2004a: 1).

"With due allowance for mission differentiation and diversity, institutional audits assess whether institutions manage the quality of their core academic activities in a manner that is fit for purpose in advancing the institution's mission and goals; addresses transformational challenges for the development of individual students as well as the requirements of social and economic development; and provides value for money in relation to the full range of higher education purposes" (CHE, 2004b: 5).

1.2.6. Code 6: Quality management enablers

"Most systems operate on a fitness for purpose premise, evaluating quality arrangements on the basis of whether they support and give effect to self-defined institutional missions and goals" (CHE, 2006b: 71).

"The following questions may help the organisation to clarify its quality management processes: (1) how does the organisation, in practice, create and sustain a quality culture within the organisation?; (2) how are the relevance, comprehensiveness and clarity of standards used in the organisation ensured?; (3) how is information about the workings of the organisation collected, how often and by whom?; (4) how are learners' needs actually met?; (5) how often are programmes delivered by the organisation reviewed?; (6) how does the organisation ensure that its facilitators of learning actually possess the competence to both

facilitate the learning effectively and assess learners in ways that are consistent with the NQF?; (7) how does the organisation ensure that learning and assessment activities are monitored and reviewed?; (8) how does the organisation ensure that what is gathered from reviews, audits and/or monitoring in fact leads to improvements in the organisation's activities?; (9) what are the mechanisms the organisation uses to report back to people within the organisation?; (10) how does the organisation ensure that resources available to it are utilised effectively and efficiently, and are used to good effect?; (11) how does the organisation report to and generally relate to the ETQA under which it falls?; and (12) how does the organisation relate to other providers in the area that it works within, if this applies?" (SAQA, 2001a: 22 & 23).

1.2.7. Code 7: Quality management system compliance

"Draw on international standards of practice and aim to develop a common understanding" (CHEQC, 2005: 8) of such systems.
"Professional bodies are generally amenable to playing a quality assurance role" (Marock, 2000: 45).
"A number of the professional bodies have developed practices that attempt both to ensure accountability and encourage the development of good quality programmes" (Marock, 2000: 31).

1.2.8. Code 8: Quality management system conformity

"Both public and private providers are subject to the quality assurance requirements" (CHE, 2001b: 10).
"The combination of processes used to ensure that the degree of excellence specified is achieved". *"A clear description of the workings of the organisation and how they assure quality needs to be provided"* (SAQA, 2001a: 22).
"F*itness for purpose, a balance between development and accountability purposes, alignment of quality assurance with strategic planning and resource allocation, quality and equity to be realised concurrently, deliberate quality management, a particular emphasis on the quality of teaching and learning and the institutionalisation of a quality culture"* (CHE, 2016: 30).

1.2.9. Code 9: Education and training audits focus

"A wide variety of learning resources that may be available, supported and maintained to different extents. These include libraries, computer facilities, internet access, on-line learning environments and resources, teaching spaces, including lecture theatres and laboratories, and

physical spaces where individual students can study and groups of students can work together" (CHE, 2014a: 19).
"Efficient structures and procedures facilitate the interaction between academic provision and academic support", *"adequately staffed, resourced and necessary infrastructure"* and *"development opportunities for support staff to enhance their expertise"* (CHE, 2004a: 9).

1.2.10. Code 10: Education and training quality management

"The institution has effective systems in place for the quality management of short courses, exported and partnership programmes, and programmes offered at tuition centres and satellite campuses" (CHE, 2004a: 9).
"Policies and mechanisms which record and quality assure all short courses offered by the institution" (CHE, 2004a: 9).
"Quality management mechanisms which ensure that exported programmes are of equivalent quality to those offered in South Africa and comply with the national quality requirements of the receiving country" (CHE, 2004a: 9).

1.2.11. Code 11: Learner-focused education and training

"Should be conceptualised and delivered in a manner that integrates theory and practice, and strengthens provider-workplace linkages" (SAQA, 2001a: 25).
"Towards the offering of programmes designed to serve particular markets or market niches" (CHE, 2016: 12).
"Promotes an understanding on the part of the student of the specific occupation for which he/she is being trained, has a balance of theoretical and practical or applied knowledge, provides opportunities to master the techniques and skills which are required by a specific profession or occupation and includes work-based learning" (CHE, 2004b: 9).

1.2.12. Code 12: Organisational vision and mission alignment

"Have a clear sense of mission and purpose". *"An academic planning framework which articulates well with the institutional mission and strategic goals"* (CHE, 2004a: 8).
"The fitness of purpose of the mission, goals and objectives of an institution is determined in relation to institutional responsiveness to the local, national and international contexts. The transformational role that institutions are required to play within the national higher education agenda is of key importance in this regard" (CHE, 2004b: 3).

"The teaching and learning strategy" have to be *"appropriate for the institutional type (as reflected in its mission)" and set "targets, plans for implementation, and mechanisms to monitor progress, evaluate impact and effect improvement"* (CHE, 2004e: 11).

1.2.13. Code 13: Learner assessments

"An assessment policy and clear and effective procedures for its implementation. The policy and its procedures ensure academic and professional standards in the design, approval, implementation and review of assessment strategies for programmes and modules, and for the qualifications awarded by the institution" (CHE, 2004a: 14).
"Quality promotion and assurance measures are likely to scrutinise assessment practices to ensure that they are valid, fair, transparent and accountable" (CHE, 2001a: 156).
"Assessment system is rigorous and secure, institutional/faculty/professional rules governing assessment are published and clearly communicated to students and relevant stakeholders, evidence is provided to demonstrate that these rules are widely adhered to, breaches of assessment regulations are dealt with effectively and timeously, students are provided with information and guidance on their rights and responsibilities regarding assessment processes (for example, definitions of and regulations on plagiarism, penalties, terms of appeal, supplementary examinations)" (CHE, 2004e: 20).

1.2.14. Code 14: Legislative compliance

"The Minister of Higher Education and Training has overall responsibility for determining the qualifications structure for the post school education and training system" (QCTO, 2014: 12).
"To redress past inequalities and to transform the higher education system to serve a new social order to meet pressing needs and to respond to new realities and opportunities" (CHE, 2006b: 17).
"Regardless of the sector in which they are active, can only be accredited as a training provider for a stipulated period of time not exceeding five years" (MICT SETA, 2012: 6).
"Institutions should demonstrate how they have met national policy goals and priorities" (CHE, 2003: 9).

1.2.15. Code 15: Education and training regulation

"The purpose of an organisation having a policy is to indicate the ways in which the organisation views itself, what it sets out to achieve, who it directs itself towards and, fundamentally, why it believes there is a need for it to exist" (SAQA, 2001a: 21).

"Enabling policies and procedures must be in place in order to maintain and enhance the quality" (CHE, 2004e: 6).
"The policy and its procedures ensure academic and professional standards in the design, approval, implementation and review of assessment strategies for programmes and modules, and for the qualifications awarded by the institution" (CHE, 2004b: 14).

1.2.16. Code 16: Organisational performance regulations

"A policy statement is not necessarily a detailed explanation of everything an organisation does, but an expression of the principles upon which an organisation bases itself as well as the ways in which it intends to operate, with whom, and for what purpose" (SAQA, 2001a: 21).
"It is the responsibility of higher education institutions to manage their own affairs. The Ministry has no responsibility or wish to micro-manage institutions. Nor is it desirable for the Ministry to be too prescriptive in the regulatory frameworks it establishes" (CHE, 2003: 39).
"Policy and strategy formulation, implementation, monitoring and evaluation; and support for the planning of capacity building in institutions" (DHET, 2012: 82).

1.2.17. Code 17: Human resource development

"Recruitment, selection, development and support policies and procedures facilitate the availability of suitably qualified and experienced academic and support staff" (CHE, 2004b: 12).
"Availability of opportunities for the scholarly and professional development of the academic and support staff" (CHE, 2004b: 13).
"Staff development policies and strategies which promote professional competence" (CHE, 2004b: 8).

1.2.18. Code 18: Strategic leadership

"Leadership is concerned with establishing and promoting the direction of the system or individual institutions of higher education, and the formulation of priorities, policy and strategy in relation to established rules" (CHE, 2016: 108).
"Senior managers of higher education institutions face an enormous intellectual and practical challenge to develop capacity in their institutions in such a way that it facilitates the core higher education business of teaching, learning and research" (CHE, 2001a: 156).
"Allocated responsibilities at senior management level for implementation, monitoring and responsive actions"; "of the mission into a strategic plan with clear timeframes and resources for the achievement of goals and targets in its core functions" (CHE, 2004b: 4).

1.2.19. Code 19: Organisational risk management

"Human factor risks are not confined to operational risks typically associated with, for example, health and safety. Human factor risks arise from the employment of people and impact on the organisation's operations" (SABPP, 2014: 50).
"Due to the fact that any organisation inevitably incurs a wide range of risks in its operations, it is important to focus on the few risks that have a potentially large impact and are more likely to occur" (SABPP, 2014: 51).
"Source or develop risk assessment tools and methodologies that are relevant, credible, valid, reliable and standardised. The trustworthiness of tools and methodologies is critical because the quality of the risk assessment depends on these to generate accurate results which lend credibility to the process" (SABPP, 2014: 51).

1.2.20. Code 20: Organisational learning

"Teaching and learning strategy"; "in place which is appropriate for the institutional type as reflected in its mission (programme types, research, teaching), mode(s) of delivery (contact/distance/e-learning), and its student composition (age, full-time/part-time, advantaged/disadvantaged); has mechanisms to ensure that teaching and learning methods are appropriate for the design and use learning materials and instructional and learning technology" (CHE, 2004e: 11).
"Maintaining and applying academic and educational standards, both in the sense of expectations and requirements that should be complied with and in the sense of ideals of excellence that should be aimed for. These expectations and ideals may differ from context to context, partly depending on the specific purposes pursued. Applying the principle of quality entails evaluating services and products against set standards, with a view to improvement, renewal or progress" (CHE, 2004f: 16).

1.2.21. Code 21: Organisational business focus

"So that it can sustain quality standards during periods of change" (SAQA, 2001b: 9).
"A degree of competition that rewards merit and performance and promotes innovation and quality" (CHE, 2003: 19).
"Institutions have their own strategic objectives, with associated priorities, plans and activities" (CHE, 2014b: 6).

1.2.22. Code 22: Organisational management

"Allocated responsibilities at senior management level for implementation, monitoring and responsive action" (CHE, 2004a: 6).
"The implementation of policies and related goals and objectives" (CHE, 2016: 108).
"Achieve the optimal balance between the outputs of products, services and other activities and the resources used to produce them (efficiency); achieve policy objectives, operational goals, and other intended effects (effectiveness); ensure that all activities are conducted according to accepted standards of commercial and social morality (ethically) and in accordance with relevant legislation" (CHE, 2003: 12).

1.2.23. Code 23: Corporate governance

"At institutional level, the most striking feature has been the intensification of more managerial forms of governance" (CHE, 2006b: 6).
"A mechanism to achieve democratic consensus about the objectives, processes and timeframes for institutional and systemic transformation, and in that sense it implied a high degree of co-operation between government and institutions" (CHE, 2003: 1).

1.2.24. Code 24: Stakeholder engagement

"Partnerships in higher education provision, include collaboration between and among institutions on a regional basis, between public and private provider sectors, between universities and universities of technology, between higher education institutions and the business sector, and between institutions across national borders. Increasing instances of cross-border provision by foreign and South African higher education institutions, as well as the use of new modes of provision" (CHE, 2004e: 2).
"Managing the demands of different stakeholders while fostering the independence of a healthy higher education sector focused on quality in teaching, increasing knowledge production and increasing relevance to a developing African country requires extensive skill in negotiation and prioritisation and careful leadership towards a clear vision for the future" (CHE, 2016: 48).

1.2.25. Code 25: Learning culture

"A new dimension to the process of increasing competitiveness and market-share: not simply the product, or better processes of production, but a new dimension of improved management and control" (CHE, 2007: 101).

"Institutionalise a culture of self-managed evaluation that builds on and surpasses minimum standards" (CHE, 2008: 28).
"The continual and consistent achievement and maintenance of high quality standards under conditions where clients' expectations are likely to continue to change depends on creating and supporting a quality culture in the organisation" (SAQA, 2001b: 13).

1.2.26. Code 26: An education and training systems-approach

"In this regard providers may find the following questions helpful: (1) what is the management and administrative structure of the organisation?; (2) how are decisions taken in the organisation, by whom and in relation to what?; (3) what is the financial resource base of the organisation?; (4) does the organisation have adequate human and material resources to carry out its intended functions?; (5) what are the systems used by the organisation to manage and be accountable for its finances?; and (6) more generally, to what extent is the organisation run in ways that are transparent and accountable?" (SAQA, 2001a: 30).
"The efficacy of institutional arrangements to support high quality teaching and learning and research" (Marock, 2000: 26).
"Improve the processes and structures so that they will be more effective and efficient" (QCTO, 2008: 10).

1.2.27. Code 27: Organisational policies

"Policy development, resource allocation and policy implementation" (CHE, 2004b: 2).
"Structures and procedures should ensure that those affected by decisions have a say in making them, either directly or through elected representatives. It requires that decision-making processes at the systemic, institutional and departmental levels are transparent, and that those taking and implementing decisions are accountable for the manner in which they perform their duties and use resources" (CHE, 2003: 8).

1.2.28. Code 28: Organisational evaluation enablers and processes

"Key quality-related priorities in the core functions of teaching and learning, research and community engagement" have to be *"aligned with the mission and strategic goals of the institution"* (CHE, 2004b: 6).
"management systems and policies"; "the financial, administrative and physical structures and resources of the organisation, as well as procedures of accountability within the organisation" (SAQA, 2001a: 20).

"To determine as systematically and objectively as possible the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives" (CHE, 2004f: 7).

1.2.29. Code 29: Instructional design and development

"How learning programmes would be developed, delivered and evaluated" (SAQA, 2001a: 20).
"The programme provider should adopt inductive rather than deductive approaches to programme design, or at least motivate why deductive approaches to programme design are justified" (SAQA, 2001a: 26).
"Practical competence is the demonstrated ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action. It is grounded in foundational competence where the learner demonstrates an understanding of the knowledge and thinking that underpins the action taken: and integrated through reflexive competence in which the learner demonstrates ability to integrate or connect performances and decision-making with understanding and with an ability to adapt to change and unforeseen circumstances and to explain the reasons behind these adaptations" (CHE, 2001a: 98).

1.2.30. Code 30: Learner programme evaluation

"Clear and effective systems" "in place (including internal and external peer review) to evaluate programmes on a regular basis. Review findings are disseminated appropriately and utilised for staff development, curriculum improvement and increasing student access and success" (CHE, 2004a: 13).
"Programme evaluations will, at least, involve judgements on the integrity and coherence of a programme's design; on whether learners are in fact attaining the specified learning outcomes; scrutiny of providers' assessment and moderation arrangements and judgments about the responsiveness, relevance and cost-effectiveness of programmes in relation to their provider's mission and mandate" (CHE, 2001a: 155).

1.2.31. Code 31: Organisational learning enablers and processes

"An understanding is required of what standards of quality are used, and what type of indicators should be applied in order to ensure good quality education and training" (Marock, 2000: 79).
"In this regard it is also important to establish if the institution will have the capacity in terms of staff, resources and facilities to accommodate and ensure quality of teaching and learning for the number of students enrolled in the programme" (CHE, 2009: 17).

"Administrative support and how it fits in and are supported by the institutional structures and processes" (CHE, 2009: 19).
"Specific monitoring indicators in the domains of teaching and learning" (CHE, 2004f: 4).

1.2.32. Code 32: Performance results

"National benchmarks include increasing enrolments and student outputs" (CHE, 2004e: 2).
"Academic governance, teaching and learning practices and the structure of the learning programme, against minimum standards" (CHEQC, 2005: 2).
"Regular reviews of the effectiveness and the impact of the integration of the objectives and mechanisms for quality management" (CHE, 2004b: 7).

1.2.33. Code 33: Evaluation procedures

"Evaluation is preoccupied with the interpretation of monitoring data, the attempt to discern, explain and assess change patterns and causalities" (CHE, 2004f: 8).
"Regular review of the nature and extent of institutional responsiveness and of the strategies and resources used to give effect to institutional goals and priorities" (CHE, 2004a: 6).
"Not only can the system be monitored from different perspectives (input, throughput, output, outcome, performance), but it is also influenced by the signals and demands that it receives from government, civil society and the market" (CHE, 2004f: 18).

1.2.34. Code 34: Performance excellence

"Academic planning and operations at institutional level include the identification of interventions for improvement and enhancement" (CHE, 2004b: 2).
"Expected to guarantee standards of excellence" (CHE, 2006b: 22).
"Unique and distinctive ways in which the institution enriches and adds excellence to the higher education sector" (CHEQC, 2005: 18).
"Achievement of excellence" (QCTO, 2008: 7).

1.2.35. Code 35: Evaluation results

"Evaluate the impact of learning and development to assess quality, alignment with strategy and impact on organisational capability" (SABPP, 2014: 66).
"The output of this process constitutes the outcome of the education process in relation to society and is an indication of the effectiveness of the system in relation to its expected impact or effect on society" (CHE, 2004f: 18).

"This requires a process of research, analysis, measurement and feedback, with a view to improving the current state of operations" (SAQA, 2001a: 16).

1.2.36. Code 36: Evaluation inputs

"Programme design; student recruitment, admission and selection; staffing; teaching and learning strategy; student assessment policies and procedures; infrastructure and library resources; programme administrative services; and policies, regulations and procedures" (CHE, 2004e: 6 & 7).

1.2.37. Code 37: Self-evaluation

"Self-evaluation refers to the process by which an institution reviews the effectiveness of its quality management system for assuring, developing and monitoring the quality of teaching and learning, research and community engagement" (CHE, 2004b: 16).
"Will consist of a self-evaluation report prepared by institutions followed by a site visit from outside" (CHE, 2004d: 3).
"The self-evaluation would be carried out by the provider and would involve an assessment of the provider using a range of categories" (Marock, 2000: 19).
"Self-evaluation reports provide a comparative framework for quality judgements across the system" (CHE, 2001b: 10).

1.2.38. Code 38: Research and innovation

"Strong capability for institutional research that can not only produce new and relevant knowledge on the institution but that can integrate knowledge produced in different parts of the institution" (CHE, 2016: 133).
"Show whether the structures and mechanisms are appropriately placed and have the necessary authority and expertise to support the achievement of the research policy and strategic objectives" (CHEQC, 2005: 48).
"Sufficient and appropriate structures that implement, coordinate and monitor research policies related to all aspects of the research process, including the evaluation and approval of research, assessment and approval of research funding applications, adherence to research ethics codes and the commercialisation of research" (CHEQC, 2005: 25).

1.2.39. Code 39: Learner needs

"Focus on aspects of student support and development" (CHE, 2014b: 7).

"Student success at a particular institution is affected by the institution's course and programme enrolment management policies and procedures – how well the institution matches the characteristics of the students it admits and places into its various programmes with what it is willing and able to provide for its students" (CHE, 2014a: 21).
"Student success is also affected by how well an institution monitors the performance and progress of its student and refers them for appropriate support as needed" (CHE, 2014a: 21).

1.2.40. Code 40: Social responsibility

"Initiatives and processes through which the expertise of the higher education institution in the areas of teaching and research are applied to address issues relevant to its community. Community engagement typically finds expression in a variety of forms, ranging from informal and relatively unstructured activities to formal and structured academic programmes addressed at particular community needs" (CHE, 2004b: 24).
"Engagements with local, regional, national and international imperatives (including national policy frameworks and objectives) in order to establish the fitness of purpose of the institution" (CHE, 2004a: 6).
"The inclusion of community engagement in the quality assurance frame of reference has already begun to play a strong signalling role, leading some institutions to begin to develop more coherent policy, planning and resourcing frameworks for their existing and new interactions with various community-related constituencies, and to think of quality issues as not unrelated to their evolving identities as socially engaged institutions" (CHE, 2006b: 72).

1.2.41. Code 41: Organisational resources

"Human, financial and infrastructural resources are available to give effect to the goals and priorities" (CHE, 2004b: 6).
"Resources will be made widely available for individual institutions to adopt or adapt to their own contexts. Examples of resources are systems, software and procedures for data collection and processing, policies, models, guidelines, teaching materials and case studies illustrating good practice" (CHE, 2014a: 22).
"It is essential that institutions have the necessary infrastructure and human resource capacity" (DHET, 2012: 5).

1.2.42. Code 42: Organisational identity

"Beliefs about what higher education is for tend to shape higher education systems, determine institutional identities and influence what they do" (CHE, 2016: 14).
"Recent work on identity formation has chartered the collective capacities of resilience, recovery and resourcefulness" (CHE, 2006b: 34).

1.2.43. Code 43: Learning organisation

"Challenges facing the post-school education and training sector: equity, re-distribution of economic resources, equalising educational opportunity, de-segregation and its impact on equity of outcome; racial desegregation as it pertains to staffing, curriculum and institutional culture in all organisations of teaching and learning; are factors that inhibit integration in a learning organisation" (DHET, 2014: 10).
"On-going reflection and evidence-based decision making will enhance higher education institutions' ability to be learning organisations" (CHE, 2014a: 21).
"Be learning organisations" (CHE, 2014a: 21).

1.2.44. Coding: Document analysis examples

Examples of codes resulting from the document analysis are presented in Figure 1.1.

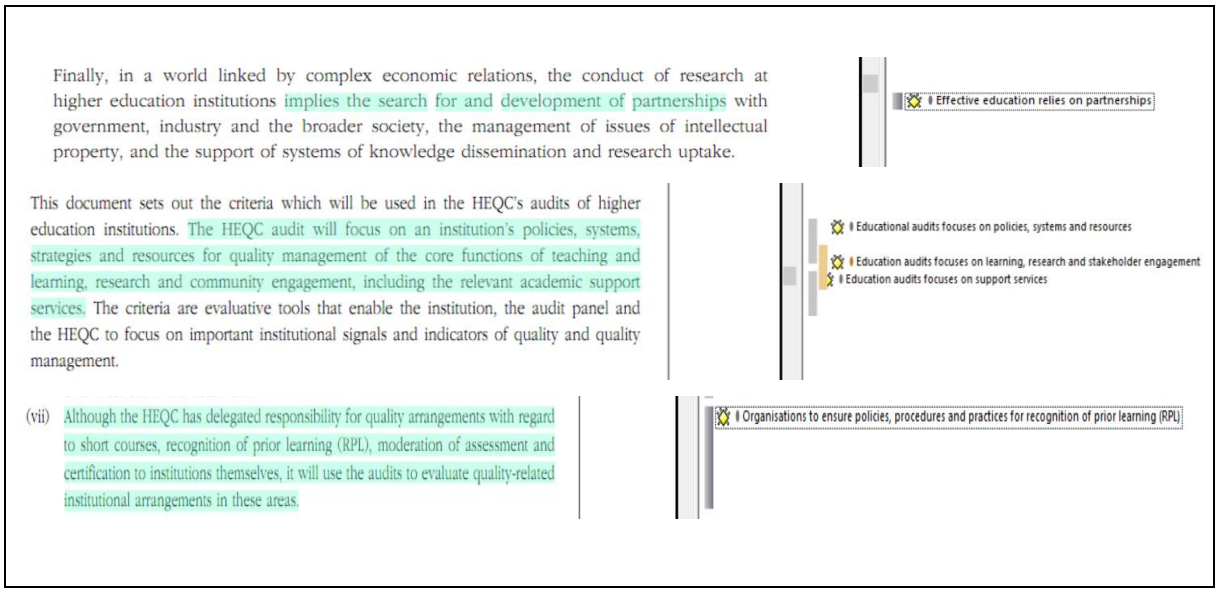


Figure 1.1: Document coding examples

1.3. Document analysis: Searching for sub-themes (families)

The results of the search for sub-themes are presented below.

1.3.1. Sub-theme 1: Leadership

This sub-theme includes codes 18 (Strategic leadership) and 22 (Organisational management). According to these codes, leadership designs and develops the strategic intent of an organisation and management is responsible to implement the strategy and evaluate performance results (CHE, 2016, 2004a, 2004f; SABPP, 2014; SAQA, 2001a).

1.3.2. Sub-theme 2: Strategy, policy and objectives

This sub-theme includes codes 12 (Organisational vision and mission alignment), 14 (Legislative compliance), 15 (Education and training regulation), 16 (Organisational performance regulations), 19 (Organisational risk management), 21 (Organisational business focus), 23 (Corporate governance), 27 (Organisational policies) and 40 (Social responsibility). According to these codes, the design, development, implementation and evaluation of organisational strategy, policy and objectives are shaped and influenced by internal and external conventions (CHE, 2016, 2004b, 2004e, 2003, 2001b, SABPP, 2014; SAQA, 2001b).

1.3.3. Sub-theme 3: Organisational education and training processes

This sub-theme includes codes 28 (Organisational evaluation enablers and processes), 31 (Organisational learning enablers and processes) and 36 (Evaluation inputs). Codes which identify inputs, enablers and outcomes required for AET system performance were included in this sub-theme (CHE, 2015, 2014a, 2004a, 2004b, 2004d, 2004f).

1.3.4. Sub-theme 4: Organisational resources

This sub-theme includes codes 17 (Human resource development) and 41 (Organisational resources). Codes describing human, technology and infrastructure resources as important system enablers were included in this sub-theme (CHE, 2015, 2004a, 2004b, 2004e; SABPP, 2014).

1.3.5. Sub-theme 5: Quality management system processes

This sub-theme includes codes 1 (Influence of quality management), 2 (Purpose of quality management), 3 (Quality management structure), 4 (Quality management system performance), 5 (Quality management audits), 6 (Quality management enablers), 7 (Quality management system compliance), 8 (Quality management system conformity) and 10 (Education and training quality management). Codes describing all aspects of quality assurance and management were consolidated in this sub-theme (CHE, 2016, 2015, 2014a, 2011a, 2006b, 2005, 2004b, 2001a, 2001b; CHEQC, 2005; Marock, 2000; QCTO, 2008; SAQA, 2001a, 2001b).

1.3.6. Sub-theme 6: Instructional design

This sub-theme includes codes 11 (Learner-focused education and training) and 39 (Learner needs). Codes that dealt with the learning design process as a core AET system driver were included in this sub-theme (CHE, 2016, 2015, 2011b, 2004b, 2001a; DOL, 2008; QCTO, 2014, 2008).

1.3.7. Sub-theme 7: Instructional development

This sub-theme includes code 29 (Instructional design and development). This sub-theme presents instructional development activities as a core AET system driver (CHE, 2004a, 2004b, 2004e).

1.3.8. Sub-theme 8: Implementation appraisal

This sub-theme includes codes 13 (Learner assessments), 20 (Organisational learning), and 30 (Learner programme evaluation). These codes were considered for they dealt with aspects which referred to organisational learning system outcomes (CHE, 2015, 2014a, 2011b, 2009, 2004e; Marock, 2000; SAQA, 2001a).

1.3.9. Sub-theme 9: Education and training evaluation results

This sub-theme includes codes 32 (Performance results), 33 (Evaluation procedures) and 34 (Performance excellence). These codes described the need, procedure and goal of AET evaluation (CHE, 2012, 2006b, 2004b, 2004f; Marock, 2000; SABPP, 2014).

1.3.10. Sub-theme 10: Stakeholder relations

This sub-theme includes code 24 (Stakeholder engagement). This sub-theme includes both internal and external stakeholders that have some bearing on AET system performance (CHE, 2016, 2014a, 2011b, 20056, 2001b; CHEQC, 2005).

1.3.11. Sub-theme 11: Organisational outcomes

This sub-theme includes codes 9 (Education and training audits focus), 26 (An education and training systems-approach), 35 (Evaluation results), 37 (Self-evaluation) and 42 (Organisational identity). These codes described the need to systemically evaluate organisational outcomes (CHE, 2016, 2004b, 2004e, 2004f; MICT SETA, 2012; SAQA, 2001a, 2001b).

1.3.12. Sub-theme 12: Innovation and excellence

This sub-theme includes codes 38 (Research and innovation) and 43 (Learning organisation). These codes highlighted the importance of innovation, research and continuous improvement efforts in an organisation's pursuit to become a learning organisation (CHE, 2016, 2014a, 2004b; CHEQC, 2005; DOL, 2008).

1.3.13. Sub-theme 13: Learning culture

This sub-theme includes code 25 (Learning culture and climate). According to this code, a learning culture, as part of organisational culture, may serve as an incubator of new ideas and cutting-edge knowledge, which is viewed as part of the system of innovation (CHE, 2015, 200, 2004b, 2004e; SABPP, 2014).

2. Interview analysis

2.1. Interview analysis: Becoming familiar with the data

Each interview conducted, is listed and its focus areas are briefly summarised below.

2.1.1. The CHE interview

Adult education and training evaluation with explicit reference to regulatory compliance was advanced by the CHE (2018). Associated important regulatory aspects were accreditation, re-

accreditation, purposeful learning, assessment and associated curricula management processes. At the organisational level the necessity for required adequate resources and infrastructure was highlighted by the CHE (2018). The importance of human capital was stressed and the important role of research and its focus on continuous improvement and excellence. Evidence of the presence of systems-thinking was presented by the CHE (2018) with reference to the purpose, role and value of relationships which are important systemic considerations. The role of external forces such as the community, as an important system element was also highlighted. The CHE (2018) stated that the influence of context and culture cannot be ignored when considering AET evaluation. The value of systems-thinking within an education management context was exhibited with reference to views expressed about organisational results, processes and excellence. The CHE (2018) mentioned that audits and reviews of organisational strategies and responsibilities should be accommodated in a quality management system aimed at continuous improvement.

2.1.2. The DHET interview

The interview conducted with DHET (2018) highlighted AET organisations' operational management concerns, evaluation system foci, as well as quality management criteria. The value of quality management with regard innovation and advancement of AET was stated. Operational management systemic requirements and responsibilities were identified at enabler, driver and outcome levels. For example, the ability of an organisation to provide quality AET services to learners, whilst also ensuring financial sustainable were highlighted as important organisational process features. Subsequently, financial planning, results, controls and accountabilities emerged as examples of important organisational systemic enablers and performance outcomes. The necessity for AET organisations to be officially registered and accredited to serve as a provider was mentioned. These were observed as important preconditions because a learner-focused service was required. However, adhering to these preconditions were marred by systemic problems, for instance governance issues and oversight issues. Current measurement protocols and practices were described as lacking, however, possible solutions to these systemic concerns may be discovered in terms of monitoring and evaluation process reviews. Another matter raised by the DHET (2018), was the relevance and nature of context differences, as applicable to AET system evaluation. An AET evaluation approach needs to take cognisance of external influences that serve as systemic enablers, for example PFMA and the NQF Act.

2.1.3. The SAQA interview

SAQA's (2018) AET evaluation comments drew attention to employee capacity and competence, as well as their research capacity. Furthermore, organisational competence was emphasised in order to ensure effective and efficient programme design and development. Continuous improvements and enhancements were also identified as important AET evaluation principles. From an organisational perspective a need to measure AET services, products and initiatives was needed to explain successes, deviations and failures of policy and policy implementation. SAQA (2018) stated that AET evaluation benefits from quality management systems because these systems provide an all-inclusive routine. Quality management addresses the quality of adult educational programmes in support of AET system management and evaluation. Quality management capacity development was stated as an organisational responsibility. Furthermore, quality management also emphasises the importance of continuous improvement. SAQA (2018) also suggested that AET organisations need to emphasise strategies and practices to perform system evaluation. Compliance with AET policies, accreditation and standards serve as strategic prerequisites for organisational performance. Furthermore, collaborative organisational efforts aimed at democratic consultation and transparency, as well as equity, redress and transformation are also necessary to ensure success as an AET organisation. Organisational arrangements that result from strategies, policies and standards have to be aimed at facilitating student accomplishments. Student motivated arrangements that include ease of access, articulation, competence focused training, life-long learning, recognition of prior learning, throughput rates and recognition from professional bodies constitute organisational efforts required to ensure success. In addition, the need for decolonisation of training and learning also emerged as an example of a current organisational variable that deserves attention.

2.1.4. The SABPP interview

According to the SABPP (2018) inputs associated with an organisational AET system must be directed by its vision, mission and strategic objectives. A workplace skills plan must describe AET efforts intended to meet strategic organisational needs. In addition, such a strategic approach needs to ensure that AET are designed, developed and delivered to accommodate outcomes-based results and be aimed at providing vocational competencies. The SABPP (2018) mentioned that the process element of an organisational AET system is guided by its quality management system. Within such a quality management system the process elements and standards of adult teaching and learning must be detailed. A learner data-base serves as an example of such a sub-process. A quality management system should also facilitate monitoring, reflection and follow-up of AET services. For example, the outcomes linked to an

organisational education and training system includes both financial and non-financial results. The notion of organisational excellence and continuous improvements were also described.

2.1.5. The APPETD interview

The APPETD (2018) referred to organisational management and underpinning systems which include compliance and accreditation matters. An enabling organisational structure was considered necessary to manage AET operations. Such a structure includes competent personnel, student-focused processes and adequate resources. Organisational processes found within said structure must adhere to contemporary AET advancements. These processes must facilitate work-integrated learning, adhere to employer needs and gauge employment successes. Furthermore, societal influences were also presented as external influences that influence an organisation's AET system. The APPETD (2018) mentioned that within an AET organisation it is expected that a quality management system will provide a purposeful framework to design, develop, implement and evaluate beneficial AET programmes. Furthermore, quality management must incorporate standards originating from professional bodies as a continuous improvement undertaking. Organisational research capacity was also considered as a continuous improvement effort that should be included within a quality management system. According to the APPETD (2018), quality management shows a relationship with performance excellence. This means that the success of an AET organisation's services and products must be evaluated. Such an evaluation must consider use of organisational performance measures.

2.1.6. The QCTO interview

Accreditation, re-accreditation, monitoring and evaluation frameworks, logical frameworks, as well as theory of change modelling were highlighted by the QCTO (2018) as important aspects of AET system evaluation. Furthermore, the importance and necessity to provide vocation-directed, purposeful, valuable and outcomes-based AET were stressed. Additionally, a systems-approach is required for the management of both academic and support services, inclusive of organisational resources, results, stakeholders and society. The management of AET initiatives and services need to include efforts aimed at ensuring continuous improvements and enhancements of these enterprises. The QCTO (2018) places student needs, programme access, impact of learning outcomes and responsiveness to social needs as primary organisational focus areas. The need for effective and efficient quality management system qualities thus serves as an essential organisational requirement. Quality assured organisational outcomes/results were emphasised as valuable indicators of AET evaluation success.

2.1.7. Data summary from the interview analysis focus areas

A data summary from the interview analysis focus areas is listed and explained in Table E.2. Six interview questions which identify and describe system elements, enablers, results and performance excellence were derived from the research sub-questions. Questions explored participants' awareness of specific policies and perceptions as to how it impacts and need to impact on AET system evaluation. Each interview transcript was thoroughly examined in accordance with the six focus areas to identify meaningful and relevant data summaries.

Table E.2: Data summary from the interview analysis focus areas

Focus and findings from the interview analysis
Interview question: How would you describe the processes your organisation recommends to determine AET system success? Analysis focus: Identifying input, process and result elements. The SABPP (2018) insists that an education and training system has to ensure that the training covers the vision, mission and associated aspects of an AET organisation. According to the APPETD (2018), CHE (2018), ETDP SETA (2018) and DHET (2018), all aspects associated with regulatory compliance, accreditation and registration as a service provider are very important. For this reason, an education quality system is required by AET organisations (APPETD, 2018; SAQA, 2018). Such a system has to make provision for all AET process elements (ETDP SETA, 2018), such as, for example, instructional development (QCTO, 2018), technical programme content, recognition of prior learning (SAQA, 2018), moderation and throughput enablers (DHET, 2018). These processes and associated activities have to be directed by AET policies and strategic plans, which have to be focused on performance management (SABPP, 2018) public financial management and an organisation's administrative systems, information systems and management systems (DHET, 2018). All AET process requirements have to be measured and confirmed by means of internal self-evaluations and external evaluations of system necessities, such as compliance, accreditation and registration requirements (CHE, 2018; SAQA, 2018). All operations systems and processes which are found in AET organisations have to be evaluated in order to comply with regulatory requirements (ETDP SETA, 2018). AET evaluation outputs which have to be considered, include the financial sustainability of an AET organisation (DHET, 2018), return-on-investment (SABPP, 2018) and efforts aimed

at research (SAQA, 2018) and continuous improvement (ETDP SETA, 2018). In addition, AET systems have to foster an environment where students will be able to have a quality learning experience (CHE, 2018). Finally, the DHET (2018) acknowledges that a uniform AET system evaluation has not yet been finalised. Furthermore, it was suggested that qualitative indicators have to be included in such a system design (DHET, 2018). A system for the monitoring of AET evaluation is thus required, however, the constructs to consider for such a system have not yet been determined (DHET, 2018).

Interview question: How would you describe system elements your organisation recommends to evaluate AET?

Analysis focus: Identifying input, process and result elements and possible constructs.

The systemic nature of AET was confirmed by the CHE (2018) with specific reference to inputs which are focused on process and the outputs and its impact. Specific system details were not provided by the CHE, however, mention was made of the context of the AET institution because all institutions are not the same and they have a different mandate or different mission, vision and objectives (CHE, 2018). APPETD (2018) mentioned that an AET organisation has to function as a legal entity and it has to have some form of formal business-oriented structure that speaks to an education and training environment.

AET system focus areas can include infrastructure needs, marketing (CHE, 2018), measurements for financial accountability, quality assurance, qualifications, teaching, learning aspects (DHET, 2018), training outcomes, work integration, competence and all efforts have to lead to some type of improvement (SABPP, 2018), community advantage and economical contribution (QCTO, 2018). AET processes have to consider the influence of best practices when implementing policies and quality management practices (ETDP SETA, 2018). The SAQA (2018) mentioned that all system processes have to be evaluated in accordance with quality management requirements. Finally, quality management focus areas have to be considered during AET system evaluation (APPETD, 2018; DHET, 2018; ETDP SETA, 2018; SAQA, 2018).

Interview question: Tell me which system enablers your organisation recommends to evaluate AET?

Analysis focus: Identifying input, process and result elements and possible constructs.

Legislation, national policies (DHET, 2018; SAQA, 2018) and workplace skills plans (SABPP, 2018) serve as enablers for AET. Legislative compliance has to be evaluated (DHET, 2018; SAQA, 2018). Furthermore, AET system enablers which should be evaluated, include performance management (SABPP, 2018), the organisational setting/environment (CHE, 2018), financial and administrative sources (DHET, 2018; QCTO, 2018), infrastructure (ETDP SETA, 2018), culture, facilitators, staff, technology, service and research capacities and resources to meet market demands (APPETD, 2018). Human and system processes serve as further examples of enablers within an AET organisation (ETDP SETA, 2018). Additionally, system elements associated with monitoring and evaluation frameworks (however, these elements were not detailed) (DHET, 2018; QCTO, 2018) and professional body requirements (SABPP, 2018) have to be evaluated.

Interview question: How would your organisation define training system excellence, and how such excellence could be enhanced?

Analysis focus: Describing performance and excellence criteria/indicators and enablers.

APPETD (2018) defines excellence as a measurement of quality within AET institutions. Training system excellence is found in the economic and community impact of AET initiatives (QCTO, 2018). Within an AET organisation, excellence also refers to professional and ethical conduct (ETDP SETA, 2018). According to the APPETD (2018), DHET (2018) and CHE (2018) an institution is deemed to be excellent at the impact level when the majority of its learners are able to demonstrate skills, knowledge, competencies and attributes that are applicable to the programme objectives and purpose. Such excellence has to link to the National Qualification Framework objectives which are access, success, redress, quality, progression and transparency (SAQA, 2018). These objectives have to be included within an AET organisation's policies (SAQA, 2018).

System excellence has to be evaluated in terms of an AET organisation's context (DHET, 2018), vision, mission, skills development and learning system successes (SABPP, 2018). This means that AET systems have to be relevant and need to make an impact in defined areas (QCTO, 2018). A focus on excellence also identifies areas of AET system improvement (DHET, 2018). Finally, the CHE (2018) and APPETD (2018) wish to remind AET organisations that excellence in one context might not be excellence in another context.

Interview question: How would you describe your organisation's recommendations with respect to continuous improvements within an AET system?

Analysis focus: Describing performance and excellence enablers.

Continuous improvement should be a dialogue within each AET organisation aimed at sharing of data and sharing of information (SABPP, 2018). Such a collaborative approach ensures that AET objectives are continuously reviewed (SAQA, 2018). Furthermore, AET organisations have to employ continuous improvement actions (for example, accreditation from international institutions) with the intention of ensuring competitiveness on a global level (APPETD, 2018). The DHET (2018) mentioned technological advances and innovation as examples of continuous improvement. The ETDP SETA (2018) stated that adherence and support for the principle of life-long learning is a continuous improvement focus area for AET organisations. The CHE (2018) recommended that AET programme and quality management reviews be performed to seek improvement opportunities. Furthermore, process improvements have to be conducted by AET organisations (CHE, 2018). These improvements include quality management reviews which have to be aimed at ensuring that policies and system processes are continuously improved (ETDP SETA, 2018). Continuous improvements have to be focussed at internal and external stakeholders which encompass teaching, learning and research activities (APPETD, 2018; CHE, 2018; DHET, 2018). These initiatives have to consider current workplace conditions, needs and challenges which are synonymous with a changing world (DHET, 2018; QCTO, 2018). Excellence thus serves as evidence of continuous improvement when these conditions, needs and challenges are satisfied (DHET, 2018).

Interview question: How would you describe your organisation's recommendations which will help organisations to link AET system evaluation results to organisational performance?

Analysis focus: Discovery of a possible model and an archetype to enhance performance and excellence.

The APPETD (2018) stated that AET organisational performance must be measured. A systemic approach was advocated by the SAQA (2018), which have to include every single deliverable as stipulated in the strategy of an AET organisation. Such a recommended systemic approach has to ensure that performance plans link to the strategic planning and imperatives of the AET organisation (DHET, 2018; SAQA, 2018). The CHE (2018) recommended that AET organisations need to keep abreast of all

internal and external changes and these changes have to reflect in the way they organise and manage themselves.

The SABPP (2018) recommended that AET system evaluation results have to be used to identify customer requirements and continuous improvement areas. An example was provided by the ETDP SETA (2018) in the form of system throughput evaluations. Such an evaluation considers that a performing organisation is one where students pass AET programmes (ETDP SETA, 2018). One more recommendation was provided by the APPETD (2018) and CHE (2018), recommending that AET should become more innovative by utilising technology. Another recommendation is based on collaboration between organisations (QCTO, 2018). Such collaboration between AET organisations and professional bodies has to support better organisational performance (QCTO, 2018).

According to the SABPP (2018), currently AET organisations do not successfully link evaluation results to organisational performance, because evaluation does not always link to a follow-up loop and organisations are thus not doing the follow up. Additionally, the ETDP SETA (2018) confirmed that unfortunately AET organisations do not effectively link AET system evaluation results to organisational performance. The ETDP SETA (2018) conceded that without such evaluation, AET organisations will not be able to see the impact it has brought about. For this reason, the DHET (2018) identified a need for a more precise evaluation and measurement of system performance, which can help AET organisations in terms of organisational performance. In conclusion, the APPETD (2018) recommended that AET system evaluation has to consider the holistic organisational effort, in order to enhance the quality of organisational AET performance.

2.2. Interview analysis: Generating initial codes

Examples of the initial codes are presented below. These are text segments which were harvested from the interview transcript contents.

2.2.1. Code 1: Purpose of quality management

"Critical for us in determining from there the throughput rate will determine if the organisation per say is delivering on a quality system" (APPETD, 2018).
"There are criteria with different minimum standards; so, it's again focused on your input, its focussed on your process your output and then the impact" (CHE, 2018).

"Quality means having gone through the quality systems because they are the quality assurers"; "there is quality and there's quality processes have being followed; there are criteria there as well but then to align it to the values"; "to develop standards and to quality assure" (SAQA, 2018).

2.2.2. Code 2: Implementation of a quality management system

"SAQA had already published a criteria and guidelines that should be utilised so there was a criteria and guideline for training providers which listed the specific and minimum requirements and standards that each and every provider must be able to meet", "when you look at quality management systems within a training provider it should meet these certain standards" and *"we all have common understanding on the application of the policies and regulations that govern the quality assurance space"* (ETDP SETA, 2018).
"To make sure the qualifications are also there is quality and there's quality processes that have being followed" (SAQA, 2018).

2.2.3. Code 3: Quality management system assessment

"We've got lots of M&E things … but it's very ineffectual because it turned out to be just tick box" and *"in order for us to do the theory of change and so on we identify the starting point are the goals and objectives of the system ... now if the goals and objectives of the system are not good, are not clear, are not measurable and so on and so forth then we're not going to be successful"* (DHET, 2018b).
"Here's an organisation I want to monitor and evaluate how effective it is as an organisation: its administrative systems, its information systems, its management systems, its governance, all of it. But that's an organisation" (DHET, 2018b).

2.2.4. Code 4: Organisational vision and mission alignment

"The education and training system must always ensure that the training covers the company's vision and mission", "because if we're not doing that, not addressing company vison and mission, then what am I training the employees for?" (SABPP, 2018).

2.2.5. Code 5: Education and training legislation

"The policies and the levels of policies and guidelines ... those are enablers that are there to guide and support and help already" (DHET, 2018b).

"That organisation must be a legal entity, registered with an appropriate authority; that's the requirement number one"; "confirm whether is this organisation operating in accordance with the accreditation conditions" (ETDP SETA, 2018).
"If the institution does not comply with the basic aspects that the DHET requires from them they will never register them" (CHE, 2018).

2.2.6. Code 6: Organisational performance processes

"Be looking at systems and processes that they would need to put in place"; "meeting the minimum quality assurance requirements and standards" (ETDP SETA, 2018).

2.2.7. Code 7: Competent workforce

"The organisation would then need to have qualified practitioners", "your human capital as an enabler for this organisation to be able to run professionally"; *"… the facilitator trainer who must be academically qualified to train"* (ETDP SETA, 2018).
"So, teachers cannot teach if they are not registered" (CHE, 2018).
"Your lecturers or your academic people does have the necessary qualifications" (APPETD, 2018).

2.2.8. Code 8: Organisational leadership

"Leadership has to look at how you operate, how you govern an institution; there is a lot of things at stake" (CHE, 2018).
"The education and training system must always ensure that the training covers the company's vision and mission, because if we're not doing that, not addressing company vison and mission, then what am I training the employees for?" (SABPP, 2018).

2.2.9. Code 9: Stakeholder engagement

"A professional body … their requirements play a specific role" and "we also work with a professional body" (CHE, 2018).
"Professional bodies also have certain standards, so maybe we shouldn't forget that within professional body forum" and *"any professional member that we have within our company needs to be affiliated to the professional body"* (SABPP, 2018).

2.2.10. Code 10: Learning environment

"The driving vehicle for this organisation will be the learning programmes … learning programmes must be aligned to the qualifications and or unit standards"; "*we strongly believe in the principle of life-long learning"* (ETDP SETA, 2018).
"Foster that learning environment where students will be able to have a quality learning experience" (CHE, 2018).

2.2.11. Code 11: A systems-approach for education and training evaluation

"The utilisation of a qualification that impact on the economy, impact on the populous of the country, impact on the living standards of our people ... that is the success of an education system" (QCTO, 2018).
"Access, access is very important in the new system; so, I think in one-line access and re-dress, so that is actually one, and then people must not only access the system they also need to be able to move through it", "which are very key I mean there's the academic part, there's the occupational vocational then there's the professional bodies", "and the things are like how to do RPL in a professional body space; they are very hands on", "RPL you know credit accumulation possibilities, relevance and especially how that qualification articulates to the rest of the system", "enablers are the articulation mechanisms and RPL"; "success is very important; the levels of learner achievement as well" (SAQA, 2018).

2.2.12. Code 12: Organisational strategies, policies and objectives

"We have items that relates to the strategic to the I mean the strategic imperatives. It's got the performance in relation to the strategic imperatives, so it's a whole thing about strategic imperatives" (SAQA, 2018).
"A very inclusive very robust process so that the policy at the end of the day those policies … there are buy-in for them; so, we have a representative group that comes and does it collaboratively", *"objectives which are access, success, redress, quality, progression and transparency"; "stakeholder groups for example the NLRD forum, the professional body forum, the research stakeholder groups and then it's working relationships"* (SAQA, 2018).

2.2.13. Code 13: Instructional design

"There is insufficient consideration of how we address different styles of learning ... very important; not everybody learns rote like you do in matric and writes an exam ... there are five

or six different learning styles; how do we approach that? … have we considered it?... is it something to do with throughput?" (DHET, 2018b).
"The new national policy framework for mixed learning methodology" (APPETD, 2018).

2.2.14. Code 14: Instructional development

"Really comes down to the specialists in the providing institutions and the qualification developers that expertise so that's the thing that you really … you know … that is key" and *"that does come from qualifications developers; the technical content"* (SAQA, 2018).

2.2.15. Code 15: Learner programme evaluation

"Very good qualifications that have been developed that could make impact into the country, make impact into the triple challenge of the country ... the unemployment; the imbalances of the past; inequality as well as poverty"; "so your institution should ensure that learners that come in have a clear outcome that I'm joining this institution" (QCTO, 2018).
"What is happening to these learners that have gone through various training organisations?"; "make follow up of the issues that have been done and were you able to make an impact in their lives; were you able to make an impact to the employers that would have send learners to your organisation for training purposes"; "assessments should be conducted in this fashion so that is one standard that has being put there; … you will have a standard where it comes to the examinations now that the examinations will be standardised by a particular ETQA" (ETDP SETA, 2018).

2.2.16. Code 16: Organisational learning enablers and processes

"Am I a credibly registered institutional type if I'm a private provider or do I enjoy the recognition of the department if I'm a public provider"; "that's why I'm saying also you must be credible, you mustn't be bogus fly by night"; "I'm talking at the highest generic level of registration and accreditation and these are common things that are looked for in terms of criteria for excellence" (DHET, 2018b).

2.2.17. Code 17: Financial performance results

"Money driven because they need to make a profit, it's like a business so for me it's also a very important thing" (CHE, 2018).
"At an institutional level what could … you've started looking at the financial side" (DHET, 2018b).

"Am I financially sustainable in order to make sure that leaners that come into my institution or organisation will be able to enjoy the full support without us going bankrupt and leaners are left on the streets" (DHET, 2018b).

2.2.18. Code 18: Non-financial performance results

"To evaluate education and training obviously is some sort of evaluation … internal audit of the facilitators in the sense of does the curriculum speak to employment needs, does the curriculum meet the needs of the overall outcomes of that qualification"; "internal audits to ensure that they conform to the needs, the research within the private providers with corporates, with employers to ensure that we meet the needs that is incorporated and needed with them" (APPETD, 2018).

"What services are they receiving from the service provider from that training provider and are they happy with the quality of those services"; "conduct your customer surveys" (ETDP SETA, 2018).

"Test whether all these processes were done in accordance with the minimum quality assurance requirements" (ETDP SETA, 2018).

2.2.19. Code 19: Performance excellence

"If the level of performance within an organisation is not excellent, you cannot deliver excellent students" (APPETD, 2018).

"Excellence to us it means whoever that you use to deliver your programme those people must be ethical in their conduct of business"; "we also look at excellence being professional and ethical in the manner in which you communicate your services" (ETDP SETA, 2018).

"Students have a quality learning experience and they are employed and their qualification get recognised … that for me is excellence because then the institution gave the student what the sector needs" (CHE, 2018).

2.2.20. Code 20: Evaluation results

"To me for the success of our country is for the success of the education system" (QCTO, 2018).

"the qualitative stuff is not being measured maybe and is that part of failure or success of a system if it is measured" (DHET, 2018b).

2.2.21. Code 21: Research and innovation

"I would say definitely a research component that looks at identifying the change in economy not just on a national level but also on an international level" (APPETD, 2018).
"Innovation; is a huge one; curriculum agility for example, and incorporating innovation, technology all of those" (DHET, 2018b).

2.2.22. Code 22: Learner needs

"A workplace skills plan is one of the tools one should consider to me that is an enabling process"; "companies/training providers should do continuous needs analyses" (SABPP, 2018).
"There is a need for people with practical skills and therefore the private domain more so focus on the work integrated learning component … they can incorporate that into their curriculum which gives them the added advantage at the end of the day", "one of the elements under the quality is the terms of employment of that student at the employer"; "another element that is very important for us within the quality evaluation is employment possibilities" change in economy not just on a national level but also on an international level" (APPETD, 2018).
"The driving vehicle for this organisation will be the learning programmes" (ETDP SETA, 2018).

2.2.23. Code 23: Social responsibility

"With society as well especially going to your rural areas it's very important to consult with the communities within those rural areas to find out the needs or the lack thereof"; "there's not a lot of employment opportunities and you have a saturated skills mark for employment they have to go and look for what they can offer to help the community" (APPETD, 2018).
"Go for public comments, go and talk to the communities, go and invite them you know" (QCTO, 2018).

2.2.24. Code 24: Organisational resources

"That we have to look at just sourcing and the infrastructure of the institution" and "they've got the infrastructure and the resources" (CHE, 2018).
"Infrastructure would be divided into two components that they need to demonstrate that they do have an infrastructure for admin purposes your office space and so forth, and also, they need to demonstrate to us that they do have access to a training facility" (ETDP SETA, 2018).
"That what we sometimes forget is that providing resources, to make that available within an

organisation to enhance organisational performance and then, very much, technology plays a role" (APPETD, 2018).

2.2.25. Code 25: Organisational identity

"That image will … could come out in various forms; it could come through your own marketing strategy that you might be utilising" (ETDP SETA, 2018).

2.2.26 Coding: Interview analysis examples

Examples of codes resulting from the interview analysis are presented in Figure 1.2.

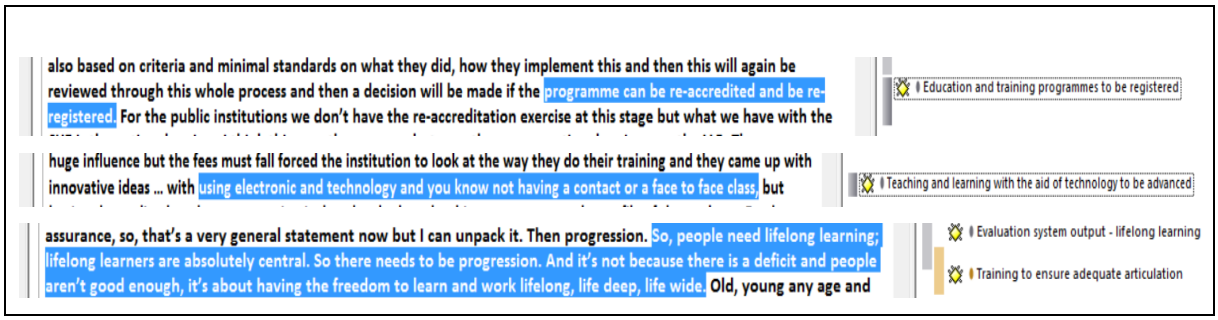


Figure 1.2: Interview coding examples

2.3. Interview analysis: Searching for sub-themes (families)

The results of this search for sub-themes are portrayed below.

2.3.1. Sub-theme 1: Leadership

This sub-theme consists of code 8 (Organisational leadership). According to this code the need for AET organisational leadership and management functions were emphasised (APPETD, 2018).

2.3.2. Sub-theme 2: Strategy, policy and objectives

This sub-theme includes codes 4 (Organisational vision and mission alignment), 5 (Education and training legislation), 6 (Organisational performance processes), 12 (Organisational strategies, policies and objectives) and 23 (Social responsibility). According to these codes, the design, development, implementation and evaluation of organisational strategy, policy and

objectives are shaped and influenced by internal and external rules and standards (APPETD, 2018; CHE, 2018; QCTO, 2018; SABPP, 2018; SAQA, 2018).

2.3.3. Sub-theme 3: Organisational education and training processes

This sub-theme includes code 16 (Organisational learning enablers and processes). Accreditation and re-accreditation (CHE, 2018) responsibilities were described as examples of organisational AET process foci.

2.3.4. Sub-theme 4: Organisational resources

This sub-theme includes codes 7 (Competent workforce) and 24 (Organisational resources). Codes describing human and other organisational resources as important system enablers were included in this sub-theme (APPETD, 2018; ETDP SETA, 2018; SAQA, 2018).

2.3.5. Sub-theme 5: Quality management system processes

This sub-theme includes codes 1 (Purpose of quality management), 2 (Implementation of a quality management system) and 3 (Quality management system assessment). Codes describing all aspects of quality assurance and management were consolidated in this sub-theme (CHE, 2018; DHET, 2018b; ETDP SETA, 2018; QCTO, 2018).

2.3.6. Sub-theme 6: Instructional design

This sub-theme includes codes 13 (Instructional design) and 22 (Learner needs). Codes that dealt with the learning design process as a core AET system driver were included in this sub-theme (APPETD, 2018; DHET, 2018b; QCTO, 2018; SABPP, 2018).

2.3.7. Sub-theme 7: Instructional development

This sub-theme includes code 14 (Instructional development). This sub-theme presents instructional development as an AET system driver (ETDP SETA, 2018; SABPP, 2018).

2.3.8. Sub-theme 8: Implementation appraisal

This sub-theme includes code 15 (Learner programme evaluation). According to this code, learner-focused evaluation approach is required (DHET, 2018b; ETDP SETA, 2018; QCTO, 2018).

2.3.9. Sub-theme 9: Education and training evaluation results

This sub-theme includes codes 17 (Financial performance results), 18 (Non-financial performance results) and 19 (Performance excellence). These codes described the performance excellence as a goal of AET evaluation (CHE, 2018; DHET, 2018b; ETDP SETA, 2018; QCTO, 2018; SABPP, 2018).

2.3.10. Sub-theme 10: Stakeholder relations

This sub-theme includes code 9 (Stakeholder engagement). This sub-theme identifies both institutional and professional body cooperation which influence AET system performance (APPETD, 2018; SAQA, 2018).

2.3.11. Sub-theme 11: Organisational outcomes

This sub-theme includes codes 11 (A systems-approach for education and training evaluation), 20 (Evaluation results) and 25 (Organisational identity). These codes described the need to systemically evaluate organisational outcomes (CHE, 2018; DHET, 2018b; ETDP SETA, 2018; QCTO, 2018; SABPP, 2018).

2.3.12. Sub-theme 12: Innovation and excellence

This sub-theme includes code 21 (Research and innovation). These codes highlighted the importance of innovation, research and continuous improvement efforts in order to improve organisational performance (APPETD, 2018; CHE, 2018; ETDP SETA, 2018).

2.3.13. Sub-theme 13: Learning culture

This sub-theme includes code 10 (Learning environment). According to this code, the CHE (2018) and APPETD (2018) proposed a need to foster an enabling learning environment within AET organisations.

3. Interview and document analyses: Reviewing sub-themes (families)

In this step, the sub-themes (families) were reviewed and refined by considering their relevance in terms of the research problem and purpose. The first research question is aimed at identifying AET process elements which have to be evaluated by South Africa's AET

organisations. The AET process elements identified and described (i.e. sub-themes), include (1) leadership, (2) strategy, policy and objectives, (3) organisational education and training processes, (4) organisational resources, (5) quality management system processes, (6) instructional design, (7) instructional development, (8) implementation appraisal, (9) education and training evaluation results, (10) stakeholder relations, (11) organisational outcomes, (12) innovation and excellence, and (13) learning culture. These elements were used to respond to the second research question in order to determine AET process elements which have to be used to define AET evaluation constructs (presented in Appendix F). The subsequent process elements were used to respond to the third research question by identifying and describing systemic characteristics of the core AET evaluation constructs (presented in Chapter 4). Finally, the use these core AET evaluation constructs to ensure performance excellence was explained in Chapter 5, in response to the final research question.

APPENDIX F: REPORT: EXTERNAL CODIFIER

To whom it may concern

A thorough examination of the codes developed by the researcher as applicable to this specific research project was requested. The purpose of this request was to have another person review the data segments and emerging code frameworks. These derived codes were from both the document analysis and the interview analysis. The relevance of these codes in terms of the research objectives, questions and sub-questions were explained and supported by insight to the research proposal, as well as the codebook.

The researcher completed the coding for 36 documents and 7 interviews.

The external codifier process consisted of the following steps:

Step 1. As external codifier I was briefed to understand and effectively use the coding system.

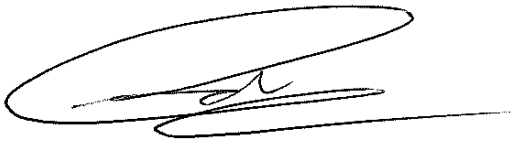
Step 2. The external codifier and researcher met to discuss the research project and the emerging codes. During this meeting the codebook was presented by the researcher. Each code was identified and accompanied with a brief definition of what the code meant. The researcher provided in-depth explanations and examples of how each code was formulated and how it had been used in the document and interview analyses. In addition, an explanation of how the codes overlapped and how they were clustered was provided. An explanation of how the codes will be used was provided.

Step 3. The external codifier review was conducted. During my review of the codes I found that the code tendencies in the data were presented as accurately as possible and based on accepted qualitative analysis principles. The process followed consists of:

- Scrutinising all text lines that were provided with code labels/descriptions.
- Checking whether agreement exists in terms of the text interpretation and the code(s) attached.

Step 4. An external codifier and researcher meeting was called. Agreement pertaining to the codes used was reached, however, such agreement confirms agreeing on the exact same code(s) for the same line of text. Despite mentioned agreement, it is important to note that all coding enquiries were dealt with during the meeting with the researcher.

I, Natasha Carstens, hereby declare that I acted in the capacity of external codifier for Christiaan Gerhardus Joubert in the data analysis phase of his thesis (titled: Education and training evaluation constructs as archetype for excellence in organisational performance).



Ms Natasha Carstens
B.A., B.A. Hons., M.Phil.

Date: 28 Aug 2018 (reviewed 07 June 2019)

APPENDIX G: FACULTY OF EDUCATION ETHICS INFORMED CONSENT FORM

Cape Peninsula University of Technology

Faculty of Education
Ethics informed consent form

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Category of Participants (tick as appropriate):

Principals		*Teachers*		*Parents*		*Lecturers*		*Students*	
Other (specify)	*X*	*Education governing entity / Professional body*							

You, as an authorised representative of your organisation, are kindly invited to participate in a doctorate research study being conducted by Christiaan Gerhardus Joubert from the Cape Peninsula University of Technology. The findings of this study will contribute towards (tick as appropriate):

An undergraduate project		*A conference paper*	
An Honours project		*A published journal article*	
A Masters/doctoral thesis	*X*	*A published report*	

Selection criteria

The sample selected for this study should be able to provide insights into training system evaluation obtained from governing and professional perspectives. As a possible participant you are a representative from an education governing entity or professional body.

The information below gives details about the study to help you decide whether you would want to participate.

Title of the research:

Training system evaluation constructs as an archetype for performance excellence.

A brief explanation of what the research involves:

The lack of knowledge of evaluation constructs that are adaptable to different contexts and aimed at training excellence is presented as a problem and indicates the necessity for this research assignment. Identifying and investigating training system evaluation constructs as an archetype for organisational performance excellence is presented as the outcome of this proposed research project.

Procedures

If you volunteer to participate in this study, you will be interviewed by the researcher. Please note that each research participant will be interviewed by the researcher. Each individual interview will consist of open-ended questions. The duration of each interview is planned for 20 minutes. Interviews will take place on pre-planned dates and times and at venues suitable to participants.

Potential risks, discomforts or inconveniences

No foreseeable risks, discomforts or inconveniences are envisaged. Research participants will not be required to divulge any confidential and/or organisation confidential information.

You are invited to contact the researchers should you have any questions about the research before or during the study. You will be free to withdraw your participation at any time without having to give a reason.

Kindly complete the table below before participating in the research.

	Tick the appropriate column	
Statement	Yes	No
1. I understand the purpose of the research.		
2. I understand what the research requires of me.		
3. I volunteer to take part in the research.		
4. I know that I can withdraw at any time.		
5. I understand that there will not be any form of discrimination against me as a result of my participation or non-participation.		
6. Comment:		

Please sign the consent form. You will be given a copy of this form on request.

Signature of participant:	Date:
Email:	Contact number:

Researcher

	Name:	Surname:	Contact details:
1.	Christiaan	Joubert	Mobile: **********

Contact person: Christiaan Joubert	
Contact number: **********	Email: ianj@atns.co.za

APPENDIX H: CODE TABLES

Document Analysis

Initial codes were generated by organising relevant text data in a meaningful and systematic way, which resulted in code definitions. Table H.1 presents a register which lists code descriptions and definitions. Table H.2 presents a list of sub-themes and associated codes.

Table H.1: Code register (Document analysis)

Code descriptions	Code definitions
Code 1: Influence of quality management	Quality management, assurance and enhancement influence and contribute towards organisational improvement, transformation and performance results.
Code 2: Purpose of quality management	Quality management make use of quality criteria to assist with planning, monitoring and appraisal of an organisation's AET system.
Code 3: Quality management structure	Quality management has to follow a systems-approach which is informed by organisational policies and consists of structured, context-specific and strategically aligned core focus areas, processes and activities.
Code 4: Quality management system performance	Quality management system performance criteria have to be objective, fair, evidence-based, credible and facilitate consistent audits and assessments.
Code 5: Quality management audits	Quality management system audits have to focus on policies, systems, strategies and resources for teaching and learning.
Code 6: Quality management enablers	Quality management systems have to be reliant on fit-for-purpose organisational enabling policies, goals, resources, systems, processes and strategies.
Code 7: Quality management system compliance	Quality management systems have to comply with international and professional best practices.
Code 8: Quality management system conformity	Quality assurance and management systems adopted by private and public AET organisations have to comply with national provisions.
Code 9: Education and training audits focus	AET audits have to focus on both organisational and educational aspects which include policies, systems and resources.
Code 10: Education and training quality management	Qualifications and curricula have to be part of an AET organisation's quality management system.

Code 11: Learner-focused education and training	Delivered education, training and learning programmes have to meet learner, organisational, vocational and knowledge-economy needs.
Code 12: Organisational vision and mission alignment	Education, training and learning programmes have to align and comply with the organisation's vision, mission, strategy, goals and policies.
Code 13: Learner assessments	Education, training and learning organisations have to implement and manage formal, reliable, secure and rigorous assessment systems, policies, procedures and practices which meet all assessment protocols and requirements.
Code 14: Legislative compliance	Education and training organisations have to comply with national legislative requirements which deal with qualification registration, accreditation, re-accreditation and quality management.
Code 15: Education and training regulation	AET organisations have to ensure that policies and procedures are in place for the efficient and effective management of its adult education and training system.
Code 16: Organisational performance regulations	AET organisations have strategically aligned, feasible and comprehensive policies and procedures in place for the management of organisational process elements, activities and objectives.
Code 17: Human resource development	AET organisations have to invest in their employees by means of continuous development to ensure a sufficient and competent workforce.
Code 18: Strategic leadership	AET organisations depend on responsible and transformational leadership to manage accountabilities and responsibilities which focus on strategic planning, operational process management, effective teamwork and communication.
Code 19: Organisational risk management	AET organisations have to identify and manage organisational business and human factor risks.
Code 20: Organisational learning	AET organisations require specific strategic organisational learning focus areas, processes, standards and practices.
Code 21: Organisational business focus	AET organisations need to have specific strategic, competitive and entrepreneurial organisational business performance focus areas.

Code 22: Organisational management	AET organisation managers have to follow a systems-management approach for the implementation and evaluation of strategies, objectives and goals according to social, quality and commercial standards.
Code 23: Corporate governance	AET organisations have to implement and comply with all corporate governance principles, requirements and dynamics in an effective, efficient, transformative and democratic manner.
Code 24: Stakeholder engagement	AET organisations have to establish, manage and assess relationships with stakeholders.
Code 25: Learning culture	AET organisations have to instil, nurture and assess learning culture.
Code 26: An education and training systems-approach	A systems-approach used for AET evaluation recognises the interdependency and cause-effect among system and sub-system elements at all organisational levels.
Code 27: Organisational policies	AET evaluation has to consider organisational policy, procedure development and implementation.
Code 28: Organisational evaluation enablers and processes	AET evaluation has to consider all organisational strategic enablers and processes.
Code 29: Instructional design and development	AET evaluation includes instructional design and development process management.
Code 30: Learner programme evaluation	AET evaluation includes learner programme monitoring and evaluation results.
Code 31: Organisational learning enablers and processes	AET includes organisational learning enablers, processes and measures.
Code 32: Performance results	AET evaluation emphasises a variety of financial and non-financial performance results.
Code 33: Evaluation procedures	AET organisations require context-specific system evaluation methods, criteria, measures and measurement.
Code 34: Performance excellence	AET evaluation supports continuous improvement and performance excellence practices, processes and results.

Code 35: Evaluation results	AET system evaluation follows a business performance and education management focus which provide different outputs/outcomes.
Code 36: Evaluation inputs	AET system evaluation relies on process management inputs.
Code 37: Self-evaluation	AET system evaluation has to include a process of self-evaluation.
Code 38: Research and innovation	AET organisations have to invest in innovation and research which support academic change and development.
Code 39: Learner needs	AET organisations have to take learner needs, problems and support into account when conducting system evaluation.
Code 40: Social responsibility	AET organisations have to deal with societal influences which are characterised by organisational efforts aimed at advancing equity, quality, efficiency, effectiveness and responsiveness.
Code 41: Organisational resources	AET organisations have to make use of various human, process, technology and infrastructure resources to establish and enhance service delivery.
Code 42: Organisational identity	AET organisations have specific institutional identities and reputations.
Code 43: Learning organisation	Educational excellence is established in organisational enablers, processes and results which are aligned to the characteristics of a learning organisation.

Table H.2: Sub-themes (Document analysis)

Sub-theme descriptions	Code references
Sub-theme 1: Leadership	Code 18: Strategic leadership Code 22: Organisational management
Sub-theme 2: Strategy, policy and objectives	Code 12: Organisational vision and mission alignment Code 14: Legislative compliance Code 15: Education and training regulation Code 16: Organisational performance regulations Code 19: Organisational risk management Code 21: Organisational business focus Code 23: Corporate governance Code 27: Organisational policies Code 40: Social responsibility
Sub-theme 3: Organisational education and training processes	Code 28: Organisational evaluation enablers and processes Code 31: Organisational learning enablers and processes Code 36: Evaluation inputs

Sub-theme 4: Organisational resources	Code 17: Human resource development Code 41: Organisational resources
Sub-theme 5: Quality management system processes	Code 1: Influence of quality management Code 2: Purpose of quality management Code 3: Quality management structure Code 4: Quality management system performance Code 5: Quality management audits Code 6: Quality management enablers Code 7: Quality management system compliance Code 8: Quality management system conformity Code 10: Education and training quality management
Sub-theme 6: Instructional design	Code 11: Learner-focused education and training Code 39: Learner needs
Sub-theme 7: Instructional development	Code 29: Instructional design and development
Sub-theme 8: Implementation appraisal	Code 13: Learner assessments Code 20: Organisational learning Code 30: Learner programme evaluation
Sub-theme 9: Education and training evaluation results	Code 32: Performance results Code 33: Evaluation procedures Code 34: Performance excellence
Sub-theme 10: Stakeholder relations	Code 24: Stakeholder engagement
Sub-theme 11: Organisational outcomes	Code 9: Education and training audits focus Code 26: An education and training systems-approach Code 35: Evaluation results Code 37: Self-evaluation Code 42: Organisational identity
Sub-theme 12: Innovation and excellence	Code 38: Research and innovation Code 43: Learning organisation
Sub-theme 13: Learning culture	Code 25: Learning culture

Interview Analysis

Initial codes were generated by organising relevant interview data in a meaningful and systematic way, which resulted in code definitions. Table H.3 presents a register which lists code descriptions and definitions. Table H.4 presents a list of sub-themes and associated codes.

Table H.3: Code register (Interview analysis)

Code descriptions	Code definitions
Code 1: Purpose of quality management	Quality management has to provide structure to organisational operations management and performance results.
Code 2: Implementation of a quality management system	AET organisations have to implement a context-specific quality management system.
Code 3: Quality management system assessment	Quality management system performance criteria have to be assessed.
Code 4: Organisational vision and mission alignment	The AET system must always ensure that the training covers the company's vision and mission.
Code 5: Education and training legislation	National education and training policies stipulate all necessary legislative requirements to function as a registered service provider in South Africa.
Code 6: Organisational performance processes	AET organisations require strategically aligned, feasible and comprehensive processes for the management of organisational process elements, activities and objectives.
Code 7: Competent workforce	AET organisations have to invest in their employees to ensure a sufficient and competent workforce.
Code 8: Organisational leadership	AET organisations have to depend on leadership to manage accountabilities and responsibilities which focus on structure, governance and operations.
Code 9: Stakeholder engagement	AET organisations have to establish, manage and assess relationships with stakeholders.
Code 10: Learning environment	AET organisations have to introduce and advance a conducive learning and teaching environment.
Code 11: A systems-approach for education and training evaluation	A systems-approach used for AET evaluation has to recognise the impact of sub-system elements.
Code 12: Organisational strategies, policies and objectives	AET organisations have to manage organisational operations by means of context-specific strategies, policies and objectives.

Code 13: Instructional design	Instructional design was described as a core function of an AET organisation.
Code 14: Instructional development	Instructional development has to be a core function of an AET organisation.
Code 15: Learner programme evaluation	AET evaluation has to include learner assessments and programme monitoring.
Code 16: Organisational learning enablers and processes	AET evaluation has to consider organisational learning enablers and processes.
Code 17: Financial performance results	AET evaluation has to include financial performance results.
Code 18: Non-financial performance results	AET evaluation has to consider a variety non-financial performance results.
Code 19: Performance excellence	AET evaluation has to support performance excellence practices, processes and results.
Code 20: Evaluation results	AET system evaluation ought to follow an education management focus which provide various outputs/outcomes.
Code 21: Research and innovation	Research is needed to support innovation.
Code 22: Learner needs	AET organisations have to take learner needs into account when planning and managing learner programmes and qualifications.
Code 23: Social responsibility	AET organisations have to deal responsibly with societal influences which are aimed at supporting community upliftment efforts.
Code 24: Organisational resources	AET organisations make use of various technology and infrastructure resources to establish and enhance service delivery.
Code 25: Organisational identity	Organisational identity is important for image building.

Table H.4: Sub-themes (Interview analysis)

Sub-theme descriptions	Code references
Sub-theme 1: Leadership	Code 8: Organisational leadership
Sub-theme 2: Strategy, policy and objectives	Code 4: Organisational vision and mission alignment Code 5: Education and training legislation Code 6: Organisational performance processes Code 12: Organisational strategies, policies and objectives Code 23: Social responsibility
Sub-theme 3: Organisational education and training processes	Code 16: Organisational learning enablers and processes
Sub-theme 4: Organisational resources	Code 7: Competent workforce Code 24: Organisational resources
Sub-theme 5: Quality management system processes	Code 1: Purpose of quality management Code 2: Implementation of a quality management system Code 3: Quality management system assessment
Sub-theme 6: Instructional design	Code 13: Instructional design Code 22: Learner needs
Sub-theme 7: Instructional development	Code 14: Instructional development
Sub-theme 8: Implementation appraisal	Code 15: Learner programme evaluation
Sub-theme 9: Education and training evaluation results	Code 17: Financial performance results Code 18: Non-financial performance results Code 19: Performance excellence
Sub-theme 10: Stakeholder relations	Code 9: Stakeholder engagement
Sub-theme 11: Organisational outcomes	Code 11: A systems-approach for education and training evaluation Code 20: Evaluation results Code 25: Organisational identity
Sub-theme 12: Innovation and excellence	Code 21: Research and innovation
Sub-theme 13: Learning culture	Code 10: Learning environment

Presentation of findings

The synthesis of document and interview codes and sub-themes by means of triangulation is presented as research findings. Synthesised document and interview data identified and described the AET main themes. Table H.5 presents a list of main themes and associated sub-themes.

Table H.5: Main themes

Main theme descriptions	Sub-theme references
Organisational intent	Sub-theme 1: Leadership Sub-theme 2: Strategy, policy and objectives
Organisational system enablers	Sub-theme 3: Organisational education and training processes Sub-theme 4: Organisational resources Sub-theme 5: Quality management system processes
Organisational education and training system drivers	Sub-theme 6: Instructional design Sub-theme 7: Instructional development Sub-theme 8: Implementation appraisal
Organisational performance results	Sub-theme 9: Education and training evaluation results Sub-theme 10: Stakeholder relations Sub-theme 11: Organisational outcomes Sub-theme 12: Innovation and excellence
Learning culture	Sub-theme 13: Learning culture

APPENDIX I: DECLARATIONS - LANGUAGE EDITING

DECLARATION - LANGUAGE EDITING

I, Hermien Bothma, the undersigned hereby certify that I have revised the language of the D.Ed. Thesis (Education and training system evaluation constructs as archetype for excellence in organisational performance), written by Christiaan Gerhardus Joubert, and have found the standard of the language acceptable.

_____ 10 Sep 2018

Hermien Bothma B.A. Date

DECLARATION - LANGUAGE EDITING

I, Barbara Snell, the undersigned, hereby certify that I have revised the language of the D.Ed. Thesis (Education and training system evaluation constructs as archetype for excellence in organisational performance), written by Christiaan Gerhardus Joubert, and have found the standard of the language acceptable.

Date: 3 June 2020

Barbara Snell

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