Exploring the academic staff development programme for newly appointed academic staff members in Universities of Technology: A systems approach

By

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DECLARATION

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I declare that "Exploring the academic staff development programme for newly appointed academic staff members in Universities of Technology: A systems approach" is my work and that all the sources that I have used or quoted have been indicated and acknowledged employing complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at the Durban University of Technology for another qualification or at any other higher education institution.

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ABBREVIATIONS

APD - Academic Professional Development
ASD - Academic Staff Development
CHE - Council for Higher Education
DoE - Department of Education
NAASM - Newly Appointed Academic Staff Members
NQF - National Qualifications Framework
SAQA - South African Qualifications Framework
SD - Staff Development
SOTL - Scholarship of Teaching and Learning
SSM - Soft Systems Methodology
VUCA - Volatile, Uncertain, Complex and Ambiguous
ABSTRACT

Academic staff development programmes are meant to assist newly appointed academic staff members in executing their duties effectively as university teachers. Newly appointed academic staff members join the university system with only their discipline knowledge (mode one of knowledge production). However, they are expected to teach and impart knowledge to students such that they become equipped for the marketplace. With rapid globalisation in a volatile, uncertain, complex, ambiguous world economy, newly-appointed academic staff members have continued to apply conventional methods of teaching as they were instructed to do, thus affecting teaching practice and the quality of graduates they release. A need has thus arisen to reconsider academic staff development in terms of a dynamic approach which recognizes that academia is not divorced from the socio-economy and rapidly changing environment. A University of Technology functions as a system where all stakeholders work towards producing graduates who are equipped to function in the marketplace.

When a systems approach is used, the appreciation of academic staff development is from a broader perspective. This includes understanding interactions between all facets of the institution, its staff members, students, curriculum and the broader society. The interaction and interconnectedness of components is complex and the output, which is the graduate student, is a product of these complex relationships. Two Universities of Technology were conveniently sampled, from each of which participants were purposively selected to participate in the study.

A qualitative case study design was employed from a social constructivism lens in order to explore academic staff development programmes for newly appointed academic staff members in Universities of Technology. Interviews and focus group discussions guided by a Soft Systems Methodology (SSM) were used to elicit data from participants.

Participants’ experiences were critical in outlining their perceived ways of viewing the world. Hence, soft issues were unearthed as critical in fostering the academic development of newly appointed academic staff members. The process of facilitation and initiation of academic staff development, the role of academic leadership in academic staff development and current practices of academic staff development have a significant bearing on individual development.
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CHAPTER ONE
INTRODUCTION

1.1 Chapter overview

The study explores academic staff development programmes in Universities of Technology in Kwazulu-Natal. The research focuses on exploring the experiences of newly appointed academic staff members, academic support departments and academic leadership on academic staff development programmes.

This chapter provides the introduction, preliminary literature review and background to the study. It also explains key concepts, motivation and the research problem; the aim of the study, objectives; and the research methodology. A brief description of the complexity associated with staff development is given. Finally, the demarcation of the study and the outline of the chapters for this study are presented.

1.2 Introduction

Higher Education Institutions are faced with massification, diversification, decolonisation of knowledge and diminishing resources (Ndebele, 2014; Chabaya, 2015; Reddy, et al., 2016a; Vorster and Quinn, 2017). Increased numbers of student intake have exacted universities to expand both infrastructure and human capital (Department: Statistics South Africa, 2017), hence a challenge of recruiting and retaining adequate numbers of academics to constitute the next generation of academic staff has emerged (Badat, 2010; Iglesias-martínez, Lozano-cabezas and Martinez-ruiz, 2014; Quinn and Vorster, 2014; Reddy et al., 2016). Most new lecturers come to the university environment with only an understanding of their discipline knowledge, but lacking expertise in other academic spheres (Quinn and Vorster, 2015). Quinn (2012) further argues that for centuries, no-one gave any thought to how university teachers acquired their knowledge and understanding of teaching. It was assumed, for example, that a distinguished physicist or historian would have the intelligence and innate ability to teach students. However, it was discovered that not all newly recruited academic staff members possess that potential to teach (Austin, 1998). Therefore, academic staff development was established to focus on remedial purposes, that is, intervening in cases where academic staff members were encountering problems or were evaluated as less than
effective. Austin (1998) suggested that this intervention was proposed to benefit and support academics in dealing with their various responsibilities and with the particular challenges associated with their respective teaching and learning. According to Quinn (2012), there has been a call globally to improve the quality of teaching in higher education. This has led to the initiation of the academic staff development process to bridge the skills and knowledge gaps of newly-appointed academic staff members regarding teaching in higher education (Quinn, 2012; Reddy, et al., 2016). Each University of Technology (UoT) has a different approach towards developing their newly appointed academic staff members. This individualised approach is challenging for the UoTs since they were established as offering career-focused, practical, hands-on approaches to education and training (Koen, 2003). Institutions in South Africa are divided into two categories: the formerly advantaged and formerly disadvantaged. Some UoTs may have successful academic staff development programmes, whilst some may be lacking the necessary academic support. The White Paper on Higher Education Transformation (Department of Education 1997) recognised academic staff development as a critical issue in the capacity building needed for the transformation of public higher education in South Africa.

Given this background, it is imperative to explore how Universities of Technology enact academic staff development processes to empower newly appointed academic staff members. This study seeks to explore the current approach to academic staff development in UoTs because the growth of the world’s population and advancements in technology, as well as the complexity of the global village, has necessitated improvements in academic staff development approaches.

Systems approaches are holistic methods to understand complex organisational matters and ‘messy’ problematic situations, hence necessary for this kind of research (Senge 1992; Checkland, 2000; Arnold and Wade, 2015). Reynolds et al. (2010) describe a systems approach as a mechanism for exploring real-world problems. Systems approaches encapsulate either qualitative or both quantitative and qualitative aspects of a problem, where the participation of stakeholders is primary in outlining the challenge and seeking ways to manage the problem. Real-world problems occur in organizations, and the rise or fall of organizations depends on how their leaders comprehend the inter dynamics between the soft and hard factors which are part of everyday problematic situations. In the same way, university leaders form an important part of these institutions (Golafshani, Salehi and Zamani, 2018). Hence, Complexity leadership also comes into context for contemporary organizations.
to survive and function in a volatile, uncertain, complex and ambiguous (VUCA) environment based on information technology (Baltaci and Baltaci, 2017b).

1.3 Background to academic staff development

Academic staff development (ASD) refers to all the policies, practices and procedures used to develop the knowledge, skills and competencies of staff in order to improve the effectiveness and efficiency both of the individual and the University (Quinn, 2012). The term has been used to refer to a range of formal and informal activities aimed at contributing towards capacitating academics to be scholarly educators (Boughey, 2007; Quinn, 2012; Chabaya, 2015). It is further considered as the mechanism that is designed to empower staff members to acquire and enhance the knowledge, understanding and skills needed to teach effectively (Quinn, 2012; Harpe, 2014). Gosling (2001) suggested that academic development is also referred to as educational development or professional development, as a broader concept concerned with the development and improvement of the quality of teaching and learning. It further included critical engagement and inquiry into curriculum issues related to education (Leibowitz and Bozalek, 2014; Mårtensson, 2015; Steinert et al., 2016).

Scholars describe academic staff development within a wide range of formal and informal professional learning activities in support of academic staff in their teaching roles: seminars; workshops; formal programmes; educational research grants; teaching academies; departmental ‘workgroups’; collegial networks – both face-to-face and online; consultations and peer review processes, such as teaching awards; and teaching portfolios for ad hominem promotion (Gosling, 2001; Boyd and Harris, 2010; Seyoum, 2014; Graf, 2015). Studies show that new lecturers in teaching described ‘feeling new’ and they experienced considerable levels of stress (Boyd and Harris, 2010; Seyoum, 2014; Graf, 2015). New lecturers feel that they were thrown ‘in at the deep end’ and ‘in the dark’, especially in teaching and supporting students. Boyd and Harris (2010) alluded that newly-appointed academic staff members described various challenges in terms of the procedures, relationships, line management responsibilities and level of autonomy within higher education.

Academic staff development in South Africa is dated back to three paradigms in the history of teaching and learning development in higher education as follows: the \textit{ad hoc} paradigm, the skills paradigm and the professional paradigm (Quinn, 2012). Teaching and learning development offered in the \textit{ad hoc} paradigm was located within the individual academic: teaching is acquired informally and individually. Teaching and learning are drawn from
experience (trial and error and help from sympathetic colleagues). The skills paradigm was most predominant in South Africa in the 1980s when the integration of formerly marginalised black students was allowed and they began to join the white institutions. White academic staff needed generic skills and tips, regardless of the epistemological and ontological foundations of their disciplines, to cope with teaching ‘under-prepared’ black students (Quinn, 2012). That kind of staff training model was said to be dealing with nuts and bolts. The third paradigm is the professional paradigm, which moves away from the single practitioner to include many concerns within disciplines by the social order.

Seyoum (2014) suggested that newly appointed academic staff needed some help and support because of the growing pressure and accountability on educational institutions; the growth of knowledge in the field of teaching; and a constant inherent desire to improve teaching in order to realize each student’s potential and academic attainment. In the past and even now, university teachers are teaching as they were taught. The requirements to be employed as a university educator do not include a teaching qualification. However, teaching duties need relevant methods to be fit for purpose (Ndebele, 2014; Reddy et al., 2016; Vorster and Quinn, 2017). The new dispensation has introduced a dynamic and challenging university environment. Modern society demands more innovation in all sectors. Naudé (2017) argues that universities should shift learning towards the gaining of complex, problem-solving skills. This shifting of learning to complex skills can be achievable through investments in newly appointed academic staff. Universities that are serious about their performance engage and review their academic staff development programmes (Quinn and Vorster, 2014; Chabaya, 2015; Vorster and Quinn, 2017).

According to Badat (2010), South Africa’s universities have experienced transformation challenges in recruiting new academics to constitute the next generation of academics. The overall task, therefore, was to produce and keep a new generation of academics and concurrently transform the historical social composition of the academic workforce. This calls for a new generation of academics in all universities in South Africa, including UoTs. However thus far, there is no dynamic programme or approach towards academic staff development. Although there are claims of academic staff development happening in different forms from more organized, formal activities such as workshops, short courses and degree programmes, to less organised activities such as based apprenticeship and situated learning (Leibowitz et
al., 2015a; Reddy, et al., 2016b), there is no universal approach or national framework which can guide universities when they build on such a framework and conduct such programs. UoTs were created in South Africa to be career-focused institutions of higher learning whose curricula are of an experiential and vocational nature, with study programs designed in a manner aimed at producing graduates with the ability to readily put in practice their skills in the real world of work (Maserumule, 2005). Therefore, UoTs have a responsibility to innovatively integrate the new generation of academic staff members to be fully functional university teachers. This shows the need for leaders who understand complexity and that the staff development process as a system is made up of components which determine the emergent property, which in this case is the quality of teaching (Baltaci and Balci, 2017b). This requires a relevant approach to understand academic staff development in the University of Technology system. Systems thinking: soft systems methodology (SSM) hence becomes an appropriate theoretical approach since they are holistic concepts that take into consideration all stakeholders (Checkland, 2019).

1.4 Key concepts underpinning the study

Some of the key concepts will be discussed in detail in Chapter Two under the literature review. However, below are the key concepts which will guide the study:

- **Academic staff development (ASD)** has been used to refer to a range of formal and informal activities aimed at contributing towards academic capacities as scholarly educators (Boughey, 2007; Quinn, 2012; Chabaya, 2015). Academic staff development is the mechanism that is designed to empower staff members to acquire and enhance the knowledge, understanding and skills needed to teach effectively (Quinn, 2012; Harpe, 2014). Gosling (2001) suggested that academic development is also referred to as educational development, whilst professional development is a broader concept concerned with the development and improvement of the quality of teaching and learning. It also includes critical engagement and inquiry into curriculum issues related to education (Leibowitz and Bozalek, 2014; Mårtensson, 2015; Steinert et al., 2016).

- **Academic leadership (AL)** is the name given to leadership in an academic setting or organization as a special sub-division of overall leadership. Therefore, this kind of leadership is leadership that includes such roles as creating a vision and mission based on science and research data for the organization, setting up creative ideas,
doing and providing teamwork (Manzoor, 2017). Leadership that is focusing on creating a conducive environment for personal academic growth and institutional development within the institutions of higher learning is alluded to.

- **Systems thinking** as a theoretical framework seeks to engage analysis from a holistic perspective. The focus is towards how the parts of a system work together and interrelate with the larger system elements (Senge, 1992; Reynolds, 2011; Arnold and Wade, 2017).

- **Soft Systems Methodology (SSM)** was defined by Checkland (2000) as an approach to see and make sense, which once internalized, allows an exploration of how people in a specific situation create for themselves the meaning of their world and so act intentionally (Checkland, 2000).

- **A “problematic situation”** is a term used in SSM to support learning about something requiring intervention, as opposed to the term *problem*, which tends to lead one to think about solutions (Checkland and Poulter, 2010).

- **Complexity leadership theory (CLT)** refers to shifting leadership from the industrial age to the knowledge era. It is the study of the interactive dynamics of complex systems embedded within contexts of larger organizing systems (Uhl-Bien and Marion, 2009).

- **Conventional Approach (CA):** The Conventional approach refers to the traditional way of teaching wherein the lecture method is used most of the time. This method of teaching is textbook-centered, teacher dominant and exam-oriented. The emphasis here is mainly on remembering and reproducing facts, principles and theories of learning (Murphy, 1997).

  **Scholarship:** The Framework encourages staff to be informed on, knowledgeable about, and have the capacity to contribute to the evidence-base of their teaching. Helping staff to identify best practice in their disciplines goes hand-in-hand with adopting innovative evidence-based approaches to teaching and learning.

**1.5 Motivation for the study**

Universities of Technology are facing unprecedented challenges in the definition of their purpose, role, organisation and scope in society and economy (Lopukhova and Makeeva, 2018). Teaching competence integrating technical skills should be clear. However, from the outset less is done as compared to other educative levels (Iglesias-martínez, Lozano-
cabezas and Martinez-ruiz, 2014). According to Iglesias-martínez et al.,(2014), this is even more serious at this precise moment, when attending to the needs of novice university teachers who must face the challenges of advanced 21\textsuperscript{st} century society.

The challenge of assuming a profound transformation in the methods to generate, manage and distribute knowledge and learning necessitates academic staff development of the newly appointed UoT teaching staff in order to achieve transformational goals (Iglesias-martínez, Lozano-cabezas and Martinez-ruiz, 2014).

Maserumule (2005) argues that the fundamental reason for transforming the designation of Technikon to University of Technology was the understanding of contemporary higher education transformation discourses and debates. This necessitated a drive to conform to international trends and also to use concepts that are universally recognizable. Designating Technikons as Universities of Technology is much more than just a mere name change. UoTs are supposed to invest in teacher quality and ongoing professionalism. Moreover, the Department of Higher Education in South Africa proposed changes to the Higher Education Qualifications Framework for vocational progression pathways from a Diploma up to the Doctoral level (SANT, 2017). These changes need more skilled UoT teachers who understand the imperatives of these in the curriculum and teaching strategies. Importantly, this indicated the need for rethinking and investing heavily in academic staff development programmes in order to meet the aforementioned changes in higher education in South Africa.
This applies to all higher education institutions and improves the ability of students to move easily and more effectively from one qualification to the next, as well as between institutions. Adapted from www.SATN.org.za (2017:1)

The single unified National Qualifications framework shown in Fig 1.1 has direct implications on the teaching staff of the UoTs. UoTs are at the forefront of these changes. For this framework to be achieved, UoTs need to be devoted to academic staff development. This can be achieved by ensuring that newly appointed academic staff members are equipped with subject matter knowledge and an evidence and standards-based repertoire of pedagogical skills that are demonstrable, as well as effective in meeting the developmental and learning needs of all students for whom they have responsibility, regardless of students’ backgrounds and intake characteristics (Seyoum, 2014; Reddy, et al., 2016a). These changes are guided by the Revised Higher Education Qualifications Sub-Framework (HEQSF). UoTs were required to review and align existing qualifications and develop new qualifications that meet the requirements of the new sub-framework (HEQSF, 2017). During the past two decades, there has been growth in participation at post-school institutions mainly due to the expansion in government funding of the sector. However, the country still struggles to meet
the rising educational needs of the youth, as well as the market demand for skills (Department: Statistics South Africa, 2017). The expansion of government funding for higher education has also increased the need for new teaching staff.

Figure 1. 2 Enrolment at universities and Technikons increased over past sixteen years. Adapted from Department of Higher Education and Training: Statistics South Africa, 2017:33

The HEMIS statistics report of 2017 showed an increased student intake in Universities and Universities of Technology from the year 2000 up to 2016 (Statistics South Africa, 2017). This suggested that the UoTs had to recruit more academic staff to teach the increased number of students. This aroused an interest to investigate how academic staff development is facilitated, as well as how academic leadership and academic support help newly-appointed academic staff members to be fully functional. This status quo required an exploration of the academic staff development programmes in the UoTs.

These issues needed to be considered seriously and were not just to continue with the business of the Technikon as usual under the new designation. UoTs therefore need to improve and intensify their academic staff development programmes so that newly-appointed
academic staff members can comprehend increases in students, growth and upgraded qualifications.

1.6 The problem statement

Academic Staff Development (ASD) was not prioritized, despite its potential to transform Universities of Technology (UoTs) and promote quality teaching and learning. Both conventional approaches and non-formal processes do not consider the perceptions and worldviews of the newly-appointed staff members (whether or not they have a holistic appreciation of teaching, learning and market requirements). The challenge has manifested itself in various ways, as attributed to the various complex issues. The national level transformation of Technikons to Universities of Technology has come with its own challenges. The UoT status is complex considering the technical focus they had. This has had challenges as these universities, besides recruiting for the new status, have also wanted to maintain their technical flair so that they release unique graduates.

The transformation of the qualifications framework for vocational progression pathways from a Diploma up to the Doctoral level (SANT, 2017) all require different approaches to staff development in order to meet the needs of the volatile, uncertain, complex, and ambiguous (VUCA) environment existing in the country. This has seen universities putting more emphasis on recruiting erudite staff or asking current staff members who do not have certain qualifications to upgrade their qualifications, yet the professional training of newly-appointed academic staff members has been neglected.

At a personal level, the newly-appointed academic staff have mode one of knowledge (disciplinary knowledge), but for them to be fully functional as university teachers, they also need teaching and learning skills. Given this trend, one gets the impression that the initiation of newly-appointed academic staff members to their new teaching duties and continuous improvement amongst experienced lecturers who needed help with their scholarship of teaching were not getting enough support. The specific needs of the newly-appointed academic staff members in the UoTs for continued educational development and support also have not been identified previously through formal research.

The problematic situation which needed to be tackled with this study was a holistic academic staff development programme, which include all academic role players (leadership, academic supporting departments) in the UoT as a complex system.
1.7 Research aim

The study set out to explore how academic staff development can be attained using a systems approach.

1.8 Research objectives

The objectives of this study were:

i) To explore how the academic staff development process can be contextualised for newly-appointed academic staff members in the Universities of Technology.

ii) To assess how leadership at various levels interact with the newly-appointed academic staff.

iii) To investigate the current practices of academic staff development and propose a model for newly-appointed academic staff members in Universities of Technology.

These study objectives of the study informed the choice of research design and methodology for this research.

1.9 Research Questions

The following questions guided this qualitative research in the form of a multiple case study design:

- How is the academic staff development conducted for newly appointed academic staff members in the Universities of Technology?
- What are the current practices of academic staff development?
- What is the role of academic leadership and academic support departments in academic staff development?
- What are the perceptions of newly appointed academic staff members on the academic staff development process and procedures?

1.10 Rationale for the study

Quinn (2012) argued that university lecturers have undergone little or no formal preparation for their role as teachers. While the argument for academic staff development is clear, there is less written on the appropriate forms and content of these existing training initiatives in UoTs. According to SATN (2017), UoTs were established to offer technological career-
directed educational programme. Since UoTs are practically oriented, their academic staff development programs should be integrating the practical component of their curriculum. There is a need for a study that will engage in an in-depth exploration of academic staff development processes in Universities of Technology.

Newly-appointed academic staff members are at the forefront of this challenging environment. University systems have got to engage all stakeholders to assist newly appointed academic staff members to participate productively. Insights from this study will contribute to the improvement of a structured academic development programme in UoTs. Successful implementation of the findings might also create a continued supportive learning environment for newly-appointed academic staff members by enabling them to be integrated into the institutional culture of the institutions. It is envisaged that the findings will be a useful tool in planning and coordinating academic staff development activities for newly-appointed academics in Universities of Technology.

1.1 Research Design

The study qualitatively explored the lived experiences of newly-appointed academic staff members whilst reflecting on their contexts of academic staff development, the role of academic leadership and academic supporting departments within the UoTs. When using a systems approach, organizations are considered to be always trying to address a “problematic” situation under consideration (Flood, 2010; Checkland, 2012). Hence the way they see and perceive things, which is enshrined in mental models, is a critical starting point in defining the problem and trying to address it. This saw the use of a case study design to gain an in-depth analysis of the problem with the selection of two UoTs. The problematic situation was initially examined using interviews and focus group discussions with the problem owners, actors and those who were accountable for carrying out the transformation (Forrester, 1994; Checkland, 2012; Burge, 2015; Reynolds, 2016). Soft Systems Methodology (SSM) stages were engaged for gathering information and analysis about academic staff development in the UoTs.

1.12 Data collecting instruments

The data collecting instruments that were used were semi structured interviews and the focus group discussions. The researcher employed recorded semi-structured interviews on academic leadership (deans, Head of departments (HODs) and academic supporting
departments representatives. Semi-structured interviews and focus groups were chosen because they are conversational and informal in tone. Both allow for an open response in the participants’ own words rather than a ‘yes or no’ type answer. An interview holds one of the effective ways of finding out about a phenomenon if people involved are asked (Creswell, 2007). Focus group discussion were used for the newly appointed academic staff members. Individual interviews were held with academic leaders and academic support departments within the faculties. The idea for using focus group discussions was to attempt to simulate a group of friends or people who have things in common and feel relaxed talking to each other. Focus group discussions were arranged for the newly-appointed academic staff members. The focus group discussions initially focused on the problematic situation and generation of the rich picture, which is a depiction of people’s mental models and was critical in structuring the current challenges being faced with academic staff development. Data triangulation using focus group discussions and interviews in qualitative inquiry result in a broader understanding of the phenomenon of interest. Both interviews and focus groups were recorded using electronic devises and the information was later transcribed, with the issues arising from both the interview and focus groups being developed into themes.

1.13 Data analysis

Each interview transcript, focus group discussion documents and additional notes from the field journal were coded. The categories were then grouped around each research question which they contributed to addressing. Codes represented theme with which each part of the data was associated. Once coding was completed, the codes that needed common elements were merged to form themes. Data analysis was completed once all the research questions had been assigned input from the themes.

1.14 Ethical considerations

Both case study institutions and participants gave their informed consent to take part in the study. The researcher complied with the Durban University of Technology’s (DUT) and Mangosuthu University of Technology’s (MUT) institutional requirements for ethical guidelines. Ethical clearance and permission were granted by the Ethics Committee before the study was conducted in both institutions. Part of the ethical requirements was to attach the letter of information and a consent form to the interview schedules. The letter of
information outlined the purposes of the study and assured participants that their identities were not going to be revealed. Participants were asked to sign the consent form to indicate their willingness to participate in the study voluntarily. Hence, Maxwell (2005) describes informed consent as a principle ensuring a participant’s right to agree or not agree to participate in the study. Participants were informed regarding their freedom to withdraw at any stage of the interviews and focus group discussions.

1.15 Trustworthiness

Multiple methods including interviews and focus group discussions were used as sources of data (Creswell, 2014). In order to enhance validity, triangulation was used as a measure to enhance legitimacy and rigour of the research including reduction of bias resulting from any one of the multiple methods used in this study.

1.16 Scope of the study

This study focused on two universities of technology in KwaZulu-Natal (KZN). The Population was limited to the following participants: academic leadership (Deans and HODs), academic support departments and the newly-appointed academic staff members. Qualitative data was collected from MUT and DUT. At MUT, data was collected from the main campus and on a satellite campus. At DUT, two campuses participated in Durban: the M L Sultan and Steve Biko campuses.

1.17 Outline of chapters

The following section provides a brief outline of chapters of this study:

**Chapter One: Introduction**

This chapter outlines the background, aims, objectives, problem statement and the scope of the study. A brief explanation of the methodology and questions is provided. The aim of this chapter was to contextualise academic staff development and to describe the background to the study. The Systems approach and Complexity leadership have been described as the theoretical framework. The key concepts that are relevant to this study were also clarified. This chapter also captured the scope and limitations of this study.

**Chapter Two: Academic Staff Development**

This chapter presents the theoretical foundation of the study. The focus was on exploring the academic staff development process as a phenomenon in the context of the UoTs. Literature reviews on academic staff development practices in different universities.
Chapter Three: Soft Systems Methodology (SSM) and Complexity Leadership theory
This chapter presents the systems approach specifically the Soft Systems Methodology (SSM) and Complexity leadership theory as a complementary theory.

Chapter Four: Research Methodology and Design
This chapter discusses the theoretical framework and the research design and process, which is a qualitative case study. The research design and research process section give details of the data generation and analyses methods and of how ethics and validity issues will be dealt with in the context of the study.

Chapter Five: Analysis and Findings
This chapter presents the analysis and findings of the interviews and focus group discussions of the qualitative approach applied and Soft Systems Methodology (SSM) in this study.

Chapter Six: Discussions
The purpose of this chapter is to discuss the findings of the study. Chapter six will cohesively present and discuss the themes and sub-themes that emerged as well as the SSM stages. This chapter will highlight how the research questions were answered and how the objectives were achieved.

Chapter Seven: Conclusion and Recommendations
The thesis concludes with chapter 7 which presents limitations, conclusions, recommendations, and an articulation of the key contributions of the thesis to academic staff development programmes.

1.18 Chapter summary
This introductory chapter served as the foundation for exploring academic staff development programmes for newly appointed academic staff members in Universities of Technology: A systems approach. This chapter explained the necessity for the study to be conducted. The research problem, objectives of the study, critical questions, as well as the rationale for the study were highlighted and presented. A brief description of key concepts relevant to the study were defined to familiarise the reader with their meanings. The Theoretical framework for this study has been briefly described. This chapter also outlined the organization of chapters of the study. The next chapter deals with the academic staff development.
CHAPTER TWO

ACADEMIC STAFF DEVELOPMENT (ASD)

2.1 Introduction

Chapter one provided an overview of the study. This chapter presents the conceptual foundation of the study. The focus was on exploring the academic staff development (ASD) process in the context of the University of Technology (UoT). The study investigated academic staff development with a systemic view of the available literature. The study demarcated the components of enquiry by selecting above 90% peer-reviewed academic journal items and less than 10% grey literature. These articles were extracted from databases: ELSEVIER Science Direct and Taylor & Francis Online using the DUT and MUT SUMMON SEARCH platforms. Other databases such as Emerald Research, Wiley Online, ISI Web of Science, Springer and GOOGLE SCHOLAR were also searched for additional articles using the key terms. The literature research focused on the background and different forms and content of academic staff development in local and international trends. The key words that were used for the literature review brought many issues, views and a better understanding of the academic staff development initiatives and processes in order to justify the study.

The literature search on ASD for this study was divided into parts, based on the research questions. The following diagram depicts how the literature review is presented:
2.2 Background to academic staff development

In the South African context, academic staff development began precisely as a means of addressing the power imbalances at play when black students entered white, English-speaking universities during apartheid (Quinn, 2012a; Maphosa, 2014; Morreira, 2017; Department of Higher Education and Training, 2018). The background to academic staff development in South Africa followed three phases (Boughey and Niven, 2012), as illustrated in the figure below:

Figure 2. 1 Phases of Academic Staff Development in South Africa

Figure 2.6 shows the phases of academic staff development in South Africa. The first phase was the Academic Support phase. This phase can be detected from the early-1980s at a few historically-white, English-speaking universities (Boughey and Niven, 2012). These
universities used a slackening in apartheid legislation to admit small numbers of black students who were believed to be in need of support for learning if they were to succeed. These universities were Cape Town, Natal, Rhodes and Witwatersrand (Boughey, 2007). These black students were believed to be under prepared for tertiary education. Work in this area remains even today and has resulted in the development of the National Benchmark Tests (NBTs) (Boughey, 2010). Hence this phase was student-centred and focused on the deficiencies that black students brought with them into higher education.

The Second phase was Academic development, which was caused by the growing awareness of the possibility of a new political order in the context of the crisis-ridden 1980s (Boughey, 2010). Academic development engaged with a narrative focusing on the idea that institutions needed to be ‘transformed’. The concept of ‘under preparedness’ needed to be located in the institutions themselves and Academic Development work needed to encompass curriculum and staff development, as well as student development (Boughey, 2010).

The third phase was Institutional Development, which was the result of a different set of conversational formulations focusing on the need for systemic and institutional efficiency (Boughey, 2007b). According to Boughey (2007), dialogues underpinning this phase of institutional development history were:

i) The re-construction of state responsibility for the provision of services such as education, to the facilitation of the provision of the same services,

ii) The need for a highly skilled technologically literate workforce in the face of globalisation, and

iii) The need for economic survival as institutions competed for what appeared to be a diminishing pool of students.

With the appearance of these challenges, institutions were not only required to become more effective in using the resources at their disposal, but also to re-curriculate? In order to meet the demands of globalisation and to attract students who were looking for work-oriented qualifications. Hence, Academic Development Practitioners began to be perceived as a resource to be drawn on in the quest for overall institutional efficiency. In many respects, the shifts in the understanding of Academic Development work in South Africa have been reflected abroad in respect of the attempt more broadly known as Educational Development (Boughey, 2007b).
Quinn (2012a) alluded to the olden times when reasonable, or lousy, teaching was something that scholars put up with and if they ever grumbled (which was rare), they rarely got much response. This view was based on the fact that university teachers’ promotion depended on their qualifications and research publications (Quinn, 2012a). Hence there was some resistance to engaging in academic staff development programmes as wasting their time (Mårtensson, 2015). The higher education landscape has changed locally and globally, and university teachers are under pressure to produce quality students that can compete internationally (Quinn, 2012a). The old practice of university teachers not getting any or very little informal preparation for teaching and learning has been challenged in most universities, as argued in the following statement:

“There is an important need for a sound level of educational expertise in a number of mainstream academics…sufficient for effectively leading and managing the design and delivery of mainstream courses and programmes, and guiding the selection and work of programme and large-course teams” (Maphosa and Ndebele, 2014:170).

The above statement highlights the need for academic staff development for academics in universities. Educational expertise will contribute to advanced knowledge in the execution of their duties as university teachers. Ndebele et al. (2014) suggested that a substantial investment by universities has to be made in developing and training academic staff to improve the quality of their teaching.

Globalisation, massification and free university education changed the demographics of students in universities (Reddy, et al., 2016). The student body has become gradually diverse in terms of educational background, age, socio-economic status and entry pathways (Spaull, 2015; Murray and Nallaya, 2016). According to Murray and Nallaya (2016), universities are expected to increase their rates of graduate employment and institutional rankings. Graduates should demonstrate graduate qualities or attributes. These qualities are built into universities’ mission statements, their assessment of students' work, and the capacity to function effectively with a frame of knowledge in readiness for lifelong learning. The development of problem-solving and critical approach skills, reasoning, and the ability for creativity, as well as the ability to connect energetically in academic and professional practice that are specific to learning outcomes of their programmes is necessary. Universities are challenged and forced to attract skilled professionals and innovative people to deal with this enormous task of teaching. Consequently, this context requires that UoTs strengthen their
academic staff development programmes and processes in order to capacitate these newly appointed academic staff to use relevant and up-to-date teaching and learning strategies. Studies show that many universities internationally, nationally and locally have formalized courses or programmes that develop teaching skills for academics - academic staff development programmes (Chalmers and Gardiner, 2015; Denard Thomas, Gail Lunsford and Rodrigues, 2015b; Reddy, et al., 2016; Meizlish et al., 2018). Skvorcovs, Titareva and Igors (2018) also alluded to the international trends of academic staff development being pushed by rapid changes in labour market, globalisation, and the development of the information society.

2.3 Academic Staff Development (ASD): Definition and Purpose

Academic staff development (ASD) is a term used to refer to a range of formal and informal activities aimed at contributing towards capacitating academics to be scholarly educators (Boughey, 2007; Quinn, 2012; Chabaya, 2015). It is further considered as a mechanism designed to empower staff members to acquire and enhance the knowledge, understanding and skills needed to teach effectively (Quinn, 2012; Harpe, 2014). Gosling (2001) suggested that academic development, also referred to as educational development or professional development, as a broader concept is concerned with the development and improvement of the quality of teaching and learning. It further includes critical engagement and inquiry into curriculum issues related to education (Leibowitz and Bozalek, 2014; Mårtensson, 2015; Steinert et al., 2016). Academic staff development also refers to several interlinked parts of work such as staff support and development (including foundation provision), student curriculum development and institutional development (Quinn, 2012).

In the global context, the concepts ‘academic or educational development’ and ‘faculty development’ are most often associated with academic staff development (Quinn, 2012). Academic Staff Development (ASD), rather than ‘educational development’, is best fitting because it is more commonly used in South Africa (Leibowitz et al., 2014; Mårtensson, 2015). Staff development, or faculty development as it is called in some countries, has been structured and conceptualized in a variety of ways over recent years. At some universities, staff or faculty development has been directed towards remedial purposes, that is, intervening in cases where academic staff members were encountering problems or were evaluated as less than effective (Austin, 1998). McLean et al. (2008), focusing specifically on academic
staff development in medical faculties within universities, proposed the following purposes for academic staff development:

- Orienting new staff into the academic culture of the institution;
- Developing discrete skills, which may be precipitated by a critical event in the life of an institution, such as the implementation of new assessment methods or online learning;
- Professionalising teaching by enhancing and extending the educational practices of academics in different disciplines;
- Developing educational scholarship by supporting individuals who will continue the field of specific education research; and
- Developing educational leadership by supporting faculty members who wish to become policymakers, chairs of educational communities or deans of faculty.

Hicks et al. (2010) identified four major themes for the Professional Development (PD) of university teachers: (i) embedding a student-centred approach, (ii) facilitating the scholarship of teaching, (iii) initiating and building up networks and relationships and (iv) introducing staff to institutional policies. However, the most critical aspect is that academic staff development emphasises a professional growth approach which recognizes that all academic staff can benefit from support in dealing with their various responsibilities. Hence the South African White Paper on Higher Education Transformation (Department of Education, 1997) identified staff development as a critical factor in the capacity building necessary for transformation (Austin, 1998), as reflected in the following statement:

“The changing context of higher education, both internationally and locally, presents new challenges to lecturers which have led to a greater emphasis being placed on academic staff development in many institutions” (Quinn, 2012:70).

Quinn (2012) argues that in many institutions, academic staff members are facing challenges due to the changing context of higher education. Reddy, et al. (2016) further allude to challenges that higher education has witnessed, namely massification, diversification and diminishing resources in the last decade, all impacting the academic profession. Hence, the need for highly skilled, innovative individuals to work in this transforming environment has grown exponentially. ASD is an emerging and contested area in higher education (Reddy, et al., 2016). However, it is also becoming very important in institutions of higher education. Academic staff development programmes might include curriculum issues in higher
education, large or small class sizes, assessments, materials development, the use of technology in teaching and learning, equity and quality assurance issues in higher education (Boughey, 2007; Seyoum, 2011; Quinn, 2012; Harpe, 2014). Traditional universities and Universities of Technology are now taking up this challenge by mainstreaming academic staff development (Reddy, et al., 2016).

2.4 Teaching in UoTs

Most UoT teachers have never done a course in teaching methodologies and andragogy (Chabaya, 2015; Maserumule, 2005; Reddy et al., 2016b). They are not expected to train as teachers and neither do they have to produce proof that they are skilled teachers (Chabaya, 2015; Reddy, et al., 2016). Newly-appointed academic staff teach in the way that they were taught, irrespective of variances in institutional context, student diversity and numbers (Chabaya, 2015). Hence, UoT teaching tends to be a problematic situation since academics are discipline experts without any formal teaching qualifications. Since UoTs were established to prepare students for practical hands-on industrial work, most of their teachers come with industrial experience. Their teaching increasingly tends to rely on pedagogies constructed through the apprenticeship of observation (Chabaya, 2015). Universities are however expected to contribute towards economic and social transformation by providing access to ever increasing numbers of students from diverse backgrounds in order to generate graduates for the labour market in a competitive global economy (Behari-leak, 2017).

The duty of a teacher at a UoT thus has many dimensions: it involves the provision of a wide context of knowledge within which students can locate and understand the content of their specific studies. It further involves the construction of a learning environment in which scholars are encouraged to think carefully and critically and communicate their thoughts. They are also encouraged to challenge and resolve difficulties rather than overlook them. O’Neil (2015) iterates that it also involves continually checking and reflecting on the processes of teaching and student understanding and seeking to improve them. The most difficult of all tasks involves helping students to achieve their own aims, and adopting the notion that underlies higher education. However, the goal of a newly-appointed academic staff member is to reach a stage where they are also regarded as experts, which can be done as their needs for ASD are addressed.
2.5 Needs of newly-appointed academic staff members

Teachers in universities are the most valuable resource available to higher education institutions in the understanding of academic programs and institutional goals, hence an investment in teacher quality and ongoing efficiency is important (Seyoum, 2014). This goal can only be archived through ensuring that newly appointed academic staff members are equipped with subject matter knowledge, evidence, and a standards-based repertoire of pedagogical skills. These should be noticeably effective in meeting the developmental and learning needs of all students for whom they have responsibility, irrespective of students' backgrounds and intake characteristics and whether or not they experience learning complications (Seyoum, 2014).

Teaching proficiency at universities is becoming a significant theme within educational research, but publications related to it are not as many as they are in other disciplines (Iglesias-martínez, Lozano-cabezas and Martinez-ruiz, 2014). In a study conducted by Iglesias-martínez, Lozano-cabezas and Martinez-ruiz,(2014), it was reported that newly-appointed academic staff raised the following issues as affecting their ability to deliver effective lectures: considerable concern about a lack of proper preparation, command and explanation of subject content; their interpersonal relationships with their departmental colleagues was also considered as lacking in interdependence; and planning in the organization of different subjects was also considered challenging. Öztürk and Yıldırım,(2012) also assert that novice teachers raised concerns about teaching in higher education institutions, as shown in Fig 2.2. Their concerns are grouped under six major themes: (1) classroom management issues, (2) curricular and instructional issues; (3) concerns for student motivation and guidance; (4) workload and time management issues; (5) challenges resulting from social circles; and (6) problems linked to the internal circle of the individuals.
Although ASD is constructed based on different contexts, the aim is generally to assist newly-appointed academic staff members in improving and honing their teaching and learning skills. Morreira (2017) argued that academic staff development has occurred in the absence of a transparent educational model, even when traced back to the 1980s. This model advocated by Morreira (2017) should be constructed with an understanding of the linkages between the six components which influence academic staff development. Lecturers’ ability to deliver has reciprocal influences on all aspects and in turn, these components have an influence on each other as depicted in Fig 2.2. This then has a bearing on the final performance of the newly-appointed academic staff member and ultimately the student. In the 1980s, even with Guskey (1986), one of the important pioneers of academic staff development, the seminal work proposed by Guskey (1986) for a model of academic staff development has three critical outcomes outlining a conventional approach to the process of ASD and its outcomes. It was also supported by Seyoum (2012) who suggested that effective staff development should not only be ongoing but should also support teachers to overcome the challenges of implementing new classroom practices in a process that is linear. This idea nevertheless does not “expagorate” on the interrelationships with academic staff development and the three critical outputs, as shown in Fig 2.3 Process of Teaching and learning

- Change in classroom practices
- Variation in beliefs and attitudes
• Modification in the learning outcomes of the student.

Figure 2.3 The process of teaching and learning change (adapted from Guskey’s (1986:7) seminal work)

The process of ASD and its outcomes as shown in Fig 2.3 seldom considers what McCune and Entwistle (2011) suggested: that academics have to learn to cope with what is called *super-complexity*. Jackson (2003) describes this complexity as problems, disorder, irregularity, instability, randomness, change and unpredictability. This type of complexity shown in the connectedness of components in Fig 2.2 is different from the convectional process, which is considered as essential when considering change in the learning outcomes of the students emanating from academic staff development as argued by Guskey (1986). It is an established notion that teaching improvement can be attained with a mastery of a set of generic teaching skills, namely how to give a lecture, how to conduct tutorials, how to prepare lesson plans and how to use technology (Collins *et al.*, 2018). This can be better achieved when a dynamic approach to ASD is taken.

### 2.6 Academic Staff Development theories

Universities of Technology, as part of higher learning institutions, are recognizing ASD as a strategy that enhances the quality of teaching of newly-appointed academic staff. Teaching quality in any institution is dependent on proper and structured ASD for newly-appointed academic staff. ASD should have reflective practice as its model through which university teachers improve their practice. Hence ASD should have sound philosophical foundations and should be able to develop the newly-appointed academic staff’s capabilities to examine
the philosophical assumptions of the process of ASD itself and their theories about teaching and learning.

Theories about academic staff development come in a range of packages, assessing staff effectiveness as a continuous process. Theoretical understandings of the newly-appointed academic staff’s approaches to teaching and learning tend to address different questions. The individualistic “conceptions of teaching” viewpoint which is rooted in cognitive theory sees teachers moving through a number of clearly defined stages of development, developing different conceptions of teaching (Trowler and Cooper, 2002). Conceptions of university teaching are described as specific meanings attached to university teaching and learning phenomena, which is claimed to then mediate a teacher’s view of, and responses to, their teaching context (Devlin, 2006). There is further suggestion that conceptions of teaching can be categorised into two groups:

- Teacher – centered/content – oriented
- Student – centered/ learning- oriented

Devlin (2006) suggested that the teacher-centered/content-oriented category can be further divided into two sections:

- imparting information
- transmitting structured knowledge.

The student-centered/learning-oriented category can be further categorized as:

- facilitating understanding
- conceptual change/intellectual development.

The other category/conception that joins and bridges these two major orientations is the “student- teacher interaction”. This suggest the active interaction of the teacher and the student in knowledge production. Fry, Ketteridge and Marshall (2008) alluded that academics teach without having formal knowledge of how students learn. This situation challenges their teaching philosophies. Caukin and Brinthaupt (2017) suggested that newly-appointed academic staff are encouraged to write a teaching philosophy statement in the academic staff development programmes. It is anticipated that they will engage in deep reflection and create a vision and purpose for their teaching.
The other perspective is the *disciplinary approach*, founded on a weak or strong form of epistemological essentialism. This proposes that academic disciplines assume distinctive approaches to teaching and learning. The key question is: “how teaching and learning practices are conditioned by the discipline?” This approach aims at understanding the faculty and departmental teaching promotion mechanisms. Socialisation into a discipline is also understood to involve socialisation into distinctive approaches to teaching and learning (Trowler and Cooper, 2002). As newly-appointed academic staff members arrive in the department, they are socialized in one or other form. Lastly, the *reflective practice* is rooted in the notion of the reflective practitioner. The key question is: “how do effective lecturers think about their practice”? The reflective practitioner has got room to improve his or her teaching practices based on an evaluation of his or her practice. The question might be, does ASD encourage reflective practice?

Constructivism brings in this reflective practice and is typically contrasted with a transmissionist (or objectivist) model of learning. Constructivism is regarded as a philosophy which cuts across multiple disciplines (for example, arts, sciences and cognition), while others view it as a learning theory. Nevertheless, whatever its classification, constructivism is concerned with how personal understanding or knowledge is formed (Richardson, 2018). Constructivism concentrates on knowledge construction. Hence this theory is of interest to learning and teaching. A Constructivist view suggest that teachers are engaged in a community in which learning is the result of interactions, reflections and experiences (Richardson, 2018). Richardson (2018) cited Vygotsky’s (1978) seminal work for learners to utilize a social support system as a kind of learning process whereby one can bridge the gulf (or zone) - Zone of Proximal Development (ZPD) - that exists between what one knows and what one needs to know. Newly-appointed academic staff members are classified as adult learners. From the constructivist point of view, newly-appointed academic staff members as adult learners construct their knowledge of teaching and learning as they interact, reflect and experience the new environment. The cognitive constructivism of the seminal work of Piaget (1936) views learners as active constructors of their worldview and discoverers of knowledge. On the other hand, Vygotsky’s social constructivism which is built on Piaget’s ideas of active learners, focuses on social interactions in learning and development. The quality of teacher-learner interaction is seen as crucial when scaffolding a learner’s learning.
2.7 Academic staff development process

The success of any process in organizations is dependent on the enabling cultural and structural conditions that are found in them. Hence the ASD process centres on the same conditions (D Andrea and Gosling, 2005; Quinn, 2006). ASD is aimed at achieving the following developmental goals: orientate, induct in the culture and practices of the institution and support newly-appointed academic staff members from the novice phase until they become competent in teaching and learning (Quinn, 2012a; Cockburn et al., 2014; Wolff et al., 2015). The ASD process also aims to provide the academic staff member with tools to enhance student learning to deliver graduates with attributes that are personally sound, professional and socially valuable (CHE, 2014).

While a considerable number of researchers have written about ASD, this section discusses a few conventional approaches, with emphasis being placed on one developed by Henard and Roseveare (2012). Their work presented a fundamental analysis of the process of ASD. Formal academic staff development in universities worldwide usually start from induction and orientation, then proceed to structured workshops, courses, individual consulting and systems for measuring the quality of teaching and learning (Nevgi and Löfström, 2015; Thomson, 2015). Richardson (2018) cited Knowles’ seven-step process for working with adult learners in a process which typifies ASD: a cooperative learning climate; mechanisms for mutual planning; diagnosis of learner needs and interests; the formulation of learning objectives based on the diagnosed needs and interests; sequential activities for achieving the objectives; the selection of methods, materials and resources; and the evaluation of learning.

Effective ASD is considered as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes (Darling-hammond, Hyler and Gardner, 2017). Features of effective ASD are content focused: teaching strategies associated with specific curriculum content (Darling-hammond, Hyler and Gardner, 2017). It incorporates active learning, which engages teachers directly in designing and trying out teaching strategies. It also supports collaboration: ASD creates space for teachers to share ideas and collaborate in their learning. By working collaboratively, teachers can create communities of practice. It further uses models of effective practice and this provides teachers with a clear vision of what best practices look like. Other important features are coaching and expert support, sharing of expertise about content and evidence-based practices. Offering feedback and reflection, assists teachers to thoughtfully move toward the expected vision of practice. Darling-hammond, Hyler and Gardner, (2017) suggested that it should also be of a
sustained duration to provide newly-appointed academic staff members adequate time to learn, practice, implement and reflect upon new strategies that facilitate changes in their practice.

ASD’s impact is linked to its relevance to academic teaching practice within departments. According to Thomson (2015), effective ASD strategies are designed to connect, inter-elate and integrate with teaching practices within departmental and disciplinary contexts. It is argued that quality teaching is a multi-level effort. Henard and Roseveare (2012) proposed that for quality ASD to happen, there should be three inter-dependent stages:

![Quality ASD process](image)

**Figure 2. 4 Quality ASD process**

**The Institution-wide level:** In this phase of general orientation, which is coordinated by the Human Resources (HR) Department, newly-appointed academic staff members are introduced to the mission and vision of the institution and to the array of policies that they will use during their entire engagement with the University, as well as to the support system that the organisation will provide to them. Crosswell, Beutel and Henderson (2011) allude to the fact that induction programs are poorly designed, implemented, and unsupported. Crosswell, Beutel and Henderson (2011) argue further that the cause of this problem is a lack of resources (time or qualified personnel).

**Teaching and learning support services:** This service is meant to provide scholarship for teaching and learning and the practice of teaching. New incumbents are also orientated on
the key policies of teaching and learning pedagogies – student-centred methods and assessments (Kern, Mettetal, Dixson and Morgan, 2015). According to Kern, Mettetal, Dixson and Morgan (2015), the scholarship of teaching is composed of four quadrants as shown in Figure 2.3 (scholarly teaching, practice of teaching, sharing about teaching and scholarship of teaching and learning).

Figure 2. 5 Dimensions of Activities Related to Teaching (DART) (adapted from Kern et al., 2015:5)

Activities related to teaching are divided into four quadrants, namely the practice of teaching; scholarly teaching; scholarship of teaching and learning; and sharing about teaching (Kern et al., 2015). These activities do not just happen randomly, they follow specific patterns (informal, private, public, and systematic). There is an argument that quality teaching and learning is based on systematic methodical, planned, and deliberate processes to acquire knowledge. If Institutions of Higher Education are thoughtful around their business, they should be investing resources in scholarly teaching so that the outcome will be the right product. According to Kern et al. (2015), academic teachers reflect on their experiences and
engage in literature, attend teaching workshops, conferences and continuously talk to other scholars.

**Internal quality assurance systems:** Quality Assurance departments are meant to assist academic staff in their various departments to make improvements and take professional responsibility (accreditation). They should be responding to identified problematic issues in departments and be accountable to stakeholders. The department is expected to be proactive in new changes in laws, practices and inform potential employers and employees about standards and also assist with funding decisions (Wani and Mehraj, 2014).

**The Programme level:** The Head of Department and the senior academic staff members are responsible for the day-to-day engagements with the newly-appointed academic staff members. They are supposed to embrace actions to measure and enhance the plan, content, and delivery of the programmes within a department or a school.

**Individual-level:** ASD programmes are supposed to help each and every newly appointed academic staff member. Helping them progress from where they are to where they should be. ASD’s standardized and structured programme may be relevant. Henard and Roseveare (2012) alluded to the fact that Universities engage in the development of quality teaching in essence for the following reasons:

- **To answer the growing demand for meaningful relevant teaching and learning.** Institutions want to ensure that their teaching leads to the relevant skills that are needed in the workplace.
- **To prove that they are trustworthy suppliers of excellent quality higher education while operating in a sophisticated setting, with multiple stakeholders, each with their expectations.** This is linked to ensuring high standards of education.
- **To balance performance on teaching and learning successes along with research performance,** since even for leading world-class universities, enquiry performance is no longer sufficient to maintain the name of the institution.
- **To more effectively contest for students** against the backdrop of higher tuition fees and greater student mobility.
- **To escalate the efficiency of the teaching and learning process** as funding constraints become more stringent.

Teaching quality throughout the world is also persuaded by contextual shifts within the higher education environment.
2.8 Weaknesses of the current ASD approach

The South African Higher education system has transformed since the dawn of democracy from 1994 (Ndebele, Maphosa and Ndebele, 2014). Democratic dispensation came with many issues that needed to be transformed. The new dispensation has highlighted the inequality that persists in the country’s tertiary system and pointed to the need for fresh approaches to addressing systemic problems in HE (Gachago et al., 2020). The transformation process should be seen in all activities or processes of UOTs. ASD is often offered as ‘one-size-fits-all’ (Gachago et al., 2020). The current ASD situation still shows that there is a lot to be done, more especially in the UOTs. Amongst other things is to strengthen the ASD programmes and processes thereof. The current ASD approach has got the following weakness: there is not yet a single programme that is based on any needs audit of the newly-appointed academic staff members. Hence there is no priority mechanism that helps in focusing on specific areas of development. Most ASD programmes use the traditional staff development methods (Ho, 2000). Most academic staff development programmes work on an assumption that providing teachers with prescribed skills and teaching guidelines will produce better university teachers and that newly-appointed academic staff members will accept, acquire and adopt the skills and methods introduced to them. However, the experiences of many staff developers have suggested otherwise: in many cases, newly-appointed academic staff members query the feasibility of the methods presented, defend the methods that they are currently using or use new methods mechanically and are unable to extend the ideas into other situations (Ho, 2000). If a needs audit was done, ASD programmes would be interesting to the newly-appointed academic staff members.

There is a need to reform the current ASD system. Reformation needs to emphasise the innovativeness of these programmes (Kretchmar and Zeichner, 2016). There is a need for longer-term sustainable (inter)institutional strategies. These strategies must allow for follow-up and collaboration between academics and academic staff developers both in terms of technical and pedagogical support, such as short courses (ideally co-designed with potential participants) or the set-up of local peer-to-peer support/networks (Gachago et al., 2020).

2.9 Academic Staff Development initiatives in South Africa

Moosa (2020) asserts that Universities worldwide are confronted by challenges to develop a new generation of academics. South African Institutions of higher education are currently facing complex challenges, corruption, student body problems (fees must fall campaigns),
high numbers of students, a diverse student body in all forms and ageing academic staff (CHE, 2016, Badat, 2010 and HESA, 2011). This situation has come with a variety of national programmes that are being proposed to assist university teachers to develop their teaching skills. Gaps in teaching in the university have been identified, hence the development of the Teaching Advancement at University Fellowship programme (TAU).

The TAU programme was conceptualised and then piloted in 2015-2016 to support the development of a team of academics across the South African public higher education sector as scholars, leaders, mentors and change agents in teaching and learning in their institutions or disciplinary fields (de Kadt and Jawitz, 2018). The TAU programme was designed for experienced academics who have been acknowledged for their teaching excellence and is designed to assist them, within a supportive and collegial environment, to extend their knowledge of and ability to play an active role in educational development. The TAU programme arose out of the experience of organising and supporting the educational development community in higher education in South Africa over several decades through the Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and its predecessors (de Kadt and Jawitz, 2018).

The TAU programme was structured around three key themes: being and becoming a change agent in higher education; the Scholarship of Teaching and learning (SOTL); and expanding understandings of teaching excellence. Each participant was required to design, develop, and implement an individual project within an enquiry group. They were required to submit a report on this project, along with a reflective piece on the participant’s experience of TAU and a (joint) enquiry group poster at the end of the programme. The TAU programme was designed for the senior academics, hoping that they will service their universities.

The New Generation of Academics Programme (nGAP). This programme was implemented in 2015. As a nationally coordinated programme, nGAP was proposed as a strategic Talent Management (TM) initiative to grow and develop early career academics (ECAs) (Moosa, 2020). Early career academics (ECAs) are defined as those in the first five years of their academic appointments (Reddy, et al., 2016b; Moosa, 2020). The nGAP is underpinned by the provision of permanent posts supported by programmes to develop an individual’s teaching, research, and social engagement (DHET, 2017). The programme adopts a phased development approach, with penalties for dropping out.

The nGAP has been designed based on the National growth projections of student numbers in South Africa. Student projections showed a need to increase the recruitment of academics.
Approximately 1200 new academics per annum were required (DHET, 2015) from the black and female academics groups. A projected number of 3683 additional academics were required by 2019, which equates to approximately 737 per year in the period from 2014 to 2019 (DHET, 2015). At a national level, the intention was to allocate a maximum of 400 posts and a minimum of 100 posts per annum to meet the maximum number of 2400 scholars (DHET, 2015). At the university level, it was envisaged that at least 15 posts per annum would be filled (DHET, 2015).

Funding for nGAP is allocated for salaries on a sliding scale over 6 years; for fees to complete doctoral or master's degrees; for mentoring; for participation in staff development activities; and for research costs and international mobility (DHET, 2017). Participants benefit from a reduced workload, working only 20% of what would have been their expected workload in years one to three; 50% in year four, with a full workload from year five onwards (DHET, 2017). The Department of Higher Education and Training (DHET) specifies the duties of the mentors, who should be senior academics who are recently retired academics (DHET, 2017).

At the Institutional level, Quinn (2012) alludes to the academic staff attitudes to teaching and learning in their disciplines. The study they conducted revealed academics’ resistance to engaging in activities aimed at professionalising academic practice. In some universities, lecturers were trying their best (and often succeeding) in ignoring all institutional structures aimed at academic staff development. This discourse is illustrated in the following response from a young lecturer:

“Then leave us in peace to teach and research our chosen topics, which seldom include education”.

Newly-appointed academic staff in that study did not attend an academic staff development programme. Some prefer to see subject-specific (or at least faculty-specific) training in place that is directly relevant to their needs. Universities’ lecturer positions do not include formal requirements for teaching and learning competence or pedagogical training. However, (or maybe because of this), academic staff development has focused on building capacity for effective and innovative undergraduate teaching and learning, whilst curriculum design and the assessment of students remain a central concern of academic staff development in South Africa (Badat, 2010 and CHE, 2016). Academic staff play a significant role in teaching and learning, research and community engagement. Therefore, it is imperative to invest in their capacity building programmes as a means of supporting them. Furthermore Reddy, et al. (2016) pointed to the fact that universities are now taking up the challenge of mainstreaming
academic staff development. Universities are now formalising courses that are aimed at developing teaching and learning skills for newly-appointed academics (Reddy, et al., 2016). They are hired to fill in gaps within the universities that were left by retired academics or new positions in the establishments/departments. Newly-appointed academic staff make up the components of the educational system.

Badat (2010), Quinn (2012) and CHE (2016) alluded to the focus of staff development for teaching and learning that is driven by the widening access to higher education in South Africa; which challenged institutions to take students who were under-prepared for tertiary education (for complex and varied reasons, including the ‘articulation gap’ between schooling and university study). According to Quinn (2012), the historically disadvantaged institutions (HDIs) reflect enormous challenges in teaching and learning. HDIs need to take more steps to bring the standards up. Quinn (2012) argues that higher education is to be inclusive of all social groups in South Africa and not only for those who have been privileged to have been prepared for tertiary education under their upbringing. Academic staff development should be critically considered as it does not only apply to South Africa, but higher education across the globe. The work of Quinn and her fellow authors has the potential to make an essential contribution to the attainment of social justice in higher education.

The academic staff development process incorporates teaching, learning and research as parts of one constituent. According to Delattre and Ocler (2012) and Evans (2008), the notion of academic staff development is polysemy, since its analysis can be conducted from many perspectives. “Professionalism” can refer to technical, managerial skills, particular the know-how in the management of activities, mastery of tools and/or techniques to implement a prescribed process or ethical behaviour. This notion also refers to a set of rules imposed from the environment on workers, subjected to new definitions of their missions, and confronted with standards of efficiency conducting their activities. In this case, the unique status of an institution from being a Technikon to a University of Technology is a new higher level with more expectations. It is believed that professionalising of the academic programmes represents an opportunity to develop a stronger sense of shared vision and improve practice in teaching and learning (Bierema, 2011). Hines and Gold (2013) refer to academic staff development as a way to provide focus to the field-building. This commends that there is a need for building the theoretical base and developing a capacity for the academic personnel to support credibility. Some lecturers in higher education welcome the opportunities provided
for them to ‘professionalise’ their practice, whilst others regard the current move towards academic staff development with doubt (Quinn, 2012).

Studies suggest that effective academic staff development programmes are founded on the following principles: how teachers learn new teaching approaches; how teachers transfer new skills into the teaching space; and how several models of teaching affect student learning in the academic, social and personal spheres (Bulman, 1996). Universities throughout the world are increasingly forced to discover methods of demonstrating their worth. The introduction of academic staff development and its purposes was to commonly prepare academic staff members for teaching and learning, which was considered the primary responsibility of academics (Quinn, 2012). The new millennium brought ‘outcomes-based education’, with new competencies being identified and many more issues to be tackled. Quinn (2012) described the educational landscape in South Africa with the opinion of the three paradigms in the history of teaching and learning development in higher education as follows: the ad hoc paradigm, the skills paradigm, and the professional paradigm (Quinn, 2012). Teaching and learning development offered in the ad hoc paradigm was located within the individual academic: teaching is acquired informally and individually. Teaching and learning are drawn from experience (trial and error and help from sympathetic colleagues). The skills paradigm was most predominant in South Africa in the 1980s when the integration of formerly marginalised black students was allowed and they could thus join the white institutions. White academic staff needed generic skills and tips, regardless of the epistemological and ontological foundations of their disciplines to cope with teaching ‘underprepared’ black students (Quinn, 2012). That kind of staff training model was said to be dealing with nuts and bolts. The third paradigm is the professional paradigm, which goes away from the single practitioner to include many concerns within disciplines by the social order.

The development of academics is centred on the view that institutions need to provide opportunities for their academic staff to develop across a variety of roles (Boud and Brew, 2013). As argued by Boud and Brew( 2013), academic staff development is at risk of ‘provider-capture’ driven by the needs of funders/sponsors rather than the needs of beneficiaries – the students. There is a manifestation of centralised events, workshops for groups who do not work together as a system but reporting procedures that count participation rather than effects and activities driven by policy initiatives rather than identified needs of beneficiaries (Boud and Brew, 2013). Badat (2010) pointed to the social inequalities
in South Africa that are reflected in all domains of social life, as results of the systemic exclusion of blacks and women under colonialism and apartheid. The higher education system was also part of that order. Hence, in response to transforming higher education, it is not only working on the outside only but also improving human capital skills and technical know-how. Boud and Brew (2013) suggested that learning at work is characterised by seven learning conditions, namely:

- The high degree of exposure to demands from customers, management, colleagues and owners.
- The high degree of exposure to changes in technology, organisation, and work methods.
- Managerial responsibility.
- Much external professional contact.
- Excellent chance for feedback from work.
- Support and encouragement for learning from the management; and
- High probability that skills will be compensated through interesting tasks, better career possibilities or better pay.

According to Badat (2010), higher education restructuring, amongst other issues, aimed to improve higher education systems to meet the needs of a more and more technologically-oriented economy and to enhance the quality of teaching and learning.

### 2.10 Establishment of Universities of Technology (UoTs) in South Africa

Policies promulgated by the former regime created a complex higher education system in South Africa that was discriminatory and by the beginning of the 1990s, consisted of twenty-one universities, fifteen technikons and a host of colleges including teacher training colleges, agricultural colleges, and colleges of nursing (Maserumule, 2005). According to Maserumule (2005), Technikons continued as a system that was providing technical education.

The “technikon” system was invented by joining “techni” with “kon”. “Techni” originated from the Greek word “techne”, meaning skill; whereas “kon” is an Afrikaans word, which is corresponding to the English word “could”, an auxiliary verb suggesting the ability to do something (Maserumule, 2005). By linking these two words together, a uniquely South African term was developed to define career-focussed institutions of higher learning whose curriculum is of an experiential and vocational nature, with study programmes designed in a
manner aimed at producing graduates with the ability to readily put into practice their skills in the real world of work. As a result, the Amendment Act 43 of 1979 saw colleges for advanced technical education existing then become known as technikons.

Historically, the technikon education establishment has developed extremely unevenly along racial lines, with the four leading institutions geared largely toward training relatively high skilled labour in applied sciences and technology with a focus on engineering and the others concentrating on the training of semi-skilled black labour (Koen, 2003). New technikons with similar programme orientations were established from 1968, particularly in regions that were perceived as requiring consistent supplies of skilled labour. These included:

- PE Technikon
- Free State Technikon
- Vaal Triangle Technikon
- TSA as a distance education centre established in 1980
- Border, Eastern Cape, Northern Gauteng, Northwest and
- Mangosuthu Technikon.

Generally, black institutions were mainly established between 1979 and 1991. Ultimately, the number of technikons in South Africa were fifteen. The status of the technikons was greatly raised with the promulgation of the Technikon Act, 1993 (Act 125 of 1993). Koen (2003) alluded that Technikons/Universities of Technology are equivalent to universities of technology, technological universities, technical universities, or institutes of technology found in countries such as the USA, Britain, Australia, New Zealand and Hungary; the Hogescholen in Belgium and the Netherlands; or the Fachhochshule [sic] in Germany. UoTs are administered along with the other traditional universities in South Africa by the Department of Higher Education.

UoTs are well-known for their career-focused, hands-on approach to education and training. Their interface with industry has enabled them to structure courses with practical applications and to deliver graduates with knowledge that is immediately relevant in the workplace (Koen, 2003).

UoTs, as a specific education sector and as an integral part of higher education, have a unique and important contribution to make with regard to the challenges facing the country, particularly within the framework of reconstruction and development. The development of the
required human resources and appropriate expertise development through research and development is central to all activities.

The National Commission on Higher Education’s 1996 Framework for Transformation reported that technikons and traditional universities enjoy equal status but different emphasis: The traditional universities and technikons are intended to be complementary sectors with formally equal status, but with differentiated missions. According to Maserumule (2005), the binary distinction between the two sectors is based on the universities' role in general formative and professional education and basic and applied research, and the technikons' role in vocational and career education and "product related" research and development (Minister of Education, 1997).

Boughey (2010), suggested that the central reason for changing the designation technikon and substituting it with university of technology was based on the understanding of the contemporary higher education transformation discourses and debates, primarily necessitated by a need to conform to international trends and also to use concepts that are universally familiar. South Africa was the only country in the world that, since 1979, used the concept “technikon”. The intention of universities of technology is to provide and promote, in closer co-operation with the business and government sectors, quality career-focused and advanced technology education together with applied and development research to meet the developmental imperatives of a changing world (Maserumule, 2005; Boughey, 2010). Hence, designating technikons as universities of technology is much more than just a mere name change. It brings along a variety of implications and challenges, particularly insofar as the core responsibilities of institutions of higher learning are concerned, which need to be seriously considered and not just to continue with the business of the technikon as usual under the new designation (Maserumule, 2005; Naidoo, 2015).

Maserumule (2005), suggested that the UOTs’ education was already established in other countries and that the modern discourses and debates on the transformation of higher education sector was characterised by a variety of important aspects, which included the following:

- Career-orientated educational programmes comprised of outcomes-based and demand-driven curricula with multi-disciplinary subject packages.
- The development and generation of advanced knowledge and its integration with professional skills and technology; and
• Emphasis on the application of knowledge and the enhancement of professional expertise, competence, and practice.

The enhancement of professional expertise and competence refers to two broad issues: product competence and academic staff development. It appeals to the current practices and implementation of academic staff development in the UoTs.

The UoT as a system needs 'loose-tight' characteristics, the combination of autonomy and flexibility with commitment to a common goal. The origin of a UoT was based on a non-university higher education institution, focusing on vocational education. This indicates that the objective of the UoT system was developed to provide human resource skills in engineering, commerce, and industry. Most students were sponsored by industry for apprenticeship training (Koen, 2003). One of the defining features of the UoT system in South Africa has been its production of skilled personnel to meet the intermediate skills needs of the national economy. This has occurred primarily through the provision of national diploma and certificate programmes at Level Five of the National Qualifications Framework. In terms of this development, UoTs were deemed to be tertiary level institutions that provided theoretical courses with a practical, work-based training component. Koen (2003) further suggested that UoTs as a system of education were established through partnerships with Industry. The main concern was to increase skilled personnel. Teaching in them was highly influenced by industrial experience and expectations. The approach that was used for teaching in a UoT was more on disciplinary knowledge, Mono disciplinary - mode one (Van Aken, 2005). The transformation that occurred from Technikon status to UoT needed another approach to teaching that considers the necessary skills with a proper teaching approach. The UoT as a system needed to integrate various teaching methodologies as it grows, with all departments, academic leaders and supporting departments to grow with the transformation process.

In the case of UoTs, the transfer of skills was the main purpose. With growth and transformation, things have shifted towards a University of Technology status that demands more knowledge of teaching approaches. Hence programmes like academic staff development become relevant.

Similarly, many stakeholders within a system frequently both compete and collaborate (Morgan, 2005). These can be combined in a positive way to increase academic staff development. Morgan (2005) alluded that a system’s behaviour is largely driven by shared
interests and identity, information, processes, and relationships. Systems, and especially loosely coupled ones such as networks, are held together by some shared identity and meaning in the form of values, core beliefs, competencies, principles, purpose, and mission. Effective systems have coherence and shared understanding at their core. This combination of identity and meaning also helps to create the internal energy that in turn leads to the deeper capacity which is the foundation of systems performance. Leadership in a UoT system have a great deal to do with shaping values, purposes and mission (Morgan, 2005).

2.11 International trends in academic staff development

International studies show that measures have been adopted for academic staff development programmes to be essential and necessary (Steinert et al., 2016). Most Universities arrange some kind of support for new staff. The training of university teachers has become common practice in several countries, such as in the UK and in the Scandinavian countries (Lindberg-Sand and Sonesson, 2008). A noticeable feature in the pedagogical approach has been a transition from offering quite secluded survival courses to supporting sustained reflective practice. Moreover, teacher training might also be arranged as formal courses in the University system and treated as a part of graduate or postgraduate education. The organisational support surrounding University teaching is designed in many different ways, with multi-focussed aims (Lindberg-Sand and Sonesson, 2008). The question of whether such courses or activities should be mandatory for all new teachers is treated differently in different countries and may vary between institutions and disciplinary fields.

According to Steinert et al. (2016), these measures include the following:

a. Evidence-informed instructional design, which encompasses the integration of theoretical or conceptual frameworks; devotion to values of teaching and learning; and the use of numerous instructional methods to achieve diverse objectives.

b. Relevant content, which is appropriate to university education.

c. Experiential learning and prospects for practice and application, both within the intervention and the workplace.

d. Opportunities for feedback and reflection, which allowed members to reflect on their teaching and learning practices, values and beliefs.

e. Educational projects, which were most common in programs that extended over time and allowed participants to apply their learning in the workplace.
f. **Intentional community constructing**, both during and after the faculty development intervention, which included the provision of a safe and supportive learning environment, explicit encouragement of collaboration and networking, personal and professional growth.

2.11.1 European higher education

The professional development of the faculty in European higher education presents some valuable lessons for audiences around the world, as iterated by Yihong (2011). The development of Academic Staff Development initiatives in European countries started from the 1960s, but not in a very well-structured manner. In the 1970s, there was a growth in the number of programs, but not in much of an institutionalized setup. In the 1980s, policy started to push for formal academic staff development programmes owing to the need for higher education reform. They encouraged more institutionalized academic staff development initiatives. In the 1990s, these programmes started to flourish. European countries responded to quality and accountability demands for higher education. In the 21st century, academic staff development in most European universities was at a full-range of growth pushed by the Bologna process and establishing the European Higher Education Area and national and institutional needs to enhance higher education quality (Lindberg-Sand and Sonesson, 2008; Jacob, Xiong and Ye, 2015; Englund, 2018). In most European countries, there have already been quality development systems and initiatives connected with academic staff development to ensure university qualities in the 1990s, for example, Norway, Sweden, the Netherlands and UK (Yihong, 2011). Nearly all European countries that joined the Bologna process recognized that higher education quality was at the heart of the building of the European Higher Education Area (EHEA). Hence, each country made a policy for quality assurance and quality enhancement, which directly or indirectly affected academic staff development in the European universities.

- **Organizational structures of Academic Staff Development programs**

Many countries in Europe have a national association for promoting academic staff development work at the national level, e.g., SEDA in the UK, PEDNETT in Norway, PEDA-forum in Finland and RED-U in Spain. These national associations serve as a network centre for all institutional academic staff development, as a resource centre that disseminates the newest ideas and approaches for staff development. They also work as main organizers for conferences, workshops or various kinds of seminars and summer schools for either
university teachers or educational/academic developers. Some associations have regular journal or newsletters for exchanging ideas and practices in staff/educational/academic development work (Yihong, 2011). In UK, Sweden and Finland, there has been considerable national funding allocated to academic staff development research projects or practical programs either through the operation of the national association or through certain university staff development units, while in other cases, resources were given to staff development work from the university central administration (Yihong, 2011).

• Program delivery
In the European countries, ASD programmes use diversified approaches to deliver academic staff development programs. The most commonly used are: seminars, workshops, luncheon and mixed format of face-to-face sessions with online sessions, completely online based programs and peer-to-peer sessions.

2.11.2 Spain
The academic staff development unit in Universitat Politecnica de Catalunya (UPC) in Spain is the Institute of Education Science (ICE). ICE started university academic staff development work from 1992 with the advocate and promotion of the then Vice Rector. The unit developed a well-structured organizational model and thoughtfully designed programs for academic staff development at UPC. In 2003, the function of the unit was identified in the university announcement as a basic unit of the university, the director of which was a professor who was directly appointed by the rector and reports directly to the rector team. The mission of ICE is to contribute to the enhancement of quality education at UPC by means of promoting improvement and innovation in teaching and learning processes. The main goal of ICE is to provide academic staff with practical solutions and training for improving the quality use of ICT and the effective adoption of new methodologies so that the focus goes on the significant student’s learning (Yihong, 2011).

The Staff development programme at ICE has seven elective modules, namely: 1) Mentoring in Problem-Based Learning (PBL); 2) facilitating large group learning; 3) traditional and alternative assessment; 4) student evaluation of learning and teaching; 5) guidance for subject learning; 6) using ICT for enhancing learning; and 7) writing as a tool for learning. This shows that it has got a structure and proper coordination.
2.11.3 Sweden

In Sweden, support for Educational Development at Universities (EDU) was initiated in the 1960s. Activities comprised of offering pedagogical consultancy on an individual basis, as well as short-voluntary courses or workshops for academics with a special interest in developing their teaching (Lindberg-Sand and Sonesson, 2008). EDUs were structured somewhat later at the four old universities (Uppsala, Lund, Stockholm and Gothenburg). All universities established EDUs, but their sizes, position in the institutional organisation and tasks varied to a high degree (Lindberg-Sand and Sonesson, 2008). The three national commissions had suggested Compulsory Higher Education Teacher Training (CHETT). Ultimately, the Swedish Parliament decided on a new and extensive system for quality assurance and they also made teacher training compulsory. The Swedish Higher Education Ordinance of 2002 stipulates that in order to be granted permanent university employment, both senior and assistant lecturers are required to have completed CHETT, focusing university pedagogy, besides qualifications from the field of knowledge they will lecture in. The Swedish HE institutions were granted separate state funding for designing and arranging such courses. In this decision, however, there were no regulations concerning the size of the courses, the qualifications of the educational organisation offering the courses, or the learning outcomes to be achieved (Lindberg-Sand and Sonesson, 2008). Institutional practices also varied to a great extent. In the same government decision, Lund University was allocated a state grant of approximately €1,400,000 for a three-year project (the “Pilot project”), with the explicit task both of developing the content of CHETT and of informing other institutions of the progress of its work (Lindberg-Sand and Sonesson, 2008).
Three common features of CHETT in Figure 2.7 is to promote an action learning perspective, with the “reflective practitioner” as a starting point; and the courses were designed to contribute both to individual learning and to the improvement of practice. A student learning perspective was an additional basic common feature. It became apparent that CHETT should be both work-based and research-based and focus on a student learning perspective. The proposals were discussed and revised at four national hearings and a final report was sent to the government in June 2005 (Lindberg-Sand and Sonesson, 2008). The report recommended that:

- CHETT should be equivalent to 10 weeks’ full-time study.
- the qualifications should be regarded as part of the second cycle in the Bologna framework (EQF-HE);
- CHETT should be based on a set of general learning outcomes, to be further discussed by the Swedish HE institutions;
- show an understanding of student learning in HE, drawing upon relevant educational research.
- Plan, teach, assess and evaluate student learning in their own field of knowledge.
- Reflect on their professional approach as teachers and on values in HE, such as academic and scientific values, democracy, equality and equal opportunities.
- Show knowledge of society’s goals and regulations of HE;
- Collect, analyse and communicate experiences from their teaching and learning practice, along with relevant research, as a basis for the development of educational practice and professional growth; and
- Produce and present a report on teaching and learning in their own field of knowledge, drawing upon relevant educational theory and research.

Lindberg-Sand and Sonesson (2008) iterate that the CHETT project recommended that the qualifications aimed at in CHETT could be acquired in other courses or that by working in a scholarly way, institutions should adjust their rules and recommendations for teaching portfolios to facilitate the documentation of competence equivalent to CHETT.

2.11.4 Norway

Norway had a mandatory education for all teachers in HE for many years now (Lindberg-Sand and Sonesson, 2008). According to Lindberg-Sand and Sonesson, (2008), the Norwegian National Council of Universities decided some years ago that all newly-appointed university teachers should undergo basic educational training. The programme is equivalent to a three- to four-week full-time workload. In many other countries, teacher training is voluntary, or if compulsory, very short.

2.11.5 Netherlands

In the Netherlands, there is a two-tiered HE system, where teaching at higher vocational institutions requires a certificate of teaching competencies equivalent to at least 300 hours of pedagogic training, but teaching staff at universities are not officially required to have any teaching qualifications (Lindberg-Sand and Sonesson, 2008).

2.11.6 United Kingdom (UK)

In the United Kingdom (UK), they reported different responses to academic socialisation. Some of these academics appear to be ‘subverting’ research work and researcher identity. They found that the pressure to publish research was widely felt, even amongst staff whose
institutional context or contract condoned their subversion of research (Boyd and Smith, 2016). Furthermore, in the UK, national standards for teacher qualifications (Higher Education Academy (HEA), 2006) exist. Teacher training is required for occupation at some UK institutions, but this is not regulated at the national level, but somewhat stems from the UK quality movement and teaching accreditation schemes (Lindberg-Sand and Sonesson, 2008).

2.11.7 University of Oxford

The University of Oxford has a unique conception and practice of professional development. Professional development centres generally recognize themselves as part of university administration. Staff members of the University of Oxford OLI attach more value to their own academic profiles, evidenced by staff members who hold PhD degrees as well as have significant teaching and research backgrounds. According to the Head of Educational Development, a scholarly approach to professional development is more effective than a managerial or even a bureaucratic approach, especially at a university with a long tradition of academic autonomy. The credibility of a professional development programme is believed to depend heavily on how it is viewed by renowned university professors who are more likely to prefer technical assistance and skills training by other academics rather than by a staff member. This explains why a more homogeneous community of academics, such as exists at the University of Oxford, would consider educational technology “intervening” and prefer more personalized assistance.

2.11.8 The United States

Facilitating faculty professional development and improving teaching practices has been discussed for a long time in US higher education and Canada (Yihong, 2011). There was an initiative in the United States to improve post-secondary education, especially improving science, technology, engineering and mathematics (STEM) instruction, which shows the reasons why the professors wanted to be engaged in teaching professional development programmes so that they can interact with others interested in improving their teaching, in order to increase their teaching competence and to increase their autonomy with respect to their teaching and teaching identities (Yihong, 2011).

At the University of Miami, academic staff development practices for faculty learning communities started some time back (Jacob, Xiong and Ye, 2015). The university provided a
structured, multidisciplinary, year-long, and voluntary way for developing learning communities. Based on their self-reports, early-career academics who participated in the faculty learning communities reported a positive impact on their interest in teaching and in the scholarship of teaching, and experienced increased comfort as members of the university community (Jacob, Xiong and Ye, 2015).

2.11.9 Canada

In Canada, professional development programmes were provided to the faculty, mostly focusing on the improvement of teaching, mainly for the new instructors (Miles and Polovina-Cukovic, 2012). They targeted specific core competencies and the use of technology in teaching and learning (Steinert et al., 2016). There are positive changes in faculty attitudes towards teaching and knowledge about education principles and teaching behaviours. Professional development also increased faculty personal interest and enthusiasm, and improved their self-confidence, sense of belonging to a community, and educational leadership and innovation.

2.11.10 Australia

Macquarie University in Sydney, Australia, started the Teaching Induction Program (TIP) which was planned to provide professional learning chances to novice academics in the Faculty of Business and Economics, particularly sessional staff (Handal et al., 2011). This programme introduces novice lecturers to the guiding principles of tertiary learning and teaching and provides on-going support.

The TIP program in Macquarie University to be underpinned by a five-point philosophy as follows:

- Construct a culture of research-led teaching across the Faculty.
- Inspire reflective and collaborative learning environments through online media.
- Kindle the exchange of teaching ideas born from both theory and personal experience.
- Advocate induction within a disciplinary context; and
- Nurture a student-centred approach to learning and teaching.

Handal et al. (2011) argue that the establishment of systematic academic staff development at the faculty level is essential to promote higher standards of student learning and engagement to novice lecturers. At this novice stage, there is a need to support with a range of pedagogical tools to enhance the student experience within their discipline space (Handal
et al., 2011). Handal et al. (2011) suggest an induction programme that aims to introduce novice lecturers to the faculty culture and available resources that will allow them to grow positively and professionally as lecturers.

2.11.11 Latin America

Latin American countries such as Argentina, Brazil, Chile, Colombia, and Peru have been making an effort to improve the quality of faculty teaching. Hence, Jacob et al. (2015) alluded that resources have been committed to building teaching competencies in complex and diverse Universities.

2.11.12 Asia

Salary structures in many Asian universities are based on the number of teaching hours faculty members complete each semester/term/quarter. From a monetary perspective, this often puts professional development programme initiatives in direct competition with actual teaching activities. The lack of general incentives or reward structures further exacerbate the situation, making it even more difficult to motivate participation in professional development initiatives. Academic Staff Development programmes are under-funded and operate on lean discretionary budgets. Faculty members seeking academic/professional self-enrichment domestically or overseas have to resort to self-funding in many cases, which is another discouragement for participation (Jacob, Xiong and Ye, 2015).

2.11.13 China

Academic staff development in China consists of the tertiary teacher training system which was established in the mid-1980s (Yihong, 2011). This training has a three-tier staff/faculty training structure, mainly focused on entry training for the young staff, which was administrated by 2 state tertiary teacher training centres, one in Beijing and the other in Wuhan. There are 6 regional centres and about 70 provincial or municipal tertiary teacher training centers, each responsible for a number of universities in the region (Yihong, 2011). There were a series of clear national policy and requirements for all university entry staff to go through two-three weeks of intensive training programs revolved on studying four books, Educational Law and Regulation; Higher Education Pedagogy; Psychology of College Youths; Moral and Ethics Education for College Teachers. The training programs were
centrally designed and required, without much consideration of the developmental needs of each specific university.

The programs were mainly carried out in lectures and each individual was assessed by open-examination (Yihong, 2011). At the time of the training, the entry teachers do not have any university teaching and university working life experience. In China comprehensive universities have the autonomy to develop their own strategic planning and need university-based staff development to meet the changing needs of both the staff and the university. The Ocean University of China (OUC) set up a Center for Learning Support in 2007, also with the advocacy of the vice president of the university. The centre staff members were mainly from education, with an administration background, with some disciplinary experts as mentors to young staff working in a different framework encouraged by the university.

In Tsinghua University, the vice president pushed to set up the Center for Teaching and Research Advancement in 1998. Academic staff development was facilitated by disciplinary specialists, IT specialists, university administrators and pedagogical specialists. In the Capital University of Economics and Business (CUEB), it was the president of the university who brought ideas back from his visit to the Office of Teaching Advancement (OTA) at the University of Toronto in Canada and mandated the establishment of OTA at the university in 2008 (Yihong, 2011).

2.11.14 Hong Kong

Ho (2000) assert that in 1995, a conceptual change staff development programme was offered to academic staff of the Hong Kong Polytechnic University as an activity of the Educational Development Unit (EDU). The Programme was a non-award bearing short course which consisted of four 3-hour sessions scheduled in four successive weeks, with one session a week. It aimed at bringing about positive changes in the conceptions of teaching in the participants. It was planned with reference to a theoretical base provided by four theories of change: Theory of Transition between theories-of-action; Theory of Conceptual Change; Classical Theory of Social Change; and the Model of Teacher Change proposed. An analysis of the essential elements of these four change theories led to a model for conceptual change programmes which contains four effective elements: a self-awareness process whereby teachers undertake a self-reflection and clarify personal conceptions; a confrontation process in which teachers are brought to realise possible inadequacies in their existing conceptions and/or teaching practices and thus create an awareness for the need to change; an exposure
to alternative conceptions to provide a direction and a model for improvement; and a commitment building process to encourage teachers to engage in change and development. It took members through the following phases:

- Actively reflecting on their embraced conceptions of teaching and their actual teaching practices by filling out a Self-Reflection Document which asked open-ended questions about their teaching (the *self-reflection component*).
- Exposure to alternative conceptions of teaching through facilitator's presentations and through interaction with peers in a series of purposefully designed group discussions (the *exposure component*).
- Reflecting critically upon their own conceptions of teaching in relation to the range of alternative conceptions and thereby noting a direction for self-development (the *confrontation component*).
- Critically analysing their adopted conceptions of teaching and their teaching practices to identify inconsistencies that might exist (the *confrontation component*).
- Examining examples of good teaching practices which demonstrate the more elaborate conceptions of teaching (the *exposure component*).
- Re-designing the teaching of a topic that they taught, either to realise their espoused conception of teaching if there existed inconsistencies between it and their current teaching practices; or to put into practice the conception of teaching which they would aspire to for self-development (the *commitment building component*).

Ho (2000) explained the conceptual change approach to staff development: a programme consisting of two explicit parts:

**Part 1: How do you teach?**

- What is teaching?
- What is learning?
- What is knowledge? What knowledge would you like your students to learn?
- What do you want your students to be able to do at the end of the academic year?

**Part II: How does one enact teaching?**

*A Curriculum – What is taught?*

- What is the focus and emphasis of your teaching for this module?
✓ How do you go about deciding what to include in your teaching?

**B Teaching methods – How is the module taught?**

✓ What types of activity might characterize your teaching for this module?
✓ How do you usually start on a new topic?
✓ What do you usually do if you find that your students have misunderstood your teaching?

**C Assessment – How learning outcomes are measured?**

✓ What types of assessment/evaluation methods do you use to assess/evaluate your students?
✓ Refer to the assignments, quizzes, projects, examination papers, etc. that you have used to assess/evaluate your students in this module. Select the ‘typical’ or ‘important’ questions, think carefully about what you were trying to assess/evaluate. Did the questions test for: – memory of information? – solving problems with formulae or standard methods?

Participants spent 30 minutes completing the self-reflection document individually. In order to help with Part II, they were asked to bring along to the workshop some teaching materials and assessment questions that they had used for a particular module. Participants’ written answers to the self-reflection document formed a database which they used in a later activity to analyse critically their own adopted conceptions of teaching and their actual teaching practices.

The programme brought about visible conceptual change or conceptual development in two-thirds of the teachers who took part in the study. Consequently, all the ‘changed’ teachers improved their teaching practices in the following academic year, while none of those who did not change their conceptions showed a change in their practices (Ho, 2000).

**2.11.15 Reflections on the international trends**

International trends have shown that an effective academic staff development programme requires top-level academic leadership and academic support from the university system. It has been made clear that without top-level administrative support, universities often consider professional development programmes as secondary to the central research and instructional focus of world-class universities. In European universities, staff development work is closely
related to the quality initiatives at the universities as the advocate of the Bologna Process and the need to establish EHEA. Staff development work is connected with the strategic planning of the university and the developing interests of the staff. Universities have either direct policy or indirect promotion criteria for staff to go through development. In the exemplary cases and the emerging cases in China, there is a clear organizational structure and reporting line of the staff development work to the central university administration. Staff development work facilitates the crucial changes from teacher-centered to student-centered learning, with the teaching-oriented pedagogical methodology to learner-oriented, problem-based, project-oriented learning. The staff development unit does not only provide training programs for staff at the university, but also engages in various kinds of innovative learning and teaching research and practical projects.

2.12 Regional trends of Academic staff development

2.12.1 Africa

Due to the tremendous diverse situations of higher education in African countries, it is difficult to reach a generalization which can serve as a common understanding of academic staff development practices (Teferra and Altbach, 2004). In Africa, there is a remarkable need for academic staff development. The shortage of qualified faculty members is debatably the greatest challenge facing African Universities. This challenge is only exacerbated with the constant rise in higher education enrolments. The aging of higher education faculty members constitutes another challenge facing many African countries (Teferra and Altbach, 2004). At the University of Nairobi and the University of Ghana, 50% of academic staff members were over 50 years of age and nearing retirement. This insufficient teaching capacity, alongside inadequate teaching facilities and socio-economically irrelevant curricula, points to a typical obstacle that developing countries face in their quest to achieve optimal higher education teaching.

2.12.2 Egypt

The British University in Egypt (BUE), which was established in 2005, has been providing ASD from inception. Academic Staff Development focused on three key areas: a) Staff Induction, Probation, and Personal Development Advisors; b) Assessment, Marking and Feedback; and c) Teaching and Learning.
Numerous developmental opportunities are made available to staff so that they can increase their knowledge, skills and performance, which are essential to the University’s mission and strategic objectives (Jacob, Xiong and Ye, 2015). Staff Development Coordinators prepare Annual Staff Development Plans for their faculties which include the key elements and requirements for the different staff constituencies as outlined in the Annual Staff Development Guidelines, as well as other key points that may be identified. The plans are developmental and therefore ongoing revision is conducted (Jacob, Xiong and Ye, 2015). The University Staff Development Coordinator oversees the processes that inform the planning, delivery and evaluation of annual staff development. Academic Staff Development workshops/sessions enhance the effectiveness of the university teachers and their teaching practices. Moreover, the knowledge and techniques acquired through attendance at staff development activities give them the opportunity to implement their new knowledge and practices. Hence it can be concluded that staff development activities lead to the satisfaction of teachers at the BUE as it gives them opportunities to work together, to share ideas and good practice, to master new behaviours, develop knowledge and skills, to address students’ learning challenges and to incorporate new practices into their teaching routine (Jacob, Xiong and Ye, 2015).

2.12.3 Uganda

As for Uganda, the demand for quality teaching comes against the backdrop of declining education standards (Wabule, 2016). The Professional development status of teaching in a Ugandan public university revealed that accredited University education training symposia and community development activities were perceived to be important in improving teaching staff’s job performance (Jacob, Xiong and Ye, 2015).

2.12.4 Nigeria

In Nigeria, teachers who participated in academic staff development programs were more effective in their job performance than those who did not in terms of knowledge of job performance than those in terms of knowledge of subject matter, classroom management, the methods and evaluation of students’ work (Chabaya, 2015).
2.12.5 Ethiopia

Haramaya University in Ethiopia started offering Professional Development Programme (PDP) courses in instructional skills, ICT in education, course and program design and review, as well as assessment and quality issues in higher education in order to capacitate the university teaching staff (Seyoum, 2014).

2.13 Reflections on the African Region and academic staff development

The African region universities do not follow the same trends. The main reasons are based on the economic status of countries. Some public universities have clear academic staff development programmes, while others are struggling but try their level best.

2.14 Local trends of Academic Staff Development programmes

Ndebele (2014) suggested that the origins of academic staff development in South Africa was the concern about the potential of students to succeed in higher education in spite of their poor matric results and disadvantaged backgrounds. There was an enormous challenge, given that staff employed in the original SD had been used based on their expertise as teachers, and who were minimally qualified (sometimes only at honours level), to work with academic peers. Higher Education South Africa (HESA, 2011) proposed a plan for a National Programme to grow the next cohort of academics for South African Higher Education. The proposal was facilitated by the multidimensional crisis in attracting, appointing and retaining academic staff. Academic work seems not to be a particularly attractive career option due to relatively low salaries, expanding student numbers and sequential workloads, as well as institutional culture issues, amongst others.

HESA (2011) proposed emphasis on the need to ensure that the next generation of academics is intellectually and academically equipped. The challenges in this regard are severe and must not be underestimated. The HESA proposal alludes to demanding academic work more than ever before. Academics require pedagogy skills to improve educational programmes and curricula. The next generation of academics must be able to navigate and undertake their responsibilities within a complex context. Academic Staff Development programs were started based on some developments in the education system.
Staffing South Africa's Universities Development Programme (SSAU-DP) was designed as a support programme that will assist in meeting the development needs of emerging scholars, New Generation of Academics Programme (nGAP) scholars and existing or supplementary staff who might participate in certain elements of the programme. SSAU-DP formal courses focus on the development of the full range of competences needed by an academic in his/her work, including teaching expertise, research expertise and social engagement expertise. Teaching development activities include workshops and seminars on topics such as curriculum design, teaching in diverse classrooms, managing large classes, understanding and developing assessment tasks, technology and education, blended learning approaches and possibilities, developing and running tutorials and promoting interactive engagement. NGAP scholars are distributed in universities in South Africa.

2.15 South African universities’ Academic Staff Development initiatives

Some initiatives in various universities have been taken to capacitate newly-appointed academic staff. These programmes were developed and named differently, but with the same objective to empower newly-appointed academic staff. Some of these programmes are in the following Universities: In the University of KwaZulu-Natal (UKZN), they call their programme the University Education Induction Programme (UEIP); Rhodes University conducts a short course called the Academic Orientation Programme (AOP); the University of Johannesburg (UJ) calls it Professional Academic Staff Development (PASD); and at the Durban University of Technology (DUT), they conduct an Academic Induction Programme (AIP).

The following section interrogates each programme, how they are facilitated, planned and implemented:

2.15.1 The University of KwaZulu-Natal (UKZN)

The university recognizes its responsibility to ensure that the academic staff is supported to promote excellence in teaching and learning through their involvement in creative and innovative curricula, pedagogical strategies, assessment practices and postgraduate research supervision of the highest standards (Reddy, et al., 2016). Hence the development of the University Education Induction Programme (UEIP). The UEIP was intended to support the personal and professional growth of academics through four specialised modules: Supervising Research in Higher Education, Assessing Learning in Higher Education,
Designing and Evaluating Curricula in Higher Education and Teaching and Learning in Higher Education.

The four modules as stated above are facilitated by Higher Education Training Development (HETD) academics. Each module runs over three days (20 contact hours each) and is offered at least four times each year. According to Reddy, et al. (2016), the programme began in 2012 after approval by the Senate. Policy makes it mandatory for all new academics to complete all four modules during their period of probation (i.e., two years). All existing academics at lecturer level and below have four years from the date of approval of the policy (January 2012) to complete the modules. Academics are also required to enter the information about the modules on the Performance Management System. Exemption may be granted on the submission and assessment of a teaching portfolio for promotion purposes or having successfully completed equivalent courses. Academics who have won distinguished teachers awards are also exempt. A description of each module, designed to provide a starting point for academics to critically reflect on their practice, is provided below.

- **Assessing learning in higher education**: The module introduces participants to core principles of assessments in higher education and provides insights into the development and implementation of assessment practices. Participants are engaged in reflecting on common challenges and sharing good practices. Discussions are underpinned by relevant theories and literature. The aim is to emphasise the integral role that assessment plays in teaching and learning. Drawing on their experiences, group discussions, theory and literature on assessment, participants are encouraged to critically reflect upon different assessment strategies. By the end of the module, participants should be able to critique different forms of assessment; understand the effects of assessment on teaching and learning to design an assessment task for a specific purpose; and identify university policies impacting on assessment.

- **Teaching and learning in higher education**: This module emphasise on developing academic staff to enhance and theorise their teaching and learning practices. By the end of the module, participants are expected to critically evaluate their own teaching and learning ideologies and practices; propose and rationalise changes to their current practices; identify learning styles and a range of teaching strategies; and develop appropriate teaching and learning materials in their disciplines.

- **Supervising research in higher education**: This module provides the broad context for postgraduate studies and explores the varied facets of supervision in different
disciplines. Sessions are structured to enable vibrant discussions between participants from different disciplines, with different expectations and practices, as well as different levels of experience. Attention is drawn to the literature, with discussions focused on the fact that supervision structures and practices vary across disciplines in relation to the kind of research, the types of projects and the guidance that is set up. By the end of the module, participants are expected to be aware of the functions and responsibilities of the supervisor and supervisee; to have deliberated on research and supervision ethics; to identify relevant policies; and to devise supervisory strategies.

- **Designing and evaluating curricula in higher education.** The aim of this module is to promote professional development in relation to curriculum development in higher education and related to the university’s fourth goal. Participants consider various models of curriculum design with the intention of locating their own curricula within these. National and institutional policies are engaged, and principles of higher education curriculum design and evaluation are discussed, emphasising structural and ideological differences. By the end of the module, participants are expected to be able to discuss the effects of various policies on curricula; to articulate various models of curricula; to critique their own curricula; and develop a programme within a module template.

### 2.15.2 Rhodes University

The academic staff development initiatives offered by the Centre for Higher Education Research, Teaching and Learning (CHERTL) are underpinned by the belief that lecturers who are scholarly and critically reflexive will design courses and teach in ways which will create conditions for student success and equip academics to respond to calls for the transformation and decolonisation of universities and curricula. Academics new to Rhodes are strongly encouraged to attend an academic orientation programme offered before the start of each academic year. A short course:

- Conversations about Teaching
- Assessment and Learning

The Rhodes programme is offered as a short course by the short courses department.
2.15.3 The University of Cape Town

The New Academic Practitioners' Programme (NAPP) is a holistic programme of professional development for new academics at UCT with less than five years' experience in higher education. NAPP supports a theorized and contextualised orientation to teaching, learning, technology and assessment practices in the higher education classroom. Its main objective is to induct new academic staff through a holistic programme of professional development which includes their roles as researchers and educators. NAPP provides participants with the resources necessary to develop as educators, researchers and members of the UCT community, in order that they might fulfil their responsibilities as academics with confidence. It orients them to the challenges that academics face in the context of a changing higher education environment, in particular the challenges of transformation. It also provides them with a variety of opportunities for community building with colleagues across the campus. NAPP strives to develop critically reflective practitioners through a series of engagements rather than one-off events and encourages the establishment of communities of enquiry and practice through facilitation and networking. The programme enables new academics to become sensitive to the tensions and opportunities in higher education/across UCT, in order to develop meaningful responses to teaching and learning challenges in their unique contexts of practice.

NAPP is a five-day programme (40 hours) = 3-day residential retreat + 2 x 1 day on-campus workshops (during the vacation or in consolidation weeks). Various sessions on teaching, learning, assessment, technology, research, management, administration and community engagement are provided. During the residential session, participants also have the opportunity to socialize and network in the evenings. Participants are also expected to complete a teaching project to explore as part of a critically reflective journey. These projects do not place additional demands on the participants as they usually emerge out of their teaching challenges in their current teaching contexts and participants are encouraged to be more deliberate and conscious of their teaching and to be mindful in developing interventions. NAPP equips new academic staff with the necessary resources and skills, especially significant in the classroom and/or in departmental spaces, where most new academics seem to struggle to negotiate contextual complexities not encountered before.
In 2016, the NAPP programme was re-curriculated to respond to the 2015 student protests. This led to an increased emphasis on engagements on the concept of decolonization and the implications for classroom practice. NAPP’s programme now includes student presentations so that new academics understand the challenges that students face at the University. Participants have said that these sessions were informative and that learning from students allowed them to work with students’ challenges to improve their students’ experiences.

Generic staff development courses inevitably experience a tension between their generic nature and the disciplinary nature of academic staff at universities. Particularly in the case of teaching and learning, there is a need for achieving greater involvement of the academic departments in the design and presentation of NAPP. In light of the calls for the decolonisation of teaching and learning and scholarship, it becomes necessary to provide NAPP participants with context-relevant approaches to decolonisation.

NAPP, The Short Course on Teaching (TSCOT) is aimed at early and mid-career academics, with the strong aim of developing reflective practices in teaching, learning and assessment, as well as the professionalising of teaching through the concept of communities of practice. It is a semester long, with weekly contact sessions.

Current challenges are related to enabling academic staff to become better teachers. The improvement of teaching and learning at a research-intensive institution such as UCT still raises the issue of the subordinate nature of undergraduate teaching and learning vis-a-vis achievements in research. While significant improvement has taken place in the last five years, much work must be done in the area of the valorisation of teaching and learning at the university. This is especially necessary when the call for the decolonisation of the curriculum requires an informed response based on curriculum review; more sophisticated assessment practices; and better teaching and learning practices in the classroom. As usual, there is a tension between encouraging and mandating academics to undertake certain activities. While it is clear that compulsory activities are more often than not counter-productive, it is necessary to interrogate the parameters of accountability that individual academics have in relation to a ‘collective’ decision of the Senate to endorse specific goals in the area of teaching and learning.

2.15.4 The University of Johannesburg

The University of Johannesburg (UJ) prides itself on creating conditions that enable students who enter the university to succeed. Key to student success is the way in which learning is
facilitated. UJ suggest that in order to increase student chances of success, there is a need to build ‘educational expertise in the sector to enable the development and implementation of teaching approaches that will be effective in catering for student diversity. In line with this, the university established the Professional Academic Staff Development (PASD) to develop and support academics to advance student success through facilitating deep and meaningful learning experiences. There is sufficient evidence in the literature acknowledging that many staff in higher education are discipline experts but do not necessarily have the requisite educational expertise in teaching and learning. PASD plays an essential role in supporting academic staff to become better teachers. PASD creates an enabling environment for academic staff to take a more holistic view and interrogate their understanding of their disciplines, their curricula, and related pedagogical practices in order to provide students with epistemological access to their disciplines. More broadly, PASD serves as a springboard for collaborative engagement with academic staff in order to create opportunities for them to enhance their theoretical insights within the field of teaching and learning in higher education. This includes interrogating the specificities of teaching and learning in their disciplines, and acknowledging teaching and learning as a complex practice.

PASD offers the following services:

- Academic preparation for new staff
- Ongoing professional development for academic staff and tutors
- Discipline-specific workshops on curriculum, teaching and learning and assessment
- Teaching, module, and peer evaluations
- Individual mentoring or support for academic staff
- Teaching and Learning conferences and seminars on pertinent topics
- Portfolio development for career and promotion purposes.

The professionalising of teaching in higher education is globally prominent and academic development divisions play a critical role in this. In the UJ context, Professional Academic Staff Development (PASD) fulfils this role. PASD is a small division within the Academic Development Centre that provides developmental opportunities for academic staff, tutors, and academic Heads of departments. PASD plays a major role in enhancing teaching and learning in UJ, with a minimum staff compliment of seven permanent members (6
It is important to stress that the focus of PASD's work is developmental.

### 2.15.5 The Durban University of Technology (DUT)

At the Durban University of Technology (DUT), there is a centre responsible for ASD called the Centre for Excellence in Learning and Teaching (CELT). According to the DUT Academic Induction Programme (2017), CELT conducts a six-month programme for newly-appointed academic staff members with the following specific outcomes:

- Investigation of your practice through reflecting critically on and evaluating your teaching and learning exercise;
- Articulate the associations between learning, teaching and assessment;
- Explore the nature of education and information within your discipline and field;
- Use an appropriate range of student-centred learning and teaching approaches effectively and efficiently to work with big groups, lesser groups, and individual students;
- Usage of a variety of formative and summative assessment methods to assess student work and to enable students to monitor their development;
- Usage of a variety of self, peer and pupil monitoring and evaluation procedures; and
- Assess future growth needs and make a plan for continuing professional development.
This framework puts students at the centre of the programme, which starts by looking at the international content, national imperatives and the institutional policies and procedures.

2.15.6 Cape Peninsula University of Technology (CPUT)

Cape Peninsula University of Technology’s curriculum project to transform their curriculum, teaching and assessment practices is a project aiming to empower academic staff members. This involves academic staff members from different departments coming to the university to take part in the organised staff development course. The aim is to improve teaching and learning, according to Henard and Roseveare (2012). Therefore, a well-designed academic staff development course needs to be an outcome of a collective consideration on the quality of teaching that is associated with university values, identity, and academic staff members’ objectives. This approach requires stages/phases, conviction, motivation, and openness. It undertakes that not only individual academics are concerned, but also deans, heads of programmes and other team leaders who are involved with teaching and learning outcomes.

2.15.7 Reflection on local trends of academic staff development

In most academic staff development initiatives in the local universities, newly appointed academic staff members are expected to complete a teaching portfolio to explore as part of critically reflective learning. These portfolios do not place additional demands on the participants as they usually emerge out of their teaching challenges in their current teaching contexts. They are encouraged to be more deliberate and conscious of their teaching and to be mindful in developing interventions. These programmes equip new academic staff with essential skills, especially significant in the classroom and/or in departmental duties, where most new academics seem to struggle to negotiate contextual complexities in the new system.

2.16 Chapter Summary

This chapter reviewed the background of ASD and various types of ASD from many universities. Academic Staff Development refers to educational development or professional development as a broader concept concerned with the development and improvement of the quality of teaching and learning. The international, regional, and local trends of ASD have
shown different patterns and processes of academic staff development in universities in various countries. The variety of these can be seen as structured and unstructured modes. Universities in some countries offer short courses, while others offer a full programme. International universities have long started to engage their newly appointed academic staff members in ASD programmes. In the African regional context, some universities are trying their level best to engage their newly appointed academic staff members in ASD programmes. Local trends show that many universities have good ASD programmes that are developed to equip the newly appointed academic staff members. The origins of UoTs as a system of education in South Africa have shown a gap in the formal pedagogical training of academic staff members, since they possess a strong industrial experience for practical teaching.

The literature review has indicated that effective Academic Staff Development programmes are founded on the following principles: how teachers learn new teaching approaches, how teachers transfer new skills into the teaching space and how several models of teaching affect student learning in the academic, social, and personal spheres.
CHAPTER THREE

THE SYSTEMS APPROACH AND COMPLEXITY LEADERSHIP THEORY

3.1 Introduction

This chapter provides a comprehensive overview of the Systems approach and Complexity leadership theory as the theoretical framework that underpins this research. The Systems approach and Complexity Leadership Theory can be used as a pair because they share certain characteristics of particular relevance (Cartwright et al., 2006). The Systems approach is a systems theory to view systems from a broad perspective that includes seeing overall structures, patterns, and cycles in systems, rather than seeing only specific events in the system. This broad view attempts to identify the real causes of issues in organizations and recognize where to work to address them (Checkland, 1981; Jackson and Keys, 1984; Forrester, 1994; Flood, 2010; Cabrera and Cabrera, 2019). Moreover, Complexity leadership theory allows for an understanding of how successful organizations succeed in turbulent times. It does not focus on the leader as the only driving force for success. Instead, it situates an emphasis on the whole system of an organization including its social interactions and ways how to manage complexity (Uhl-Bien, Marion and McKelvey, 2007; Uhl-Bien and Marion, 2009; Baltaci and Balci, 2017b).

In this study the specific systems approach that is chosen is the part of Soft Systems Methodology (SSM). SSM has been described by Checkland and Scholes (1990) as “an organised way of tackling messy situations in the real world”. SSM promotes subjective understandings from the individuals involved, so that they can shape a more suitable future.

3.2 Systems approach – Soft Systems Methodology (SSM)

SSM emerged from an intense application during 30 years of action research (Checkland and Winter, 2006). They intended to generate methods, more capable than existing ones, to handle the complexity of the 21st century and associated problem situations (Checkland, 2010). SM stresses the relevance of the human aspect, which is typical in most problem situations (Checkland, 2000). The human aspect refers to any issue that arises from the interaction of people. SSM belongs to the class of interpretive systems approaches and applies a soft systems paradigm (Jackson, 2000).

This approach takes a holistic view of the UoT as a system. Thus focus is on the variables and how their interplay affects the characteristic being exhibited (Forrester, 1994). The
Systems approach synthesises the classical approach and the human relations approach to organisational management (Checkland et al., 2019). A systemic view is made up of hard and soft aspects of a problem (Jackson and Keys, 1984). The Hard systems approach is reflected by an objective view of reality, whereas the soft systems approach accepts that people construct their reality, hence requiring a reflection on perceptions and the way in which people operate (Checkland, 1981).

Senge (1990) defined the Systems approach as a discipline for seeing the full amount and a framework for interrelationships. This means that the Systems approach can be used as a lens to investigate organizational interrelationships. Literature suggests that the study of organizations like universities should be holistic and viewed as a system, in particular as a social-educational system (Flood, 2010; Checkland, 2012). Hence the systemic view is pertinent to unravel and understand relationships between the components of ASD in the institutional setting. In this case, academic leadership, academic support departments and newly appointed academic members, the process as an integral part of the system. Furthermore, Flood (2010) suggested that the relationships and links in the system are crucial.

A holistic approach offers a mechanism to help leaders respond to these growing organizational complexities and move leadership from a traditional bureaucratic model to a more adaptive model better suited for today’s dynamic environment (Nugroho, 2013). The mental models are of particular significance as they determine how a problem is approached. It is thus desirable to have methods in place to allow participants to jointly have the opportunity of expressing their views and opinions.

A Systems approach thus serves as a nascent method for the formulation of a framework for the exploration of academic staff development at Universities of Technology (UOTs) which focus on the soft aspects of ASD. Reynolds (2016) argues that the Systems Approach differs from traps in conventional approaches because it considers the following positions:

- Interconnections are not ignored.
- No assumption of linear causality.
- Reveals, acknowledges, and deals with diverse worldviews.
- Facilitates a holistic understanding of all aspects that contribute to a situation;
- Enables people to discover their own ways to handle problem situations by means of employing an organised process of interrogating and thinking,
• Unveils change and improvement possibilities; and
• Seeks stakeholder involvement.

Systems approach has been found generally useful to express the problem situations in the form of pictures and diagrams as well as in notes prose and collections of data.

3.2.1 Philosophy of Soft Systems Methodology (SSM)

Out of all the systems approaches, soft system methodology (SSM) was used as a framework for the study. SSM was constructed as a tool and a structure to organise thinking (learning in a situation) not as a representation of reality. The reasoning behind SSM is centred on modelling; the first model is a rich picture – unstructured model of the situation as seen by participants or stakeholders (Rose, 1997). SSM is set to work out the soft issues (subjectivity, learning and multiple views). The ontological status of SSM is lying in a socially constructed view and experiences of reality by participants, it’s epistemology stance as the exploitation of systems constructs to structure learning, and its reasoning strategy as that of model building and testing (Proches and Bodhanya, 2015; Mingers and Taylor, 2016). SSM is useful to describe the Organisational modelling (Checkland and Poulter, 2006). According to Reynolds and Howell (2010), SSM can be used to examine organisational change and an individual to manage different situations can use it. Checkland and Poulter (2006) as an action-oriented process of inquiry into problematic cases in which practitioners study their way from finding out about the condition and taking action to improve it. SSM takes purposeful human activity as its field of enquiry (Burge, 2015; Rooyen and Labuschagne, 2016). SSM is a learning process no apparent reason for theory construction.

Checkland (1981) devised SSM as a tool for systems requirements investigation. According to this view, SSM questions what and why of operations the system should perform. SSM aims at producing a set of feasible and culturally acceptable actions, which can improve the problem situation. The benefit of SSM is that it can model the different value-systems of people with an organisation (Reynolds et al., 2010). According to Checkland (1981), the investigator is not an expert, dispensing solutions, but a facilitator providing support to the corporate actors as they define their system’s purpose and functions (Reynolds et al., 2010). SSM is an interactive tool to make an explicit conflict of interest within a system (Mehregan, Hosseinzadeh and Kazemi, 2012).
This study infused Soft Systems Methodology (SSM) in a qualitative design. According to Checkland and Poulter (2006), SSM strives to learn from the different perceptions that exist in the minds of different people involved in the situation. According to Checkland and Poulter (2006), SSM is not only a methodology for a particular set-up study or project, and it is a mechanism that can be used to manage any real-world purposeful activity in an ongoing sense (Checkland and Poulter, 2006).

The ontological position of SSM is in an interpretative or socially constructed view of reality, it's epistemology as the exploitation of systems constructs to structure learning, and its reasoning strategy as that of model building and testing (Rose, 1997).

Creswell (2012) suggested that qualitative research is best used to explore a problem and develop a detailed understanding of a phenomenon. Information was collected through in-depth interviews and focus group interactions. In focus group interactions participants were engaged in the construction of a holistic, rich picture (Arnold and Wade, 2015; Proches and Bodhanya, 2015).

### 3.2.2 The SSM process

The SSM current four-stage process constitutes the core part of the logic-based stream of analysis and fundamentally describes a never-ending learning cycle (Martin and Holwell, 2010). The learning cycle has to be on-going because the world constantly changes (Checkland and Winter, 2006; Wang, Liu and Mingers, 2015). The SSM four stages will be followed in this study. Although one stage leads to the next stage, there is no obligation to follow them rigidly or sequentially (Checkland, 2010). The user can execute the stages concurrently, proceed iteratively or move backwards and forwards between them (Checkland and Poulter, 2006). Mingers and Taylor (2016) reported the use of the various elements of SSM. This implies that SSM is flexible some stages may not be merged. Some studies will be ended after defining the action, some after implementing it. This description of the cycle as activities (1) to (4) may give a false impression that are describing a sequence or linear progress of steps (Reynolds et al., 2010). Although nearly all investigations will be initiated by finding out about the problematical situation, once SSM is being used, activity will go on simultaneously in more than one of the stages.
This stems from the fact that real world complexity will always be the result of many interacting relationships. The SSM rich pictures are a better way to represent relationships than linear style. They enable both instrumental and cultural relationships to be captured (Mingers and Taylor, 2016).

3.2.3 Making Rich Pictures

SSM suggests that when arriving in a real situation to understand and find out the problem situation, it calls for a particular frame of mind in the user of SSM (Reynolds et al., 2010). The investigator needs to be sponge-like, soaking up as much as possible of what the situation presents to someone who may be initially an out-sider (Reynolds, 2016). SSM proposes that the investigator needs to hold back from imposing a favoured pattern on the first impressions, the enquirer needs to have in mind a range of ‘prompts’ which will ensure that a wide range of aspects are looked at.

Rich pictures form part of an approach to soft systems methodology, but they also can stand alone in their own right (Reynolds et al., 2010). The idea is to include information which could be regarded as “soft” (such things as people’s attitudes, roles, and assumptions) as well as “hard” or technical data.

Reynolds et al., (2010) suggested that drawing a rich picture is useful in itself because:

- It helps people to visualise and discuss their role in the organisation.
- It can be used to define the aspects of the organisation which are intended to be covered by the system.
- It can be used to show up the worries of individuals and potential conflicts.

Rich pictures are a graphical means of identifying differing worldviews to arrive at a shared understanding of an organizational phenomenon (Booton, 2018). Participants should be encouraged to draw not just figures but also contexts and interactions and to avoid using excessive text. The lack of strict rules about what sort of symbols, words, stickman or any other way of recording that can be used is deliberate (Booton, 2018). It is an attempt to prevent prematurely excluding things just because they can’t be neatly pigeon-holed, or only selecting certain kinds of evidence. Rich picture records anything that is of interest and sort out later what sort of themes, topics or issues the picture tells about the situation. (Reynolds et al., 2010).
3.2.4 Relevance of SSM for the study

This section explains the engagement of SSM in this study. It highlights the SSM features that seem important for this study. Since this study seek to explore the academic staff development programme for newly appointed academic staff members in Universities of Technology: A systems approach. Subsequently this study sought an in-depth understanding of academic staff development in the UoTs, SSM seemed particularly well suited, due to its emphasis on a holistic exploration of a problem situation.

There are two frequently used expressions in SSM, namely problem situation and worldview, needs to be clarified.

A problem situation is characterised by its messy, unstructured, complex, and ill-defined nature. It is composed of multiple, ambiguous and partially conflicting objectives and notions, various interlinked issues and people who perceive the problem differently (Reynolds et al., 2010). Checkland (2000) define such situations as “wicked” problem situations. The described notion of problem situations corresponds with the perspective of soft systems thinking.

Worldview describes an individual’s understanding of the world. This means the way humans perceive and construct their world and make sense of it, which is always in a manner comfortable to them. The concept of worldview implies the notion that humans have individual assumptions, values, perceptions, intentions, norms, beliefs, personalities, backgrounds and experiences, which shape and influence their respective worldview (Checkland, 2000). The worldviews of the newly appointed academic staff members are highly needed since they will give full account of the process.

SSM is valued for its ability to pay attention to underlying soft issues and diverse stakeholder perceptions as indicated by Burge (2015), as these aspects, thus far, appeared insufficiently explored. Moreover, its participative nature aligned with intention of rich stakeholder engagement. The ability of SSM to facilitate feasible and desirable improvements further explains its relevance to this study.

Gregory & Midgley (2000) for example, handled comparable challenges by applying SSM. They dealt with poor organizational cooperation and stakeholder groups who pursued various interests despite a common goal and who depended on each other, yet without belonging to one unit. These conditions are similar to universities of technology, where stakeholders are mutually dependent, and in principle want to collaborate, yet practices are unclear,
disintegrated and poor communication (Reynolds et al., 2010). Checkland (1997) has used SSM to work on a project with the National Health Service (NHS) (the public-sector health system in the UK), focusing on the NHS internal market. While he explored the views of people in other agencies as part of this study, his purpose was to gain insights into the NHS rather than to directly support multi-agency working. Gregory and Midgley (2000) showed that SSM application helped to address the causes of cooperation problems. Other authors confirmed SSM’s capability for situations characterized by conflicting interest and fragmentation (Checkland, 2000; Mingers and Taylor, 2016). SSM has been used to explore different perspectives so that people can gain insights into each other's thinking. This section introduced SSM and provided a rationale for its relevance to this study. The Systems approach recognizes that organizational leadership is central to the interconnections of elements, their properties and other factors that interact in them. The following section introduces the complexity leadership in a comparable way.

3.3 Complexity leadership theory

UoTs are complex organisations of interrelating departments, each charged with the ultimate accountability of providing for the educational needs of students (Bonnette, 2015 and Seyoum, 2016). According to Bonnette (2015), leadership can arise everywhere within a social system. It needs not be authority or position established, but instead a complex cooperative dynamic generated by adaptive experiences. This stance suggests that academic staff development should inculcate leadership skills if it is aimed at being proactive. There is growing thoughtfulness focusing on both the quality of teaching and learning at the university level throughout the world, as well as the growing force to ensure effectiveness (Devlin and Samarawickrema, 2010 and Seyoum, 2016). However, provisioning high-quality teaching and learning is the primary responsibility of academic leadership whose objective is to develop acceptable standards for academic work.

A variety of leadership theories have emerged recently to identify and understand activities that drive organizational effectiveness. The Complexity leadership has been suggested as a solution to rigid leadership theories that adapt to the status quo (Uhl-Bien and Marion, 2009). Complexity leadership theory is defined as the shift of leadership from the industrial age to the knowledge era. It operates as the interactive dynamic complex system surrounded by contexts of larger organizational systems (Uhl-Bien and Marion, 2009).
Complexity Leadership Theory (CLT) focuses on the whole system as it removes the linear causality (Uhl-Bien and Marion, 2009; Baltaci and Balci, 2017b). It further recognizes the dynamic interactions that take place within organizations as they change. It also creates innovation and evolves with a focus on complex relationships and network interactions rather than controlling, standardizing and autocracy (Uhl-Bien, Marion and McKelvey, 2007). The theory considers leaders as individuals who act in ways that influence the dynamic (internal interactions) and its outcomes (Uhl-Bien, Marion and McKelvey, 2007). Most leadership theories have largely focused on leaders: the actions of individuals with independent capabilities (Uhl-Bien and Marion, 2009). Leadership is more than individual skills and talent, it is a highly dynamic process that is a product of the way people interact within and across groups and teams.

CLT centres on identifying and exploring the strategies and behaviours that nurture organizational and sub-unit creativity, learning and adaptability. CLT recognizes three wide types of leadership, namely:

1. **Leadership grounded in traditional, bureaucratic views of hierarchy, alignment and control (administrative leadership):** There are two important aspects of administrative leadership: operational leadership and strategic leadership (Baltaci and Baltaci, 2017a). Operational leadership is accomplished through activities of employing and supporting staff, overseeing budgets and maintaining a positive workplace climate. Strategic leadership involves guiding the direction of an organization with the future in mind. Strategic leaders clarify purpose; inspire individuals to pursue a shared vision; and ensure that goals and outcomes are attained. Baltaci and Baltaci (2017a) alluded that effective administrative leaders engage in advocacy because they are future oriented and they want to have influence on external conditions that impact their programs. The academic leaders in UoTs fall within the two administrative leadership: operational and strategic. Deans are strategic leaders while HOD play the two roles of being administrative and operational. Deans in the strategic roles oversee many departments’ plans while HODs are supposed to plan and execute their plans in their departments. Working with newly appointed academic staff members is more a responsibility of HOD as academic leaders.

2. **Leadership that structures and enables conditions that are able to optimally address creative problem-solving, adaptability and learning (enabling leadership):** An organization's leadership structure determines how workflow, accountability and authority work together (Baltaci and Baltaci, 2017a). Hierarchical leadership employs a top-down,
pyramid-shaped structure with a narrow centre of power that trickles down to widening bases of subordinate levels. Non-hierarchical leadership flattens the pyramid to form a structure with decentralized authority and fewer levels. Effective organizational design applies the structure that is likely to be most effective in helping the organization achieve its mission (Baltaci and Baltaci, 2017a).

(3) Leadership as a generative dynamic that underlies emergent change activities (adaptive leadership). Adaptive leadership is becoming more important for most managers and administrators as the pace of change affecting organizations increases (Baltaci and Baltaci, 2017b). Adaptive leadership involves changing behaviour in appropriate ways as the situation changes. Baltaci and Baltaci (2017b) suggested that Adaptive leaders possess the following characteristics:

• Learn to recognize early warning signs of an impending crisis that can affect your organization; avoid the common tendency to ignore or discount these warning signs.
• Make a quick but systematic analysis to understand an immediate problem or crisis.
• Direct the response by the unit or team in a confident and decisive way but remain receptive to information and ideas from others about things you may have overlooked.
• Keep responses to a crisis consistent with the core values of the organization and high standards of corporate social responsibility.
• Plan in advance how to avoid serious problems and make contingency plans for coping with potential problems that cannot be avoided.
• Keep people informed about the nature of a major problem and what is being done to resolve the problem.
• Conduct a review session after a crisis ends to determine what was done well, what mistakes were made, and what lessons were learned.

Academic leadership is more inclined to possess cognitive and systemic thinking that includes the ability to understand how the various parts of the organization relate to each other: How changes in one part of the system will eventually affect the other parts and how changes in the external environment will affect the organization. A manager with a high level of these skills is able to develop a better mental model for understanding complex causal relationships (Senge, 1990). Cognitive skills are essential for strategic leadership and, as noted earlier, they are especially important at higher levels of management (Mumford,
Campion et al., 2007). Social intelligence involves the ability to understand the leadership situation, including political processes and social relationships.

Complexity Leadership Theory (CLT) focuses on emergent processes within complex systems and suggests that leadership needs to run at all levels in a process-oriented, contextual and interactive manner (Marion & Uhl-Bien, 2001). According to this idea, CLT emphasizes the importance of social interactions within organizations and also demonstrates the key role of the leader in enabling change. Leadership roles in academic institutions are quite diverse and are practised at different levels. Traditional senior executive roles (vice-chancellor, chief executive, president, vice-president) lie at the strategic top and resonate with executive roles encountered in other sectors. Academic leadership roles (deans and head of schools or departments or centres) fall within middle management. In contrast, the academic and administrative staff of various departments are seen to occupy the low level of leadership which is at the operational core and is often epitomised by module and course coordination, as well as research project leadership. Therefore, emerging theories describe leadership in higher education as ‘distributed leadership’ since it is dispersed across all levels and in different forms.

CLT recognizes the vibrant interactions that take place within organizations as they change, create innovation and evolve with a focus on complex relationships and network interactions, rather than controlling, standardizing and autocracy (Uhl-Bien & Marion, 2009). The interactions within a complex situation that is undergoing organizational change can be stressed because individuals respond to both external and internal forces as they struggle with their duties. CLT is a form of shared leadership in which the leadership position is not concentrated in one person, but shared amongst many (Uhl-Bien and Marion, 2009; Baltaci and Baltaci, 2017a).

In Classical Leadership Theory, most of the discussion arises on the relationship between the leader and the follower (Uhl-Bien and Marion, 2009). However, Complexity Leadership shows that the concentration is on the many and frequently recurring social interactions within a system. Therefore, anyone within the workplace can become a leader through their social capital. Promotion of interactions in both leadership theory and SSM, makes them complement each. Leadership theory looks at the human capital and SSM at the processes.

The leading front-runners in this educational system are the academic staff members that do the daily activities of teaching and learning. Tara (2010) and Clarke (2012) argued that an
essential feature of complex systems is that they cannot be estimated- nobody can anticipate or determine the conduct of a complex system. Complexity Leadership improves team performance, increases the ability of the organization to adapt and innovate and promotes quality outcomes(Uhl-Bien and Marion, 2009). The academic leadership plays a central important part in achieving the goals and the mission of the UoT as an organization.

3.3.1 Relevance of complexity leadership theory for the study

Leadership complexity theory focuses leadership efforts on behaviours that enable organizational effectiveness, as opposed to determining or guiding effectiveness (Marion and Uhl-Bien, 2001). This is the process for managing dynamic systems and interconnectivity. Newly appointed academic staff members in UoTs join the academia with the aspirations to grow through UoT interaction processes that are holistic. Their expectations are to be guided and interact as a learning process for new skills of trade. Complexity leadership theory is very important as a move away from reductionist perspectives that reduce holistic systems to isolated observations (Marion and Uhl-Bien, 2001). Hence complexity leadership theory approaches matters more holistically; relationship-oriented and promotion of effective networks. Instead of viewing leadership just as interpersonal influence, complexity leadership theory sees leadership as providing linkages to “emergent structures” within and among organizations.

Complexity leadership theory put the role of leadership as to create the conditions in which followers’ behaviours can produce structure and innovation. The transformational leadership address the behaviour of leaders in the organization. Marion and Uhl-Bien, (2001) argues that transformational leadership (1) enhances follower awareness and acceptance of the organization’s goals (broad direction), (2) encourages them to make their personal desires subservient to the needs of the organization or the team (facilitates correlation), and (3) activates their higher-order needs. For ASD in UoTs to be effective leaders have to consider their leadership practices and behaviours. According to transformational leadership, academic leaders are supposed to create enabling environment, enhance awareness and inculcate acceptance of UoTs goals by the newly appointed academic staff members.

3.4 Universities of Technology as a system

A system is defined as a commonly interacting or interdependent group of parts forming a unified whole (Arnold and Wade, 2017). The logic of the system is understood to integrate
people within the systems. A UoT fits this definition since it is formed by parts that interact to make a whole. These parts are individuals, departments and faculties that make a particular UOT and without these parts it cannot function. A university system may be reckoned to be a complex system, linked with ‘messy problems”, more especially in activities that are related to academic staff development (Green and Hardman, 2013). This suggests that academic staff development can be ill-defined. Firstly, ill-defined issues are characterised by the fact that ‘what’ and ‘how’ of the problem-solving and are not clear (Checkland, 1981, Jackson and Flood, 1991 and Bjerke, 2008). Secondly, ill-defined situations are better approached through a systems approach. This approach is known to bring together different components and enables them to construct dialectic engagements to address such conditions. It is further argued that the usage of a systems approach can assist in tackling complex situations and problems that cannot be quantified. Similarly, it is suggested that this approach can be useful for understanding inspirations, viewpoints, interactions and addressing qualitative magnitudes of the situation.

Within universities, many initiatives are being taken to change, improve and innovate (Kallenberg, 2020). These initiatives not only concern changes, improvements, or innovations in the educational (learning) process (innovations in lectures, modules, or curriculum), but also around the educational process (innovations in educational support or educational conditional processes). The employees, teams or departments are only involved in one part of a change or innovation process. Changes, improvements, and innovations benefit when people work together, cooperate and influence each other. The Systems approach suggests that all actors in a system should be involved in these initiatives to improve. Systems approach strategies will be dealt with in detail in the methodology chapter.

3.5 Chapter summary

The literature on the Systems approach and Complexity leadership has also been reviewed to interrogate how organizations like UoTs and their leadership play their role in ASD. This chapter offered a theoretical overview of literature findings which served as a foundation for the empirical research. The following chapter (four) is devoted to the research methodology used in the study.
CHAPTER FOUR
RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

This chapter examines the research methodology applied in this study. A clear and succinct description of how Systems approach was used to explore Academic Staff Development in two Universities of Technology in KwaZulu-Natal. This was done with academic leadership (Deans and HODs), academic support departments (teaching and learning support departments) and newly-appointed academic staff members. Academic leadership and academic support departments were engaged in semi-structured interviews and newly-appointed academic staff members in focus group discussion sessions. This chapter explains the philosophy that underpins the approach chosen: constructivism. The consequent choice of a qualitative approach is also outlined in detail. The chapter then explains the reasons for the adoption of a case study approach. It also provides an overview of the research site, research design, sampling and research instruments. These were semi-structured interviews and focus group discussions. Data collection and analysis is elaborated in the context of a Soft Systems Methodology (SSM). The chapter concludes with the ethical considerations.

4.2 Paradigm of the study: Constructivist approach

This study applied constructivism as the underpinning paradigmatic perspective, as it deals with the understanding that system features are an emerging character of activities of the whole and its components (Creswell, 2007).

The Constructivist approach is based on the understanding of the world of human experiences (Mojtahed et al., 2014; Survival, 2015). Constructivist is an ontological stance that asserts that social phenomena (Academic Staff Development) and their meanings are continually constructed by social actors (Bryman, 2012). In this case, newly-appointed academic staff members construct their knowledge continually. It implies that social aspects and classifications are not only produced through social interaction, but that they are in a continuous condition of revision. Interactions play a role in constructing knowledge about their duties. Epistemology and the ontological acceptance was that reality is socially constructed. There was engagement with participants as the study sought to understand the world in which they live and work. Stakeholders thus develop subjective meanings of their experiences of a phenomenon. According to Creswell (2014), implications point towards specific goals. These
Meanings are wide-ranging and manifold, which led the researcher to look for the complexity of views, rather than narrowing definitions into a few sets of ideas. Creswell (2014) argues that constructivism has many assumptions, namely:

- **Human beings construct meanings as they participate in the world, they live in.** Qualitative investigators tend to use open-ended questions so that the contributors can share their opinions.

- **Individuals engage with their world and make sense of it, constructed on their past and social viewpoints.** People are all born into a world of intellect given upon us by our values. Thus, qualitative investigators seek to understand the context or setting of the participants by visiting this context and gathering information personally. They also know what they discover, an analysis shaped by the researcher's own experiences and background.

- **The first generation of meaning is always social, rising in and out of interaction with a human community.** The process of qualitative research is mainly inductive, whereby the inquirer generates sense from the data collected in the field.

The goal of the investigation, then, is to rely as much as possible on the participants' views of the situation they are experiencing (Brooks and Normore, 2015; Ngulube, 2015). Constructivists believe that reality is constructed and that the experience is based on the knowledge of individuals acquired over time (Abdelsamie *et al.*, 2014; Schneider, Coates and Yarris, 2017). Constructivism is based on the following principles:

- Knowledge is not passively received but is built up by apprehending the subject. This principle knowledge cannot be transferred into students' minds, but students construct their meanings of the world or worldviews. Hence this approach suggests that newly-appointed academic staff members have some information: they are not blank, their mode one of knowledge production is relevant, hence they have been selected. They only need further engagement to their new trade - teaching and learning.

The meaning of cognition is adaptive and enables the learners to construct viable explanations of experiences. In this view, experiences of a phenomenon help a person to build his or her mechanisms to adapt or learn in a situation. Constructivism is premised on the act of learning, which is based on a process which connects new knowledge to pre-existing knowledge (Creswell, 2007; Marshall and Creswell, 1977).
Constructivism considers the connections and relationships of the contextual issues and how knowledge is constructed or learned. In this sense, a constructivist point of view is aligned with systems thinking. They both consider connections and relationships (Flood, 2010). Newly-appointed academic members learn in their new environment how to adapt and construct their knowledge on how they see things done and demonstrated to them.

Kivunja (2014) argues that paradigms are conceptual models or worldviews, or a mind-set that presents the researchers epistemological, ontological and methodological premises. The standard becomes more appropriate in complimenting the nature of the research question of the study. Kivunja (2014) considers a model as a shared worldview that represents the beliefs and values in discipline and that guides how problems are solved. According to this view of Kivunja (2014), philosophical assumptions about the nature of social reality – ontology and epistemology: the manner in which we know what we know is described within a paradigm. Kawulich (2012) also argues that epistemology investigates the nature of knowledge and truth. The concern is about: what are the sources of knowledge? How reliable are these sources? What is known? How does one know if something is correct?

The epistemological standpoint on the constructivist approach is that knowledge of reality is gained through social construction in language, ordinary meanings, tools and documents (Kivunja, 2014; Nutchey, Grant and Cooper, 2016). Constructivists believe that participants seek to understand the world in which they live and work (Creswell and Nebraska-lincoln, 2007). The questions become comprehensive and general so that the participants can construct the meaning of a situation in a discussion or interactions with other people. Creswell (2014) suggests that the researcher’s aim in social constructivism is to create a sense of (or interpret) the significance others have about the world. Other than starting with a theory (as in post-positivism), inquirers generate or inductively develop an approach or pattern of meaning (Creswell, 2014). The study uses qualitative research with a view to apply the Soft System Methodology (SSM) in the interpretation and making of meaning of data.

4.3 Theoretical framing: The systems approach- Soft Systems Methodology (SSM)

This study will be based on the Checkland (1981) and Checkland and Holwell (1998) generic systemic methodology process representation of systemic methodology Figure 4.1, which is generic to all systemic methodologies applied in this research. It accentuates exploring institutional inter-dynamics within an environment and a diagrammatic representation.
This framework emphasises a framework of ideas (F), which is engrafted in a methodology (M) (systemic) and applied to an area of concern (A), cyclically leading to iterations of learning (L). This should be the primary trajectory followed by the ASD process for ensuring rigorous and deep reflection to the process and in-depth understanding of ASD from a broad perspective. The framework is iterative and at every stage, multiple systemic conceptual tools can be used.

To engage with academic staff development in Universities of Technology (UOTs), this study drew on the Soft Systems Methodology as a lens to explore the experiences and understanding of the stakeholders. A systems approach is based on a paradigmatic viewpoint drawing on over 60 years of research, commencing with Von Bertalanffy (Ison, 2014). The systems approach comprehends that the world is organised into a whole and there are some patterns that underlie the whole which manage its function, and an understanding of these patterns has the potential to yield enormous changes to complex social problems (Checkland, 2012).

According to Checkland (2012), the three basic components that should be expressed by systemic research are theoretical and methodological pluralism, boundary critique and action for improvement. *Theoretical and methodological pluralism* stems from the understanding...
that different boundaries represent different theories. Different theories also mean different methodological approaches as these hold different theoretical assumptions. **Boundary critique** involves defining issues to be involved and actors to be consulted or linked at different stages and this takes into consideration power relations. Critical analysis on boundary judgements is important as it is the basis upon which ethical considerations come from, as different actions have different possible outcomes. Checkland and Poulter (2006) proposed that SSM, as a system’s thinking component, strives to learn from the different insights that exist in the minds of different people involved in the situation. Hence it can be engaged in order to develop a model for academic staff development for the UOTs.

According to Checkland and Poulter (2006), SSM as depicted in Fig 4.2 is not only a methodology for a particular set-up study or project, it is a mechanism that can be used to manage any real-world purposeful activity in an ongoing sense, following four different kinds of events. There is therefore a need for an analysis of these problems using a “forest” view, where the problem is viewed from many different perspectives.

![Figure 4.2 The SSM process (adapted from Reynolds, 2010:207)](image)

The SSM cycle as shown in Fig.4.2 emerged as its classic representation. It comprises four diverse kinds of activities:

**Stage 1** of SSM process is about **finding out** the real-world problem situation/ first experience in the situation (Checkland, 2000). The purpose of this stage is to start the inquiry
process by collecting information and carrying out a comprehensive overview of the situation under consideration. It finds out about crucial stakeholders, present issues, perceptions, relationships, and interactions. The researcher determines the research boundaries by defining the data collection techniques and the included stakeholder groups (Checkland, 2000).

**Rich Pictures** are diagrammatic representations of a situation’s entities, structures, processes, relationships, and issues. The rich picture analysis support the desired holistic insight and the intended determination of critical issues and relevant human activity systems. A Rich Picture constitutes an expressive illustration of a situation and supports its structuring (Checkland and Poulter, 2006). Ideally, it shows the relevant stakeholders, institutions, structures, components, issues and opinions and their interrelationships in a situation to reveal deficiencies, facilitates a common understanding and encourages discussions (Checkland, 2000).

**Stage 2: Conceptual models and root definition (RD)**

The aim of this stage is to identify and create a clear definition of the relevant systems to be modelled in the next SSM stage 3. In SSM terms, this definition is called *root definition*. A *root definition* is short written statement describing a *purposeful activity* (Checkland, 2000). A *purposeful activity* is described as a *transformation* process that involves doing something to achieve something else. A *root definition* requires the investigator to express the particular point of view that the models will adopt, which provides the reason or justification to carry out the transformation process; for this, SSM uses the term *worldview* or *weltanschauung*. There are always several *worldviews* that can be suitable for any single system. From a variety of critical issues identified in the problem situation, significant ones are chosen for the development of conceptual models of purposeful human activity systems (Checkland, 2000). A root definition specifically defines the activity system (Checkland, 2000). It clearly states the system’s purpose, its emergent properties, implicit assumptions, and the transformation that emerges from the implementation of this system (Checkland, 2000). From the root definitions, conceptual models are generated. The models contain the essential activities to realise the system as described in the root definition (Checkland and Poulter, 2006). The activities are linked in a logical manner (Checkland, 2000).
The root definition is supported by the mnemonic CATWOE which for naming the key stakeholders and aspects that need to be included in the root definition (Checkland and Poulter, 2006).

C – Customers: beneficiaries or victims affected by the system’s activities.

A- Actors: agents who carry out or cause to be carried out, the main activities of the system, especially its transformation.

T- Transformation: the means by which defined inputs are transformed into defined outputs.

W – Weltanschauung (worldview): an outlook, framework or image that makes this particular root definition meaningful.

O – Owners: some agency having a prime concern for the system and the ultimate power to cause the system to cease to exist.

E – Environmental Constraints: features of the system’s environment and wider system which it has to take as given (Checkland 2000).

Stage 3: Comparison and Structured Debate

This stage seeks Structured Debates about improvement options on possible changes (Checkland and Winter, 2006). Accommodation describes a situation in which all participants can live, in spite of their different worldviews and aims (Checkland and Winter, 2006). The changes need to be systemically desirable (Reynolds and Holwell, 2010). This means that they must be practically relevant and culturally feasible. This requires the consideration of people’s specific circumstances, history, relationships, and ambitions (Checkland, 2000). Generated models are matched against the present problem situation and serve as source for exploratory questions (Hanafizadeh and Mehrabioun, 2018). The debates are structured by means of assessing which of the model activities are already performed, how, by whom and why. Comparison guides the path towards appropriate changes that will be implemented in the following stage.

Stage 4: Action to Improve

This stage implements changes that were approved in the previous stage. In other words, a relevant human activity system is translated into action (Checkland and Poulter, 2006). The ensuing changed situation leads to a new problem situation. This demands re-investigation
and thus the SSM learning cycle starts again, which explains its continuous nature (Checkland, 2010). In this study this stage will be proposals for taking action.

4.4 Rational for SSM usage

Soft systems methodology (SSM), developed by Checkland and colleagues at Lancaster University, has attracted much interest within OR, Systems, and diverse other fields (Mingers and Taylor, 2016). It has been successfully used by Checkland and has stimulated considerable academic debate. One of its strengths is claimed to be its practical usability in a wide range of situations by people without technical backgrounds (Reynolds et al., 2010). SSM has been viewed as a problem-solving methodology; that is, one which leads to intervention and change in organizations. However, studies show that SSM is conceptualized as an enquiry process, or learning system, which might change peoples' perception and understanding without bringing about direct, problem-orientated change. It has also been used to ease a problem situation and to develop understanding on messy problematic situations. SSM stages also gives structure to complex organizational problem situations (Mingers and Taylor, 2016). It forces the user to look for a solution that is more than technical. It can also be seen as a rigorous tool to use in "messy" problems. It gives us an understanding of how humans try to take purposeful actions based on their own interpretations of the situation.

4.5 Research site

The study was conducted at the two Universities of Technology (UOTs) in Durban, eThekwini, KwaZulu-Natal. The two institutions were Mangosuthu University of Technology (MUT) and the Durban University of technology (DUT). They were both formerly categorized as Technikons. MUT is situated west of Durban at Umlazi Township. It was mainly constructed to accommodate the previously disadvantaged community situated around KwaZulu Natal and part of the Eastern Cape. It comprises approximately 11 586 students. DUT’s main campus is situated in the central business district (CBD) of Durban, eThekwini. DUT was formed in 2002 following the merger of Technikon Natal, ML Sultan and Indumiso College of education. Initially known as the Durban Institute of Technology, it has five campuses in Durban and two in Pietermaritzburg. In July 2019, approximately 33932 students were enrolled to study at DUT. The University is one of 5 technical institutions on the African continent to offer Doctoral Degrees.
DUT’s mission statement states, to: promote excellence in learning and teaching, technology transfer and applied research, external engagement that promotes innovation and entrepreneurship through collaboration and partnerships. MUT’s mission statement is to contribute in creating an equitable and prosperous Southern Africa in which individuals have the opportunity to achieve their full potential. In both UOTs in this study, teaching and learning is a major issue. The academic staff components of these two UOTs has a similar structure, from junior to lecturer, HODs for specific departments and Deans for faculties.

4.6 Research strategy

A qualitative approach is considered to be an appropriate approach for exploring Academic Staff Development in Universities of Technology. A qualitative research approach for this study was chosen because qualitative methods are useful in discovering the meaning that people give to the situations that they experience. Qualitative research methods were combined with SSM in an interactive manner. The following aspects explain and justify this combination:

- Qualitative methods facilitate the comprehensive insight, that is intended by SSM and thus the combination of both seemed promising for the purpose of this study.
- SSM and qualitative methods pertain to an interpretive paradigm (Holwell, 1997).
- SSM and qualitative methods intend to surface stakeholders’ underlying perceptions and the less obvious aspects of a situation (Checkland, 2000).

Bryman (2012) defines qualitative research as multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. Creswell (1998) defines qualitative research as an inquiry process of understanding based on methodological traditions of inquiry that explores a social or human problem. Denzin and Lincoln (2005) described qualitative research as a multi-dimensional research method involving an interpretative, naturalistic approach to the theme matter, aiming to develop, describe and/or give meaning to a phenomenon. This means that qualitative researchers study things in their natural settings and attempt to make sense of or interpret phenomena in terms of the meanings people bring to them (Marshall and Creswell, 1977). Accordingly, qualitative research deploys a wide range of interconnected methods and tools which are inclined to descriptive aspects of problems. This could include specific views, meanings, perspectives, or attitudes of a specific, pre-determined population group (small sample) in a natural setting (Creswell, 1998).
data obtained generally is word-based, which is coded and from which theory is extrapolated, interpreted and discussed. According to Denzin and Lincoln (2005), qualitative research provides the following principles:

i. **Qualitative investigation is holistic**: it looks at the larger picture and begins with a search for understanding of the whole. In this study, the views and opinions of the participants revealed a large picture of the ASD system in UoTs.

ii. **The qualitative method looks at the relationships within a system**. The views and opinions about the relationships between stakeholders were crafted in the questions for each case study.

iii. **The qualitative approach focuses on understanding a given social setting, not necessarily on making predictions about that setting**. The different methods of data collection—interviews and focus group discussions—were done to understand from different perspectives the existing situation in the UoTs about ASD.

iv. **Qualitative study design requires the researcher to become the research instrument**. It also incorporates room for an explanation of the researcher's prejudices and ideological favourites.

v. **A Qualitative study design incorporates informed consent decisions and is responsive to ethical concerns**.

<table>
<thead>
<tr>
<th>Theoretical stance</th>
<th>Ontology beliefs about the nature of being or reality</th>
<th>Epistemology belief about the nature and scope of knowledge (how we come to know the world)</th>
<th>Methodology based on paradigmatically different ontological and epistemological assumptions</th>
<th>Design overarching strategy for collecting data, such as: Experimental, Quasi-experimental, Random Controlled Trials</th>
<th>Emphases deductive reasoning, inductive reasoning</th>
<th>Methods techniques for collecting data, such as: Survey/questionnaire, Interview/Focus group, Document analysis, Observation</th>
<th>Instruments specific data collection tools, such as: a specific questionnaire or interview schedule</th>
<th>Analysis how the data are processed in order to make sense of them (to answer your research questions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>There is one objective reality</td>
<td>You uncover the reality — there is one true explanation</td>
<td>Quantitative Positivist, Objectivist, Empiricist, Nomothetic</td>
<td>Qualitative Hermeneutic, Interpretivist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contrasting stances</td>
<td>There are multiple realities</td>
<td>Meaning is culturally defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to Twining et al. (2017), the conceptual framework shows several assumptions about the nature of a qualitative study. Data collected through interviews and focus group discussions assists in describing people’s lived experiences. A qualitative framework investigates ultimately human experiences and applies an interpretive activity.

According to McCusker and Gunaydin (2015), qualitative research is characterised by its aims that are determined by the nature of the research questions and the subject being investigated. Qualitative methods generally aim to understand the experiences and attitudes of multiple participants (McCusker and Gunaydin, 2015). As a consequence, the research format used in an investigation should be seen as a tool to answer the research questions. This research sought to understand the experiences and perceptions of newly-appointed academic staff members with regard to the process of enhancing their teaching capabilities.

Qualitative research uses multiple methods that are interactive and humanistic and involve active participation by participants and sensitivity to the participants in the study (Marshall and Creswell, 1977). Researchers look for the involvement of their participants in data collection and seek to build understanding and credibility with the participants in the study. Creswell (1998) divides qualitative research into five main strategy types, which are: phenomenology; a biography; grounded theory; ethnography and case study. A case study was adopted. The case study is the most flexible of all research designs. It allows the researcher to retain the holistic characteristics of real-life events while investigating empirical events. A case study is an empirical inquiry which: investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Saxena and Saxena, 2019).

Maxwell (2008) also suggested six questions which researchers should consider in designing their research. These questions are about the what, why, when, how, where and who will be involved in the study. The table below details the questions that led the design of the research.

<table>
<thead>
<tr>
<th>Explanation of the six questions used in planning the research design</th>
<th>Question Indication</th>
<th>Details of this study</th>
</tr>
</thead>
</table>
What would you like to discover? | What? | Explore academic staff development programme for newly appointed academic staff members in universities of technology using systems thinking approach.

Why do this investigation? | Why? | To discover systems and models of academic staff development in universities of technology.

When should the study be conducted? | When? | During 2016 up 2019.

How will the investigation be done? | How? | Interviews and focus group discussions.

Where will the study be done? | Where? | In MUT and DUT.

Who will be recruited as study participants? | Who? | Academic staff members and academic supporting departments.

Table 4.2 Description of the planned research design 9adapted from Maxwell (2008:235)

4.7 The Case Study approach

A case study research approach aims to explore situations or cases that are of interest to the researcher or have the capacity to illustrate and inform a phenomenon regarding the issue or situation (Rose, 1997; Baškarada, 2009; Charles et al., 2015; Lewis, 2015). Case studies investigate a choice of what is to be studied; properties, actions, attitudes and social structures of characters, groups or institutions by applying one or more methods, such as participant observation, interviews and analysis of documents (Chabaya, 2015; Charles et al., 2015; Gustafsson, 2017). Furthermore, case study research is characterised by its explorative nature as an approach that facilitates the exploration of a phenomenon in depth within its context using a variety of data sources.

The principles of case study research convey an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research (Rose, 1997). Case studies highlight a detailed contextual analysis of a limited number of occasions or conditions and their relationships. Researchers have used the case...
study research method for many years across a range of disciplines (Rose, 1997). Social scientists, in particular, have made wide use of this qualitative research method to study contemporary real-life situations and provide the basis for the application of ideas and extension of methods (Rose, 1997). The Case study research method is an empirical investigation that explores a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which numerous sources of evidence are used (Creswell, 1998). Researchers use multiple methods and approaches to conduct case studies.

Exploratory case studies aid to gain insight into the structure of a phenomenon in order to develop models or theories. Case studies normally examine the interplay of all variables in order to offer as complete an understanding of an event or situation as possible (Creswell, 1998). This type of comprehensive understanding is arrived at through a process known as thick description, which involves an in-depth narrative of the entity being evaluated; the situations under which it is shaped; the characteristics of the people involved in it; and the nature of the community in which it is placed.

Case study research was chosen as it helped to provide a true picture of institutional practices and implementation in the context of academic staff development. This study focuses on the two universities of technology as different case studies.

4.8 Developing semi-structured interviews and focus group discussions

The interviews and focus group discussion questions design were informed by the literature review. Facts from the literature review which were found to contribute to the overall emergent character of Academic Staff Development were considered in the development of the questions. Afterwards, the researcher categorised the questions according to which research objective they most probably addressed. A sequence was then developed so that the questions would lead the interviews and focus group discussions on an orderly manner. Follow-up questions were developed when the need arose. A semi-structured interview and focus group discussion guide was developed. Open-ended questions were developed to allow participants to respond in their own words. Research questions and the drawing of a rich picture facilitated the development of a proposed ASD programme.

A pilot study was then conducted at DUT and MUT for both the interviews and the focus group discussions. The objective of the pilot study or pre-test was to ensure that the data collection
tools had good face validity. No changes to the data collection tools were necessary after the pilot study was done. Participants who were invited for the pilot study were not included in the study. Hilton (2015) suggested that a pre-testing of questions is a technique of checking that items work as intended and explicit by those individuals who are likely to respond to them. Pre-testing is conducted to test, validate and refine the developed data collection instruments (Perneger and Courvoisier, 2014; Cyr, 2016).

4.9 Target population and sampling

Academic leadership (Deans and Heads of Departments), academic supporting departments and newly-appointed academic staff comprised the sample. The target population for interviews consisted of the academic leadership category (Deans and HODs) based on their roles and responsibilities as leaders in their faculties and departments. Academic supporting departments were also included as they are relevant and contribute to the ASD process. The Focus group discussion population was composed of the newly-appointed academic staff. These were selected based on the advice of the reviewers who were experts in Academic Staff Development programmes. All participants in this study were purposefully selected (Purposive sampling) in both UOTs. Purposive sampling is considered to be a deliberate choice of participants due to qualities the participant possess (Etikan, 2016).

The population for the focus group discussions was a homogeneous group in the sense that all participants who were considered newly-appointed academic staff members within DUT and MUT were considered. Candidates who did not comply with the inclusion criteria as stipulated below were excluded from the target population. The sample was constituted as follows: A participant:

✓ had to be a relatively newly-appointed academic staff member in DUT and MUT, appointed within the last three years

✓ had to be employed as a newly-appointed academic staff member on any of the following post levels: junior lecturer, lecturer, and senior lecture

✓ had to be employed permanently and/or on a contract basis.
<table>
<thead>
<tr>
<th>Participants</th>
<th>Data collection</th>
<th>University of technology X</th>
<th>University of technology Y</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deans</td>
<td>Interviews</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Heads of Departments (HoDs)</td>
<td>Interviews</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Academic support department</td>
<td>Interviews</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Newly appointed academic staff members.</td>
<td>Focus Group Discussions</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
<td>14</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 4. 3 Sampling of participants
The data collection for this study comprised of the following stages:

**Phase 1.** The **interviews** were held with Academic leadership comprising of Deans of faculties and HODs and academic supporting departments’ representatives. These interviews were intended to understand their roles in Academic Staff Development programs and the support they give to newly-appointed academic staff members. Interviews enabled the researcher to explore complex concerns in detail by facilitating the personal engagement of the research in the collection of data. Interviews are known to capture the unique experiences and individual stories of the interviewees and produce data as words (Grove, Burns and Gray, 2013).

**Phase 2.** **Focus group discussions** with newly-appointed academic staff members were held to get the lived experiences and understanding of ASD. Cyr (2016) argues that focus group discussions are used to collect data at the individual level, group, and interactive levels. They are also proposed to make a group of persons with specific attributes provide qualitative information related to the research topic in a comfortable environment and through group discussions.

The SSM stages, finding out and expressing of the problem situation were incorporated in **focus group discussions.** The SSM stage 1; finding out and expressing the problem
situation were combined. Finding out stage was done in the focus group discussions. The expression of the problem situation was captured through drawing of a rich picture of their experience and the understanding of the current practice of Academic Staff Development in their UoTs (Checkland, 1981; Checkland and Scholes, 1990).

4.11 Data collection

4.11.1 Interviews’ data collection

Interviews were conducted with academic leadership and academic support departments’ representatives. The academic leadership consisted of Deans and HODs, while the academic support departments sent representatives of their departments. On the date of appointment with participants, a conducive environment in boardrooms and offices was used to conduct interviews with academic leadership and the academic support departments’ representatives.

The instrument used was semi-structured to allow for a further probing of issues. The interviews ranged from one hour to one and a half hours, not beyond two hours. Participants were asked to select the best possible time they could participate in the interview so that they would really concentrate on the process and questions. Participants were also assured of the confidentiality of their responses through the use of codes and that the information being collected would be used for academic purposes only. The interviews were recorded to provide an accurate record of the participant’s comments and were scheduled for thirty minutes for each participant.

The interviews were carried out on a one-on-one basis, mostly in the offices of participants where they could freely respond to questions. At the end of the interviews, participants were asked to describe possible models of Academic Staff Development that could be implemented by UOTs. Their inputs were integrated into the drawing of an SSM rich picture.

4.11.2 Focus group data collection

All the participants were invited (personally or by e-mail communication) to take part in the focus group discussion and were sent an information letter with details about the research, electronically or in hard copy. Appointments were set up and a reminder e-mail was sent before the interview. This e-mail included a copy of the consent form. Some participants read and signed the form and brought it to the session, whilst others read it upon entering the room and signed it there. The interviews were recorded to provide an accurate record of the participants’ views.
The following format was used during the data collection process for all four focus group discussions conducted:

- **Phase one:** The researcher welcomed the participants, gave a short summary of the intended research, and thanked them in advance for their time and inputs in each interview. The signed consent forms were collected. Each participant in each focus group were given numbers from 1 to 17 and they were displayed on a card in front of them (the transcription and applicable field notes were documented, using the letter assigned to the specific participant – no names were used).

- **Phase two: Introduction of the research topic:** Details as on the information letter (given to each participant before the focus group discussions) were briefly discussed.

- **Phase three: Setting of the ground rules:** Before the discussions started, ground rules were set by the researcher and the process was explained. They were also requested to use the numbers on the cards instead of their colleagues’ names.

- **Phase four: Asking the opening question:** The first question was posed to initiate discussions. Thereafter, the researcher prompted for further responses, as well as to clarify some responses where necessary. Research questions were tabled and discussed.

Each participant was also given a copy of the interview guide on the day of the interview in order to read the questions posed. About 30 - 50 minutes were scheduled to discuss each question and the researcher guided the interview in such a way that both positive and negative experiences could be addressed in response to the first question. The discussion room offered a comfortable space. The discussions were also audio recorded with the consent of all participants. A voice recorder was used in each session. After each session, the voice recordings were downloaded, clearly marked, and backed up. These were used for transcription purposes and to re-visit in order to gain a better understanding of the group interactions and non-verbal communication.

- **Phase five:** The group discussion sessions were also used for SSM stages. In the SSM sessions the researcher taking the lead in engaging the participants in discussions. The SSM session aimed at allowing participants to identify the issues regarding academic staff development (ASD) and present them in a rich picture. Participants
were informed that a rich picture does not need to be designed in a particular way, but
the common style drawings are stickman and other simple hand drawings. The
intentions are to evoke and record insight from a situation. An example of a rich picture
was circulated, and explanation was made about the rich picture.

![Rich Picture Example](image)

Figure 4. 2 example of a rich picture adapted from Reynolds and Holwell (2010:210)

The example above (figure 4.4) was presented as an example of how a rich picture is drawn.
This was shown in interviews and focus group discussions, to assist in drawing the rich picture
for this study.

Participants were asked to draw a rich picture of their views and understanding of Academic
Staff Development practices in their UoTs. In the focus group, the SSM rich picture drawing
discussion started with participants being asked to populate an SSM rich picture of the current
situation of academic staff development in their UoTs. Participants were given a blank white
sheet and were shown a sample (figure 4.4) of a rich picture and were asked to draw their
own representing ASD practices in their UoTs. They were then given the material required to
draw the picture, which included coloured pens and pencils. Participants were asked to be
as creative as possible and not to mind the quality of the drawing, but the need to reflect
issues was emphasised. The participants were given 30 minutes to draw the picture. After
this, a discussion, interactive process of the SSM which lasted between 20 and 30 minutes, was done to reflect on the picture. Purposeful activity models were generated during the interactive discussion process. Comparison and accommodation were generated from the collected data.

➢ Phase six: Closure: Once discussions came to an end and there were no further responses from any of the group participants, the researcher closed the discussions by thanking the participants.

Field notes were made on the day of the discussion by the researcher as discussions proceeded. The researcher listened to the recordings while reading the transcripts in order to increase the trustworthiness of the data, and corrections were made accordingly. The researcher also did the transcriptions of each session immediately after the session. Notes about the observations made during the discussions and on the group, dynamics were analysed with the participants’ responses. All the transcripts were used for analysis and interpretation.

4.12 Transcription from Audio to Text

Transcription of audios from the semi-structured interviews and focus group discussion process was done through listening to audios according to the length of the sessions. The transcription was first handwritten, and notes were added while typing the transcript. The transcript was edited twice for verification. There was then a third round which consisted of first reading the typed transcript which had been edited twice to verify themes raised so far and then listening for the last time to confirm, and add, if necessary, other themes which had not been picked up.

Coding for transcribed text: Codes Academic leader and Focus group were ascribed to interviews 1, 2 and focus group 1, 2 respectively to show which group the participant belonged to. During this process, there was coding of participants responses according to the order of the interviews and focus group discussions from 1-17. Furthermore, the research interview guide was used to aid coding to the transcription process as questions and answers were classified under each research objective as Q referring to question and A referring to answer. Additionally, coding was based on the objectives which were summarised as:

i). To explore how the academic staff development process can be contextualised for newly appointed academic staff members in the Universities of Technology.
ii). To assess how leadership at various levels interact with the newly appointed academic staff.

iii). To investigate the current practices of academic staff development and propose a model for newly appointed academic staff members in Universities of Technology.

4.13 Data analysis

Data analysis followed the phases of theme and subtheme identification. This was done to reflect and synthesis in an ongoing process which also facilitated learning for the researcher. Thematic data analysis was done to get a deeper understanding. The thematic analysis revealed relevant issues, underlying patterns, processes, and linkages that are relevant to the study. Data from the interviews and focus group discussion which incorporated SSM stages were carefully analysed to elicit findings. The transcripts from the interviews were examined along with data from the focus group discussion which incorporated SSM stages to enable thematic analysis.

Rich Picture Presentation: Data presentation was also aided by the rich picture which was analysed through thick descriptions as given by the participants who drew the rich picture. There was thus triangulation of data to build a coherent justification, and the converging of multiple data sources and perspectives to ensure the validity of the study. To also ensure validity of the research, the researcher recognised the participants role in the research. To ensure that bias was eliminated from the research, two external auditors who were not acquainted with the researcher were appointed to review the study. As experts in the academic staff development and systems approach respectively, they added validity to the process.

4.14 Ethical considerations

Ethical considerations were maintained in numerous stages of the research to ensure and maintain high ethical conduct. A formal application with details of the research to be conducted was sent to the Ethics Committee of the Durban University of Technology (DUT). The Ethics Committee of DUT approved and granted permission to conduct this research. After obtaining the full approval to conduct research from DUT, another approval to conduct research was further obtained from Mangosuthu University of Technology (MUT), Ref No: M10/18/22, since it was also part of the study.
The research process sought to inform participants in a non-deceptive way of what the research was about, which was done through full disclosure using a letter of information along with other relevant documentation to show that this was scholarly research. Participants were also informed that participation was voluntary, and they were asked to sign informed consent forms proving that they had agreed to be interviewed and participate in the focus group discussions. They were also made aware that there was no reward in either cash or kind being offered for participating in the research process. To maintain confidence and ensure participants could fully disclose the required information, anonymity was important. This was to protect the participant from any negativity or harm as a result of the research. Anonymity was thus ensured by making sure that names of faculties, departments and individuals were not mentioned when writing up the research, thus pseudonyms were used. Participants were also made aware that they were free not to respond to certain questions that they felt were invasive. They were also assured that they had the freedom to withdraw from the interview at any time, without any consequences to their withdrawing.

The information obtained was also made confidential as this was important so that participants would feel safe that the information, they had given would not be made public, which may result in physical harm, harm to participants’ development, and loss of self-esteem, stress, or victimisation during and after the process of research. Thus, all material was kept under control which included filing and locking away interview transcripts and focus group discussions on a secure place and writing the research in a way which did not identify participants. Interview material and participants contact details were also kept separately.

**4.15 Chapter Summary**

The inception of the chapter explained the philosophy that underpinned the approach chosen: A qualitative approach was outlined in detail. The reasons for the adoption of a case study approach was discussed. The chapter also explored the methods used for data collection during the different stages, including the systems approach SSM stages, finding out and expression of the problematic situation. The next chapter presents the analysis and findings of the research process.
CHAPTER FIVE
ANALYSIS AND FINDINGS

5.1 Introduction

The main purpose of this chapter is to present the analysis and findings of the study. It is structured in accordance with the four-stage SSM process. Themes and subthemes from the interviews and focus group discussions were merged into one table. A narrative is then provided with comments from the participants being included verbatim. The first section covers the Finding Out stage which identified themes and the rich picture then followed by Conceptual models and root definition. Subsequently the outcome of Model Generation and of Comparison and Structured Debate. The last contains proposals that might be relevant for taking Action to Improve. This is followed by a reflection on the four-stage SSM process. The chapter concludes with a summary of improvement suggestions which are potentially desirable and feasible concerning Action to Improve. The UoTs are described as **UoT – X** and **UoT – Y**.

5.2 Stage 1: Finding Out stage - Themes

Finding out led to the drawing of the rich picture and identification of three themes and subthemes. Figure 5.1 is the rich picture that was drawn during the finding out stage. Table 5.1 represent the objectives, themes, and sub-themes. The three themes that emerged are explained in more detail in the following sections.
Figure 5. 1 Rich Picture drawn during the focus group discussions
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Themes</th>
<th>Subthemes</th>
</tr>
</thead>
</table>
| 1. To explore how the academic staff development process can be contextualised for the newly appointed academic staff members in the Universities of Technology. | Facilitation and Initiation of Academic Staff Development | • Facilitation of academic staff development process  
• Initiating academic staff development interaction  
• Orientation of newly appointed academic staff members to academic process and procedures |
| 2. To assess how leadership at various levels interact with the newly appointed academic staff. | Role of academic leadership and academic support departments | • Academic Support departments  
• Leadership interaction with newly appointed academics |
| 3. To investigate the current practices of academic staff development and create a model for the newly appointed academic staff members in the universities of technology. | Current practices of academic staff development | • Academic support- Teaching Centre  
• Poor ASD practices  
• Promote academic development |

Table 5. 1 Objectives, themes and sub-theme
5.2.1 Rich Picture

The problem situation depicted in figure 5.1 rich picture, represents the complex situation of Academic Staff Development in Universities of Technology, as derived from the discussions during the data collection. The main intention of the SSM rich picture is the desire to understand human activity systems in a way that is meaningful to the actors in UoTs. The rich picture portrays the primary stakeholders, their interrelationships, and their concerns. As for this study, the stakeholders were academic leaders, academic supporting departments and the newly appointed academic staff members.

The rich picture depicted computers used by institutions as they post all their policies and other materials. Newly appointed academic staff members search and google information for themselves on the internet about academic issues. They complained about a lack of proper information sharing. Ladders represent inspirations and challenges to progress. Other stickmen represent supporting departments, students, and other colleagues within institutions. Newly appointed academic staff members complaining about a lack of support on teaching and learning activities. They also expressed dissatisfaction in line with the connections and interactions taking place. In UoT - X. “Each department is working on its own way”. Focus group participant 1. They expected interaction so that they can also express their weaknesses and get some tips from academic leaders and experienced colleagues. “We are swimming from the deep end” Focus group participant 2. This was said by the newly appointed academic staff in the focus group discussions. This suggested that newly appointed academic staff members in UoT-X feel that they are not assisted, as they expected some form of support in performing their duties properly. Newly appointed academic staff members have got mode one of knowledge production (disciplinary knowledge) but they lack the teaching skills. ASD programmes are meant to bridge this knowledge gap.

The rich picture also portrayed newly appointed academic staff members who do not see a proper structured plan for academic staff development. The process is not systemically structured. The facilitation of the ASD process seems to have some gaps. In UoT – Y, the conventional approach of ASD needs some review. In UoT – X, participants drew a picture that suggested the lack of a standard ASD programme that
can be showcased. Participants further explained that there is no support given to them in terms of Academic Staff Development in UoT - X. For ASD programmes to be successful, a structured plan needs to be in place and to be supported by academic leadership. At UoT - Y, participants said that the Academic Staff Development programme that they attended did not address most of their needs. Some respondents at both institutions felt that the programmes needed to be improved to cater for key aspects related to their work. This implies that UoTs must organize and structure their ASD programmes to support the newly employed academic staff members.

Organised Academic Staff Development programmes do not exist as a structured programme at UoT- X. Only some form of workshops which are also not well organized are the norm. At UoT-X, the picture thus portrayed a situation where there are no proper ASD programme in place, but just some activities that are meant to orient and train staff on certain aspects of the academic profession. The workshops themselves do not follow a particular sequence or plan, and there is no proper evaluation method to appraise staff on performance after induction; while at UoT – Y, the conventional programme does not assess current needs and consider where newly-appointed academic staff are in terms of academic development. Their needs are not recognized neither are they given a platform to contribute to the process of development. The programme is run as it was planned a long time ago, without considering the complex and dynamic changes that are occurring in academia and the wider economy. Participants thus expressed boredom induced by the familiarity of the process. This suggests that the conventional ASD programme in UoT – Y needs to be evaluated on some of its content and make it relevant to 1st century academic staff members. The newly appointed academic staff members in both UoTs seem not to be satisfied with how the Academic Staff Development process is managed. The whole point of a rich picture is to reflect as much going on as possible without favouring, pre-arranging, or presuming a particular point of view.

Engaging in the rich picture transformed an unstructured problem situation into an expressed situation and enabled the selection of relevant systems from the problem themes. The three themes emerged are presented as follows:

i) Facilitation and Initiation of Academic staff development
ii) Role of academic leadership and academic support departments
iii) Current practices of academic staff development
5.2.2 Facilitation and Initiation of academic staff development

This theme facilitation and initiation of academic staff development examined facilitation of ASD in UoTs. It has got three subthemes: facilitation of academic staff development process, initiating academic staff development interaction and orientation of newly appointed academic staff members to academic process and procedures.

5.2.2.1 Facilitation of the Academic Staff Development Process

In Both UoTs there are specific departments that facilitate academic staff development. “There is a department specific to that, but they do things as they go kind of. There is a department that does that, but it looks as if is still new or no capacity. They have invited somebody last time to talk to us, but I cannot tell you what the session was about. The programme was not fully touching on my expectations as a new lecturer or novice”. Focus group participant 4. The programmes are seen to be helpful at UoT - Y but can be tedious due to taking up an entire week. “I like their programme as much as is long, but it helps. This part is also interesting, but it takes the whole week away from your teaching duties. They cover have a good programme to help us understand”. This was said in the focus group discussions. “Their job is very good. But they block the whole week with newly appointed academic staff members. They work with them for a year”. Academic leader 8. According to all respondents (leadership, support, and new academics) at UoT-X, the facilitation of the academic development process was very unclear and inconsistent. There seemed to be a lack of clear planning and no clear guidelines in relation to orientation and induction from the institution to the academic support departments. Programmes were being cancelled at the 11th hour. “I think TLDC is supposed to attend to newly appointed academic staff members. But there is no clear plan that we know they are using. Focus group participant 1.

In one UoT the facilitation of Academic Staff Development is reported by all stakeholders to be not prioritized. “There is no formal process that I know of. Things just happen. We lean as we go in this Institution. We teach as we were taught. If you are lucky, you get a friend at least who knows something they you get help”. Focus
group participant 7. There is no clear persistent, continuous programme followed. “There are no clear guidelines in institution in our institution that talks to orientation and induction about teaching and learning”. Focus group participant 8. The academic leaders reported that they are not sure of the process that is followed for the initiation of ASD. “Just to start with there are no clear guidelines in this institution that talks to orientation and induction about teaching and learning.” Academic leader 1. The situation in that UoT suggests that the academic support department responsible for ASD is lacking the proper personnel or the department is still new, or still under construction. “There is a department specific to that, but they do things as they go kind of. There is a department that does that, but it looks as if is still new or no capacity. They have invited somebody last time to talk to us, but I cannot tell you what the session was about. The programme was not fully touching on my expectations as a new lecturer or novice”. Focus group participant 4. The newly appointed academic staff members’ concerns needed some attention since they can hinder positive development, thus installing negative outcomes that cannot be detected immediately but, in their products, later. In one UoT, the ASD conventional programme that is conducted for the newly appointed academic staff members seem not to have acceptable initiation processes, hence staff are left with unresolved issues related to induction. “If they ask us what we want. Or only invite us in those sessions that we have indicated interest. But if there is no body interested what will happen. I think they are good to have a planned programme and a schedule to follow”. Focus group participant 1.

5.2.2.2 Initiating Academic Staff Development interaction

There must be initiatives to bring together the older/experienced and new academics in order to exchange knowledge, experiences, and ideas. This can help academic development. “I have never seen initiatives that look at bringing old and new lecturers together, except in our departmental meetings and faculty board meetings”. Focus group participant 4.

Departmental meetings seem to be a place of interaction at one institution. “In my department the HOD interacts with us in the departmental meetings”. Focus group participant 1. HODs were active in engaging newly appointed academic staff members and explaining key aspects to them such as policies. “Only the HOD is active engaging
us on those issues”. Focus group participant 2. The HOD did have one-on-one sessions with newly appointed academic staff members, “It really helped me to work with him very early”. Focus group participant 3. There must be initiatives to bring together the older/experienced and new academics in order to exchange knowledge, experiences, and ideas. “I have never seen initiatives that look at bringing old and new lecturers together, except in our departmental meetings and faculty board meetings”. Focus group participant 4. “The interaction is minimal we only meet in staff meetings and in faculty board meetings”. Focus group participant 5.

5.2.2.3 Orientation of newly appointed academic staff members to academic processes and procedures

The focus group at one of the institutions was firm in relaying that there was no academic support in terms of teaching and learning. “But there is a lack of support by relevant departments to uplift teaching and learning in this institution. There is little or no support for teaching and learning except when during the award of best teaching and learning which is done through nominations and acceptance of nominees to compile their teaching and learning portfolio”. Focus group participant 9. There was no form of academic mentoring in the UoT-X. “There is no form of mentorship in my department. Not that I am aware of. No mentoring and coaching that we get even from senior lectures. Maybe is not their duty”. Focus group participant 10.

There is more focus needed in the following aspects: More courses needed in assessments and moderations. “There should be a short course on assessment and moderation, and facilitation”. Focus group participant 10. There should be initiatives to bring together both old and new lecturers for knowledge and experience exchange. “I have never seen initiatives that look at bringing old and new lecturers together, except in our departmental meetings and faculty board meetings”. Focus group participant 3. The Leadership of an Academic Department tries to assist HR in the orientation where possible. Each department has their own aspects/parts to deliver on for the new staff members and this was elaborated by focus group participant 3. “We do our part and HR their part. “That department takes care of the orientation together with Human Resources. I also do some final touch ups with them”. Academic leader 2. “HR notifies our department when they have got new people, they also run their orientation and induction. So, it becomes easy for us to know”. Academic leader 4.
5.2.3 Role of academic leadership and academic support departments

This theme examined the role of academic leadership and academic support departments in the ASD for newly appointed academic staff members.

5.2.3.1 Academic support departments

Academic Support departments were at the forefront. Their efforts entailed the following:

Organizes workshops for academics, introducing them to teaching strategies and methods. This takes a full week of duration. “They organize workshops for all academic staff members and introduce all kinds of teaching strategies and methods. Teaching Centre takes the whole week on teaching and learning. They have got a booklet that specify what they do. They have got a programme they follow”. Focus group participant 10.

Sessions are held by the department where new academics can share experiences and where guest lecturers are also invited. “There are also some special sessions for the academics. The institution also we hold sessions whereby first-year students’ lecturers come together and share their experiences. They have called us to a session that was presented by an invited guest from another university”. Academic leader 5.

According to one institution’s leadership, the academic support department focuses on teaching and learning due to the mandate from the Higher Education Review. “Teaching and learning was one of the main issues in the report that we have received last year from higher education review. I think our institution should be active in the area of academic staff development”. Academic leader 4. Academic support departments try to involve the HODs of the academic departments for validation and transparency purposes. “HODs were involved when TLDC started, they would invite them to their sessions with newly appointed academic staff so that we may know what they have covered in those sessions”. Academic leader 7.

They also include HR as HR deals with all employment-related issues. “The teaching Centre is facilitating together with Human Resources department. Teaching Centre deals with academic stuff and Human Resources with employment policies, benefits and all other related issues”. Focus group participant 6. The programmes are seen to be helpful at one institution but can be tedious due to taking up an entire week. “I like their programme as much as is long, but it helps. This part is also interesting, but it
takes the whole week away from your teaching duties. They cover have a good programme to help us understand”. Focus group participant 9. “Their job is very good. But they block the whole week with newly appointed academic staff members. They work with them for a year”. Academic leader 8.

The leadership at one institution did mention that they try to benchmark with other institutions, but it is not easy to advise the department per se (the assumption is that he/she is talking about the academic support department). “We may benchmark from other universities of technology but is not easy to advise that department”. Academic leader 8. According to the respondents, the current processes appear to be unorganized in the following ways:

The new academic staff respondents also felt that the academic support department did as things in an adhoc way with no structure in place”. Academic support department rep 4.

“There is a department specific to that, but they do things as they go kind of. There is a department that does that, but it looks as if is still new or no capacity. They have invited somebody last time to talk to us, but I cannot tell you what the session was about. The programme was not fully touching on my expectations as a new lecturer or novice”. Focus group participant 4. One of the institution’s respondents also felt that there was a need for more ‘dedicated’ and planned sessions. These sessions would appeal to their specific needs rather than a generic programme. The programmes should also be well-known to the institution. “If they were asking us what we want. Or only invite us in those sessions that we have indicated interest. But if there is no body interested what will happen. I think they are good to have a planned programme and a schedule to follow”. Focus group participant 1. “They should have a programme or a plan which is well known to everybody in the institution”. Academic leader 3.

5.2.3.2 Leadership interaction with newly appointed academics

The Dean has the overall responsibility of the entire faculty and therefore includes academic development as well. “The Dean is responsible for departments in his or her faculty. So, I take the overall responsibility on issues that relate on academic staff development, but I only see them as they come to my office and during planning and review of faculty board meetings”. Academic leader 5. The Deans are meant to be the ones to interact/give direction to HODs in relation to academic development. The Dean
at one of the institutions also tries to assist the Academic support – TDLC in its efforts toward academic development of new academics. “Maybe TLDC is still planning and organizing itself. In my department I am forced to help them with all their needs that I know of, but if the was a proper structured programme would assist”. Academic leader 5.

The academic leadership and academics also played a role in the instigation of the interaction with newly appointed members regarding Academic Staff Development. Results reflect the following: The academic leadership at both institutions seem to focus much on the subject files which is a critical aspect of academic life and career due to it covering pertinent issues relating to tests, exams, curriculum, and moderation etc. “The newly appointed academics, I take them through the subject files, and I try to explain in detail what is expected of them. I facilitate it myself in my department as an HOD. In this institution if you are not innovative you cannot survive. From the first day I take them through the subject file and try to show them everything, how to set a test question, drawing a memorandum, sending the paper for moderation with forms and all other issues as the subject file guides. At least I have worked on my sample subject file that covers most everything that they should know about their new duties”. Academic leader 5.

At one institution, the Leadership felt that it was a proactive move to use their own sample subject file beforehand to orientate the academics, rather than waiting for the academic support department. “At least I have worked on my sample subject file that covers most everything that they should know about their new duties. The department that is responsible for institutional academic staff development is there, but it works on its programme, so I do not wait for them I continue”. Academic leader 6. The leadership at one institution started with all basic academic issues. “I start from basic issues and until I encourage them to publish in our field”. Academic leader 2. Another leadership staff member kept an open-door policy so that any queries could be dealt with from new academics. “Some enjoy working with me while others want to experience problems and come back to me later. I use open door policy. I always tell them that I am always available to help”. Academic leader 7. Senior lecturers Apart from leadership, some senior lecturers assist new academics on academic aspects of teach, learning and other related matters. “In my department there is an active senior lecture who is keen to help me on academic issues, teaching and learning. I think he
is good he started from setting test and moderation. He is also helping me to work on my profile”. Focus group participant 1.

5.2.3.2.1 Guidance and coaching

However, many new academics (respondents) felt that they are not receiving the appropriate assistance in terms of academic development. There seems to be a lack of engagement with new academics. More formal sessions with HODs and senior academics are needed, and these should be done in the department. “If academic leaders – HODs and senior lecturers can have sessions for explaining all these important issues it could be better or academic support department helps. Some of these issues should start in departments for thorough discussions. You get advice on corridors about procedures”. Focus group participant 6. At one institution, the HODs and senior academics were not active in staff development and new academics had to make their own way/efforts. “HODs and senior lecturers are not active in academic staff development. Academic leadership does not help us at all we make our own way”. Focus group participant 2. Some HODs appear to be too busy to assist at one institution. “HOD has once tried to talk about coaching but was just in passing. The only academic leaders who is accessible is the HOD, but he is also busy with his own things”. Focus group participant 3.

5.2.3.2.2 Attachment to senior lecturers

Newly appointed academic staff members in some departments are attached to senior lecturers. However, as mentioned by leadership at UoT-X, there is no formal processes or procedure for Academic Staff Development. This means that there is no standard plan that is followed; thus, departments improvise. Perhaps it should be made part of the senior lecturer’s job description. “There is no proper procedure even there HODs try to make plans. If in the job description of a senior lecturer, it was put clearly that one of their duties is to coach and mentor newly appointed academic staff it will help”. Academic leader 3.

“Sometimes I ask other members to help, but there is no standing procedure to task senior lecturers, if there was a clear programme to follow things will be easy”. Academic leader 2.
Newly appointed academic staff felt that sometimes they get allocated subjects in a manner that is not appropriate, whereby they get subjects allocated that are not preferred by the older academics and hence are forced to teach that subject even though it is not in their line of expertise. “I found out two weeks before that I would be lecturing. I knew that I would be lecturing a particular subject, newly appointed academic staff get allocated subjects that are not preferred by older members, not those that are in line with their line or route of specialization”. Focus group participant 4.

5.2.3.2.3 More interaction with academics needed

According to the academic support departments in both UoTs, there must be more interaction between the academics, academic support, and newly appointed lecturers to mitigate problems and issues. “If there can be an active academic interaction with newly appointed lecturers that can reduce many problems”. Focus group participant 4.

5.2.3.2.4 Lack of platforms

Respondents at both institutions indicated a lack of platforms for interaction and engagement. There needed to be more sessions and platforms to discuss teaching and learning issues. “I so wish they can be many interactions sessions we can also know many things. There are no other platforms that I know of. I thought maybe there would be sessions whereby they will talk to us about teaching and learning issues”. Focus group participant 8.

Respondents at both institutions indicated that the academics and HODs seemed to be too busy to engagement with them regularly. “But we try to interact with those who are open. But academics are busy people. “With me it was very difficult I came when my HOD was very busy and I could see that she wanted to help me, but she was always in meetings. I am still struggling even now my HOD is busy, and my moderator does not have time, he just sign forms and let them go like that, maybe I am good I do not make mistakes”. Focus group participant 10.

Respondents, as newly appointed academics, had to try to make their own efforts to learn due to minimal interaction from the department. Some respondents tried to learn from other colleagues. “Some of the things we make our own way. And my moderator
does not have time, he just signs forms and let them go like that, maybe I am good I do not make mistakes. There is some interaction with other colleagues. We also talk to each other”. Focus group participant 11.

Some respondents interacted with other academics during tea-time. This can also be referred to as the water-cooler effect of knowledge exchange (Brzozowski, 2009). “There is some form of interaction in my department we sometimes talk during teatime and older guys talk about preparing for conferences, their abstract have been accepted. They make me too to be interested”. Focus group participant 12.

5.2.3.2.5 Informal interactions

Sometimes, new lecturers are attached to older and more experienced lecturers in order to gain practical knowledge and experience. However, this is not a formal process. “Some make friends with older lecturers and get orientation from them on tests, examinations and moderations. Sometimes I attach them to willing older lecturers to help them. Some older lecturers sometimes agree”. Academic leader 6. Some respondents interacted with other academics during tea-time. “There is some form of interaction in my departments we sometimes talk during teatime and older guys talk about preparing for conferences, their abstract has been accepted. They make me too to be interested”. Focus group participant 9. Newly appointed academic staff members showed an interest in interacting with experienced academics in informal sessions so that they can learn from them.

5.2.4 Current practices of academic staff development

This theme has three sub-themes, namely academic support- teaching centre, poor ASD practices and promote academic development.

5.2.4.1 Academic support - teaching centres

The academic support department organises workshops for academics, introducing them to teaching strategies and methods. This takes the duration of a week. “They organize workshops for all academic staff members and introduce all kinds of teaching strategies and methods”. Focus group participant 7. Newly appointed academic staff members showed dissatisfaction about the full week away from their teaching duties. “They have called us to a session that was presented by an invited guest from another
Focus group participant 5. The academic Support Departments, also referred to as Teaching centres, (TDLC/TLC) provided the following orientation support to new academics. As asserted by the academic leadership at one institution, the academic support department should cover the key area of providing academic materials such as subject files and study guides, as well as cover issues related to test and exam processes. “But the academic staff development process is for the academic support and their departments. Academic support should be covering study guides, learning materials, subject files and tests and examination issues. Departments should help them on curriculum issues Human Resources and TLDC, are there the ones supposed to take care of that and the respective departments also should be playing their role since the newly appointed academic staff are supposed to set tests, assignments and examination”. Academic leader 5. At one institution, the academic support department appointed education specialists to teach and assist new academics in compiling their teaching portfolios. “There are some education specialists in our department who work with newly appointed academic staff to develop a portfolio. This portfolio is about teaching practices. Some newly appointed lecturers comply while some take their time to finish the portfolio. It is supposed to take the whole year compiling it”. Academic support department rep 1.

5.2.4.1.1 Focus on teaching and learning

There is more focus needed in the following aspects: More courses needed in assessments and moderations. “There should be a short course on assessment and moderation, and facilitation”. Focus group participant 10. There should be initiatives to bring together both old and new lecturers for knowledge and experience exchange. “I have never seen initiatives that look at bringing old and new lecturers together, except in our departmental meetings and faculty board meetings”. Focus group participant 3. The issuing should first start to define themselves in relation to their context and the offerings thereof. This will then allow them to align their processes accordingly. “Every institution has its values and things. So, I would advise them to understand the context that they are in but define themselves according to what they want to contribute within this context”. Focus group participant 5. As mentioned above, some newly appointed lecturers do get attached to senior lecturers. However, as mentioned by leadership at one institution, there is no formal process or procedure for this. This means that the
processes is not guaranteed. Perhaps it should be made as part of the senior lecturers’ job description. “There is no proper procedure even there HODs try to make plans. If in the job description of a senior lecturer, it was put clearly that one of their duties is to coach and mentor newly appointed academic staff it will help. Sometimes I ask other members also to help, but there is no standing procedure to task senior lecturers, if there was a clear programme to follow things will be easy”. Academic leaders 4. However, some academics felt that sometimes they get allocated subjects inappropriately, whereby they get subjects allocated that are not preferred by the older academics and hence are forced to teach that subject even though it is not in their line of expertise. “I found out two weeks before that I would be lecturing. I knew that I would be lecturing a particular subject. Newly academic staff get allocated subjects that are not preferred by older members, not those that are in line with their line or route of specialization”. Focus group participant 1.

5.2.4.1.2 Benchmarking

The leadership at one institution did mention that they try to benchmark with other institutions, but it is not easy to advise the department per se (the assumption is that he/she is talking about the academic support department). “We may benchmark from other universities of technology but is not easy to advise that department”. Academic leader 8. According to the respondents, the current processes appear to be unorganized in the following ways: According to all respondents (leadership, support, and new academics) at one institution, the facilitation of the academic development process was very unclear and inconsistent. There seemed to be a lack of clear planning and no clear guidelines in relation to orientation and induction from the institution to the academic support departments. Programmes were being cancelled at the 11th hour. “I think TLDC is supposed to attend to newly appointed academic staff members. But there is no clear plan that we know they are using. They call them in an unorganized manner. There is no programme for academic staff development. Last year one of the newly appointed academic staff members said that they received an email inviting them, but the workshop was cancelled”. Academic leader 1. “Just to start with there are no clear guidelines in this institution that talks to orientation and induction about teaching and learning. To answer your question, I think TLDC is the main department to conduct academic staff development in this University
The new academic staff respondents also felt that the academic support department did as things in an adhoc way with no structure in place”. Academic support department rep 4.

“There is a department specific to that, but they do things as they go kind of. There is a department that does that, but it looks as if is still new or no capacity. They have invited somebody last time to talk to us, but I cannot tell you what the session was about. The programme was not fully touching on my expectations as a new lecturer or novice”. Focus group participant 4.

5.2.4.1.3 Have dedicated planning and sessions

One of the institution’s respondents also felt that there was a need for more ‘dedicated’ and planned sessions. These sessions would appeal to their specific needs rather than a generic programme. The programmes should also be well-known to the institution. “If they were asking us what we want. Or only invite us in those sessions that we have indicated interest. But if there is no body interested what will happen. I think they are good to have a planned programme and a schedule to follow”. Focus group participant 1. “They should have a programme or a plan which is well known to everybody in the institution”. Academic leader 3.

5.2.4.1.4 Needs improvement

Some respondents at both institutions felt that the programmes needed to be improved to cater for key aspects related to their work. “It is the same with me I have learned many things in that programme. I think they need to improve there and there especially to know which areas that we need more. I so wish I attended a session on academic development, they can unpack most of the things that relate to my work as a lecturer”. Focus group participant 10. They should also make the programme more attractive, rather than long and tedious. “If they can make it to be more attractive rather than so many days of learning”. Focus group participant 2.

5.2.4.1.5 Poor ASD practices

However, according to the respondent (new academics), the current practices of academic staff development was poor. This was classified in the following sub-themes:
The leadership at one institution felt that the ASD programme run by the academic support department was not being well received by new academics. This was for the following reasons: The newly appointed academics did not seem satisfied with the academic staff development programme. “I would say there is a Programme for academic staff development. That department is responsible for all the newly appointed academic staff members. But when I ask the newly appointed staff, they seem to be not satisfied with how things are done there”. Academic leader 4.

According to the leadership, new academics’ needs were not taken care of. “They say their needs are not taken care of”. Academic leader 4. They also found the programme to be boring. “The department runs a programme that is boring to them”. Academic leader 5. At one institution, the respondents indicated that the orientation was generic and did not relate directly to their needs and key issues. “But the orientation and induction programme does not talk to our needs, and it generalises on many issues and everything”. Focus group participant 4. There was a need for more evaluation of the academic development programmes, and this should be done from the feedback of the respondents. Some new academics (respondents) at one institution found the current academic development programmes to be uninteresting and the issues discussed did not relate to them. “Their programme is sometimes not interesting. If they can ask to indicate what we are interested on, and they help us there. But they are long and some of the issues do not talk to us”. Focus group participant 1. The new academics at one institution felt that they receive very little assistance in the form of mentoring and coaching. They have to rely on their own knowledge and skills. “Currently we get very little assistance. I know my discipline but how to teach effectively it takes knowing different methods, but I teach as I was thought. There is no form of mentorship in my department. Not that I am aware of. There is no coaching and mentoring I have received; I was thrown in the deep end”. Focus group participant 3. Respondents at one institution also felt that there should be a needs assessment done so the institutions can focus on the pertinent issues of academic development required by the new academics. “If I was an adviser, I will advise that they conduct workshops, but they start with the needs assessment so that they can know what we need. I think that can help us a lot”. Focus group participant 8. Respondents from one institution conveyed that the institution should be cognisant of current challenges facing the institutions such as large classes, diversity of students and technology-related
challenges. This must be taken into account when it comes to academic development. “These days there are many challenges for universities of technology, big classes, different students and technology. So, we need a lot to be effective”. Focus group participant 7. As mentioned in a previous node, there was need to benchmark with other institutions. “We may benchmark from other universities of technology but is not easy to advise that department”. Academic leader 5.

5.2.4.1.6 Need for more discussion platforms and opportunities

There was currently a lack of discussion platforms across both institutions where new academics could raise their concerns and needs. Hence, more platforms were needed so academic issues can be discussed openly and advice and guidance can be sought. This should become part of departmental initiatives. “If there can be open discussions maybe during teatime to get advice on teaching big classes, how to set questions and mark them, marking takes a lot of time. I so wish I can ask somebody to do it for me. Now that I am part of this engagement, I am so interested that other similar platforms can be created where we will talk about our duties as newly appointed academic staff. In our departments we are always closed no open talk where we can learn from other colleagues and know what they are doing. I so wish we can have sessions in my department where we can talk about teaching and learning experiences. Or else it can be arranged by the relevant department. I so wish that there were sessions delegated to academic development. We can ask all questions and we get proper guidance. Maybe in other places there are sessions that deals with academic staff development issues”. Focus group participant 3. There must be initiatives to bring together the older/experienced and new academics in order to exchange knowledge, experiences, and ideas. This can help academic development. “I have never seen initiatives that look at bringing old and new lecturers together, except in our departmental meetings and faculty board meetings”. Focus group participant 4.

5.2.4.1.7 Promote academic development

One institution tried to promote academic development by sending their academic staff to other institutions for added development. “We are currently sending our academic staff members to Rhodes University and University of KwaZulu-Natal. But most of our lecturers have attended at Rhodes University”. Academic support department 3. Such
development also included sending staff to do a PGDHE diploma, which was a well-rounded qualification relating to all duties of an academic. “The curriculum for the post graduate diploma in higher education is relevant is talking to all duties of an academic staff members in the universities. The institution is funding the post graduate diploma in education. The only problem is that, only those who want to enroll is not compulsory”. Academic support department rep 2.

5.3 Stage 2: Purposeful activity models

The aim of this stage is to identify and create a clear definition of the system to be modelled in the next SSM stage 3. The findings that emerged from the analysis of the themes and notes from the focus group discussions during the drawing of the rich picture revelled the following soft issues:

- Lack of academic support
- Lack of institutional mandate on ASD
- Poor interactions
- Lack of discussion platforms
- Lack of mentoring and coaching by the academic leadership

5.3.1 Root definition and Conceptual model

The Root Definition (RD), CATWOE and conceptual model of a system that seeks to promote academic staff development programme in the universities of technology. The creation of a root definition is supported by PQR formula. Do P, by Q, to help achieve R, where PQR answer the questions: What? How? And Why?

P is identified as the promotion of academic staff development in the universities of technology. Q: providing a holistic academic staff development to the newly appointed academic staff members R: to create a supportive, needs based acceptable proper programme of academic staff development for the newly appointed academic staff members. Following these statements, a root definition was written:
**Root definition:** A system that promotes academic staff development programme in the universities of technology that intervene appropriately to encourage interactions and synergies between academic leaders and supporting departments to create a holistic, supportive academic staff development programme for the newly appointed academic staff members.

### 5.3.2 CATWOE

The root definition was complemented by applying a series of steps known by the mnemonic CATWOE. This helps the analyst to further define the system's components that will inform the conceptual models, in particular identifying and defining the main stakeholders involved in the system.

<table>
<thead>
<tr>
<th>CATWOE</th>
<th>Definitions for this study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clients or customers</strong> of the system that are benefited or affected by the transformation process</td>
<td>Newly appointed academic staff members</td>
</tr>
<tr>
<td><strong>Actors</strong>, who would perform the necessary activities to achieve the transformation</td>
<td>Academic leaders and supporting departments</td>
</tr>
<tr>
<td><strong>Transformation</strong>, the change that takes place throughout a purposeful activity</td>
<td>Holistic Academic Staff Development Programme</td>
</tr>
<tr>
<td><strong>Weltanschauung</strong> (worldview) a particular point of view that provides purpose to the system analysed</td>
<td>Structured ASD programme that intervene appropriately to encourage interactions and synergies between academic leaders and supporting departments</td>
</tr>
<tr>
<td><strong>Owner</strong>, who is the authority to stop or make changes to the system</td>
<td>Universities of technology all relevant stakeholders</td>
</tr>
<tr>
<td><strong>Environment</strong>, restrictions that could enhance or affect the system</td>
<td>ASD coordination and timing of workshops</td>
</tr>
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Table 5. 2 CATWOE (Customers, Actors, Transformation, Worldview, Owners, and Environment)

5.4 Stage 3: Comparison and Structured Debate

The discussions in the focus group led to comparison of the two UoTs, ASD programmes. In UOT – X, there is no proper standing plan or scheduled academic orientation and induction from the academic support department. Through the triangulation of data from interviews and focus group discussions, it can be concluded that the lack of senior management support in case study UoT- X constrained the development and implementation of ASD activities in the university. This shows that the support given to newly appointed academic staff members is too minimal and is not adequately communicated to all. HODs are not involved in full force, and they only sign the nomination forms for nominated candidates for best teaching and learning awards whereby they compile the teaching and learning portfolio. Academic leader participants reported that they use their initiative to guide teaching and learning as there are no clear guidelines prescribed by the institution. They attach newly appointed lecturers to older or experienced lecturers. In UOT- X, participants reported that there is a lack of support for teaching and learning given to them by relevant departments which are supposed to be helping them. UOT- X should support them by organizing sessions that can help them in teaching and learning strategies. Coordination of teaching and learning is left in the hands of HODs who are also overloaded with all departmental duties.

Participants in UOT- X reported that they needed an orientation that will address them in teaching and learning strategies. Some claim that they are still using traditional teaching and learning methods and are not satisfied with them. They also mentioned that there are teaching and learning tools for assessments, but they are not too clear about their proper usage. They show that there is a little that is mentioned, but no follow up to ensure that all academic departments use these tools, like Bloom’s Taxonomy for assessments. In UoT-Y, the respondents reported that their departments show newly appointed lecturers teaching and learning methods and assessment strategies. The academic leaders (HODs) seem to be engaging with their newly appointed academic staff members in teaching and learning tasks.
Respondents in **UoT-Y** reported that they organise departmental staff meetings where they interact and connect and build better relationships and a pleasant working environment. The institution also holds sessions whereby first-year students’ lecturers come together and share their experiences.

Figure 5.2 below shows the soft issues that were realised in the focus group discussions debate.

![Conceptual Model](image-url)

Figure 5.2 conceptual model showing soft issues of ASD

Figure 5.2 shows soft issues that were noted. There were substantial weaknesses found across both UoTs in relation to the academic orientation of new academics. There is a lack of formal plans, processes, and guidelines for the academic orientation process of new academics. There seems to be a lack of formal processes to make it easier to adapt to the academic environment at UoT-X. Hence, they learn as they go. “**There is no formal process that I know of. Things just happen. We lean as we go in**
this Institution. We teach as we were taught. If you are lucky, you get a friend at least who knows something then you get help”. Focus group participant 7. In UoT-X, there were also no clear guidelines relating to orientation and induction on teaching and learning. “There are no clear guidelines in institution in our institution that talks to orientation and induction about teaching and learning”. Focus group participant 8. There seemed to be a lack of teamwork in the academic support department of one institution “I advise my department to work as a team, but it is not easy”. Academic support department rep 4. The academic support department at other institution conveyed that there seems to be a lack of interest from the newly appointed academics as well as the academic leadership when it comes to attendance of programmes. “Newly appointed lecturers are not the same, others attend others attend once and they put reasons. The academic leaders know about the programme some show interest some they do not”. Academic support department rep 7.

Figure 5.3 Relationship between Holistic ASD process and structured academic orientation process.

Figure 5.3 above shows a situation showing a holistic ASD process has the effect on structured ASD and academic orientation process as there will now be a proper coordination of ASD and the processes will be systemic. Hence there is a need to structure the ASD programme properly.
In Figure 5.4 Here, the implementation of conventional ASD programmes needs a structured approach to form a Holistic ASD programme and this is also true for unstructured ASD and unorganised academic orientation processes. At the same time, an increase in the availability of conventional ASD processes will reduce haphazard workshops and un-coordinated academic orientation processes.

Figure 5.5 Conceptual model for ASD

Figure 5.5 above presents a conceptual model for the summarised factors which influence proposed ASD model. From the diagram, it can be noticed that the process
of ASD is not a simple linear relationship. There are various factors which influence
the behaviour of ASD as a system and these factors have relationships amongst
themselves and the whole. The success of ASD cannot therefore be pinned on simple
cause and effect relationships. For example, it may be argued that establishing a
structured ASD coordination will lead to the implementation of a holistic ASD
processes. However, this may lead to an increase in the use of conventional ASD
processes if the coordination and institutional protocols have not applied systemic
pathways to developing manuals, which thus reduces the implementation of a holistic
ASD process. The input of the newly appointed academic staff members (NAASM) to
the conventional ASD programme can contribute to the holistic ASD programme. From
the model above, all concepts which are counterproductive to holistic ASD
implementation and hence they should be countered. Furthermore, there are some
concepts that act as leverage points that can be implemented in ensuring that a holistic
ASD process is executed. UoTs should, along with establishing a structured ASD
coordination, improve on the processes which establish dialogue or discussion
platforms because dialogue increases stakeholder participation in the critical issues of
a systemic ASD process.

5.5 Stage 4: Action to Improve

In this study this stage – action to improve will be the proposal for taking action,
which will be presented in the recommendation section in chapter seven.

5.6 Chapter Summary

The systems approach followed in this study was achieved through the SSM four
stages. The finding out stage produced the themes and a rich picture. Then,
proceeded to build conceptual models and the root definition, whose objective was to
represent the relevant transformation processes and soft issues as realized. The
modelling of ASD system for the UoTs has been achieved based on the conceptual
models and the root definition. The last stage – action to improve will be dealt with in
the last chapter of this study in the recommendations section.
CHAPTER SIX
DISCUSSION

6.1 Introduction

In the previous chapter, the findings, and results of exploring Academic Staff Development for newly-appointed academic staff members in Universities of Technology were presented. This chapter outlines the contributions of this study from a theoretical and methodological perspective and regarding the explored academic staff development in both UoTs. The chapter will endeavour to intertwine and align the reviewed literature, theoretical and methodical insights that shed light of the research and the other section will answer the research questions.

6.2 Systems approach - Soft Systems Methodology theoretical reflections

This research which employed qualitative methods and SSM, brought together various stakeholders views on ASD in the UoTs. The fundamental intention of SSM was to facilitate a holistic understanding of a situation, and to facilitate learning and improvement. The SSM engagement in focus group discussions and interviews in chapter 5 showed the in-depth understanding of the ASD situation in UoTs. Given the nature of ASD practices in the UoTs, a situation-specific approach was constructed based on the four guiding principles of SSM stages shown in Figure 4. 2, the SSM process.

6.2.1 ASD in UoTs

The problem situation in SSM is expressed by understanding different perspectives of the problem as expressed by participants (Checkland and Winter, 2006). According to SSM process, views or worldviews of different participants can be explored through many different forms including the rich picture, to help to open discussions and come to a broad, shared understanding of the situation (Holwell, 2000; Checkland and Winter, 2006; Mingers and Taylor, 2016). The Finding Out stage of SSM outlined in
chapter 5, suggested three main issues that influence academic staff development in the UoTs. The Facilitation and initiation of Academic Staff Development, with many issues of concern in the UoTs. This is followed by the role of academic leadership in Academic Staff Development and current practices of academic staff development.

6.2.1.1 The facilitation and initiation of ASD in UOTs

The finding out stage outlined the situation of ASD in UoTs. The facilitation and initiation of ASD is generally not prioritized in the UoTs. SSM define this situation as a messy, problematic situation (Reynolds and Holwell, 2010). In both UoTs, newly appointed academic staff members reported that ASD is not taken serious. Developing the universities newly appointed academic staff members conceptions of teaching and learning usually falls to an academic staff development department or a unit within the University of Technology. Facilitation of academic staff development forms the basic set of generic teaching skills: how to lecture, how to conduct tutorials, how to prepare lesson plans and how to use media and technology resources. Initiation ensures that a newly-employed academic staff member is provided with information and support when beginning employment at the UoT. The information given to newly-employed academic staff members at this phase is supposed to clearly outline what the UoT stands for (the mission and the vision) and reducing the risk of regulatory breaches, as well as enabling employees to respond effectively to new tasks. Initiation is the process of receiving employees when they begin work; introducing them to the UoT and their colleagues; and informing them of the activities, practices and conducts of the UoT (Salau, Falola and Akinbode, 2014). This process is linked to the allocation of duties and advice on available academic support. Newly-appointed academic staff members (novices) need guidance on regulations, rules, standards, and other important guidelines in order to perform their duties in acceptable parameters.

In UoT –X, the facilitation of Academic Staff Development is reported by all stakeholders to be not prioritized. There is no clear persistent, continuous programme followed. The academic leaders reported that they are not sure of the process that is followed for the initiation of ASD. The situation in UoT – X suggests that the academic support department responsible for ASD is lacking the proper personnel or the department is still new, or still under construction. The newly-appointed academic staff
members’ concerns needed some attention since they can hinder positive development, thus installing negative outcomes that cannot be detected immediately but, in their products, later. In **UoT – Y**, the ASD conventional programme that is conducted for the newly-appointed academic staff members seems not to have acceptable initiation processes, hence staff are left with unresolved issues related to induction.

Studies show that effective ASD should be facilitated by a specific section or department in a university. At the University of KwaZulu-Natal (UKZN), the University Education Induction Programme (UEIP) is facilitated by the Higher Education Training Development (HETD) department. According to Reddy, *et al.* (2016), the UKZN senate approved that the programme and is mandatory for all newly-appointed academic staff members. Dunkin (1990) asserts that in Australia, the induction of new academic staff in universities was acknowledged as an important issue by the Australian Vice-Chancellors’ Committee. This suggested that other universities regarded ASD as an important process and hence these two UoTs should also do the same.

SSM can be of value to the UoTs ASD programme in a number of ways. Various stakeholders, especially those who are most influential, may be identified, so as to commence discussions on common issues and possible ways of bringing about improvement to the whole system, in the light of the intertwined nature of the UoTs. This suggests that efforts should be made to include the academic leadership, academic supporting department and newly appointed academic staff members, who in this study, were found critical to ensuring smooth processes and efficient facilitation of ASD programme.

### 6.2.1.2 Value of SSM in ASD interaction

Interaction in ASD starts in the departments where the newly appointed academic staff members are allocated. The initiator of the interaction are the HODs, since they are the ones who welcome and allocate the duties to all academic staff members. HODs’ leadership role is very important for the newly appointed academic staff members. The HODs play a role in initiating the interaction with new academics for academic development. They do this via the following methods: Meetings- Departmental meetings seems to be a place of interaction at one institution. In **UoT – X**, some HODs were active in engaging newly-appointed academic staff members and explaining key
aspects to them such as policies. The HOD did have one-on-one sessions with newly-appointed academic staff members at UoT – X. However, findings show that there is a minimal interaction holistically and this must be improved on. The interaction is only at meetings. A fair number of respondents across both institutions indicated that interaction only took place at staff and faculty board meetings. Newly appointed academic staff need some guidance and coaching, which can be done by experienced academic staff members. HODs and senior academics have a task of mentoring the newly appointed academic staff members. Mentoring is generally used to represent a relationship between an older, more experienced mentor and the newly appointed employees, less experienced apprentices for the purposes of supporting the career development of the novice. The mentor may not work in the same organization as the apprentice, but is likely to work in the same sector or bring a deep understanding of the issues and challenges faced by the novice (Passmore, Peterson and Freire, 2012).

SSM aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning phase which is ideally never-ending (Reynolds and Holwell, 2010). The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world, and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models. These are conceived as holistic ideal types of certain aspects of the problem situation rather than as accounts of it. It is taken as given that no objective and complete account of a problem situation can be provided (Reynolds et al., 2010; Checkland, 2012; Mingers and Taylor, 2016).

6.2.1.3 The common issues of facilitation of ASD in UOT

At UoT -X, facilitation of ASD is suggested to be complex in the following manner:

**Unclear** - In UoT-X, the actual facilitation of the Academic Staff Development process was unclear. Some respondents were not even sure of the term itself. They also asserted that the department that was meant to facilitate was not active in the process.

**Own efforts** - Some of the respondents had to make their own efforts in learning due to the lack of active facilitation processes from the institution in terms of academic development.
Lack of adjustment - Respondents in UoT-X asserted that they were not given ample time to adjust to the institutional climate and processes. This lack of adjustment is linked to academic orientation, whereby newly appointed academic staff are orientated about their duties and other formalities in the institution.

No structure plan - The Academic Staff Development programme seems to have no structure, even though in the departments are trying to do something. Departments appear to be not actively engaged and do things in their own way. They are doing things as they wish as there is no standing structured programme. There is no clear programme, but the academic supporting department is there. In UoT-X, there is no structured plan of Academic Staff Development as things are done informally. Departments use their own innovative ways.

In UoT-Y there seems to be a clear process that is followed. Öztürk and Yıldırım, (2012) alluded that an effective teacher induction program should be a clear and detailed program which facilitates a positive transition from industry experience to entering university teaching; being a novice teacher; and an extensive mentoring program. In some universities, experienced teachers are matched with new teachers to guide them in all matters by focusing on the concerns of the beginning teachers, and supportive professional development courses in which the internal structure of the institutions organize a broad network of novices and provide opportunities for growth, socio-emotional support, collegial interaction, appropriate assignments and adequate resources. All of these efforts are aimed at releasing anxiety from newly-appointed academic staff members (Öztürk and Yıldırım, 2012).

Disciplinary departments condition the way academics conceptualize their roles in the department by creating a discursive and tacit construction of the ‘norm’ or the ‘acceptable’ practice (unwritten rules) in that department. If these norms are not explicit, new academics have to navigate a difficult terrain from what Behari-lea, (2017) calls the ‘periphery to the centre’. The academic support department also works with HR when it comes to orientation. The routine that is followed for the orientation of the newly-appointed academic staff members is not clear. The HR notifies the Academic support department. This makes it easier for the department to be aware of the appointments that have been made during a particular period so that arrangements can be made for orientation and induction process.
The academic support department inducts newly-appointed academic staff on issues that are relevant to them. Dunkin (1990) further supports this process of inducting newly appointed academic staff members by stating that lecturers in universities occasionally have had formal training as teachers, and they rely heavily upon previous teaching experience for their knowledge and skills of teaching. It is to be expected, therefore, that the induction of newly appointed academic staff members would reflect their prior experience as teachers. As some newly-appointed academic staff members arrive with lower academic qualifications, it might be expected that special consideration would be given to them during an induction period. In UoT-Y, some newly-appointed academic staff members complained that the programme does not consider their status in terms of where they are: some with PhDs, Masters and Bachelor of Technology degrees. They expressed unsatisfactory treatment in induction.

Subsequently, some Lecturers already know the institution quite well from having been students or even members of staff there earlier. Hence it might be expected that their induction would be different from that of other newly-appointed academic staff members. Likewise, it might be expected that those whose publication record was less inspiring at appointment would be encouraged to develop in that domain and would therefore have different induction experiences from others. Newly-appointed academic staff members appointed on a contract basis would be expected to experience a different type of induction from those who are appointed on a full-time basis. Features such as age and sex ought not to make a difference to induction experiences independently of academic and professional background. Both newly-appointed academic staff members and academic leaders agree that there is no structured plan for orientation and induction in UoT-X. Academic leaders point to the academic support department that does not organise the orientation and induction programme for newly appointed academic staff members.

SSM, with its wealth of tools, can explain the true complexity of the system, which presents a challenge in deriving quick and easy solutions within UoTs (Reynolds and Holwell, 2010). The rich picture, by outlining stakeholders and their interests, allows for stakeholders to gain insight into the workings of each independent entity, understanding the limitations of academic leadership and academic supporting departments in facilitation of ASD as merely being about connecting different
stakeholders. It further illuminates concerns raised such as lack of transparency, limited information, predominant interest by the newly appointed academic staff members. This can help the Facilitators of ASD to understand that the problems in the newly appointed academic staff members extend beyond their mode 1 of knowledge production. It is a stage of intensive tensions and learning in unknown contexts, in which they may require a professional knowledge and maintenance of a certain personal balance. This process of intense learning of the trial-error type, determined by a principle of survival and the prevalence of the ethics of the practical, which is called "reality shock" (McArthur-Rouse, 2008; Iglesias-martinez, Lozano-cabezas and Martinez-ruiz, 2014).

6.2.2. Role of academic leadership in ASD

Leadership in academia poses unique challenges to leaders, and is described as particularly demanding Leadership in Academia (Deesomsak, Paudyal and Pescetto, 2014; Baltaci and Balci, 2017b). Despite a general understanding of the importance of leadership in academia, faculty members end up in leadership roles without ever having aspired to them (Deesomsak, Paudyal and Pescetto, 2014; Baltaci and Balci, 2017b; George Siemens, Shane Dawson, 2018). The career paths of deans and HoDs are likely to reach these positions without formal training or previous leadership experience, lacking an understanding of the required roles and impact of this task on their academic and personal lives (Deesomsak, Paudyal and Pescetto, 2014). Academics are mostly promoted on the basis of excellent research performance (publication output, third-party funding, and reputation in their field of research), but not necessarily because of their leadership skills or experience (Deesomsak, Paudyal and Pescetto, 2014). Furthermore, while a long tradition of enhancing the practice of teaching and learning exists, programs for systematic leader development are still uncommon in UoTs. This is true for leadership roles in academic administration such as deanship and heads of departments. In the academic context, leaders are not prepared for their demanding roles systematically (Deesomsak, Paudyal and Pescetto, 2014).
The academic leadership and academics also played a role in the instigation of the interaction with newly appointed members regarding academic staff development. Studies show that the academic leadership should support the newly-appointed academic staff as quickly as possible since in many countries, there are concerns that the ageing academic staff members will not be sufficiently replaced by newly-appointed academic staff members coming up through the ranks as older academics (baby boomers) retire (Matthews, Lodge and Bosanquet, 2014).

Leadership in academia spread across multiple levels, including individuals, teams, and the entire UoT. UoTs essentially strive for creativity and innovation through knowledge creation and transfer (Deesomsak, Paudyal and Pescetto, 2014). UoTs generate new knowledge and apply it for the betterment of society. With this in mind, universities worldwide compete for resources and recognition. This competition is based on aims such as hiring outstanding faculty, increasing student numbers, successful grant applications, and industry collaborations.

Empirical data for Leadership from UoTs leadership reveal that there is a leadership deficit that is taking place in higher education, and leadership development can help with this issue. In particular, as the review of literature above suggests, leaders in academia need ‘people skills’ (Deesomsak, Paudyal and Pescetto, 2014; Baltaci and Balci, 2017b; George Siemens, Shane Dawson, 2018). Drawing from interviews with academic leadership in UoTs, needs to communicate compelling visions, share responsibilities, and manage complexity in order to be effective. Leadership in the corporate arena, however complex that might be, is substantially less complex than leading in academia.

The HoDS play a key role in guiding and coaching all academic staff (old or new). When it comes to new staff, some HODS sit with them to determine their academic needs, assist them with on-the-job training, and other related aspects of development. The role of senior lecturers in ASD seems to be not clearly defined by UoTs. The HoDs and senior lecturers should have an active role in ASD since they interact with them on a daily basis. Uhl suggested that leadership should enable the learning, creative and adaptive capacity of complex adaptive systems (CAS) in knowledge-producing organizations. UoTs are learning organizations, hence the academic leadership
should be enabling learning to ensure the capacity building of the newly appointed academic staff. Complexity Leadership Theory suggests that the role of academic leaders should not be limited to aligning worker preferences with centralized organizational goals (Uhl-Bien, Marion and McKelvey, 2007).

6.2.2.1 Coaching and mentoring

The changing landscape in Higher Education in general has made it more difficult for less experienced colleagues to find persons willing and able to invest in, and support their professorial development (Carmel and Paul, 2015). More experienced academics point to not having the time to coach and mentor the newly appointed academic staff members. In UoTs where no formal mentoring programme exists, the issue of mentoring is problematic because only a limited number of persons will interpret their role in academia as having a duty to mentor others. Mentoring can encourage employees to feel appreciated by the UoT as mentors feel their knowledge and experience is valued by their peers (Carmel and Paul, 2015). According to Carmel and Paul (2015), allows mentees to feel that the UoT is prepared to invest in their future. Mentoring also helps to rekindle the enthusiasm of dissatisfied employees, and to revitalise staff and senior staff. It further helps to raise the self-esteem and self-confidence of academic staff. Mentoring provides a safety valve for career-related frustrations, allowing mentees to discuss incidents that impact on their professional lives (Carmel and Paul, 2015).

Newly appointed academic staff members in some departments are attached to senior lecturers. However, as mentioned by leadership at UoT-X, there is no formal processes or procedure for ASD. This means that there is no standard plan that is followed, thus departments improvise. Perhaps it should be made part of the senior lecturer’s job description. In UoT-X, HODs try their level best to coach newly appointed academic staff members on academic issues. This attachment can be related to coaching. Coaching is defined as unlocking people’s potential to maximize their own performance. It is helping them to learn, rather than teaching them (Passmore, Peterson and Freire, 2012). Coaching is further explained as a form of conversation with unspoken ground rules of certain qualities that must be present: respect, openness, compassion and commitment to speaking the truth (Passmore, Peterson and Freire, 2012). Newly appointed academic staff members need coaching from their
experienced peers. Coaching is also ascribed to help in a relationship formed between experienced persons and a managerial authority with a responsibility in an organization. It uses a wide variety of behavioral techniques and methods to achieve a mutually identified set of goals to improve professional performance (Passmore, Peterson and Freire, 2012). Literature shows that in other Universities, there are specific programmes developed to assist newly appointed academic staff members in doing their duties (Reddy, et al., 2016b).

However, UoT-X’s newly appointed academic staff felt that sometimes they get allocated subjects in a manner that is not appropriate, whereby they get subjects allocated that are not preferred by the older academics and hence are forced to teach that subject even though it is not in their line of expertise. A lack of platforms for interaction and engagement can be linked to the lack of capacity for the development of newly appointed academic staff members. There needed to be more sessions and platforms to discuss teaching and learning issues. Capacity development can be defined as the ability to perform, create, or deliver value. In many ways, capacity is about the potential to act as opposed to performance, which is about execution or implementation. Morgan (2005) states that the Systems approach refers to the overall ability of a system to perform a particular task.

6.2.3 Current practices of ASD in UoTs

In UoT-Y, the academic support department organises workshops for academics, introducing the newly appointed academic staff members to teaching strategies and methods. This takes the duration of a week. Newly-appointed academic staff members showed dissatisfaction about the full week away from their teaching duties. Moreover, sessions are held by the department where new academics can share experiences and where guest lecturers are also invited. The programme is helpful but long. The programmes are seen to be helpful at UoT-Y but can be tedious due to taking up an entire week. This suggests that UoT – Y has got a plan to assist the newly-appointed academic staff members. However, the newly-appointed members feel that the conventional ASD is somehow not meeting their expectations and needs. They are also not satisfied by the duration it takes. This suggests that the planning should be considerate of other commitments that the employees might have. The
current ASD practices are centred around the traditional methods of doing things, planning for them not with them. In UKZN, newly appointed academic staff are supported to promote excellence in teaching and learning through their involvement in creative and innovative curriculum, pedagogical strategies, assessment practices and postgraduate research supervision of the highest standards (Reddy, et al., 2016b). The university seeks to create a student-centred ethos by providing students with curricula, teachers, infrastructure and support services designed around their needs. According to Reddy et al., (2016), it is envisaged that this in turn will produce well-educated, competent, sought-after graduates who are critical thinkers.

The current practices of ASD were described as poor by the newly-appointed academic staff members. The leadership at UoT-X felt that the ASD programme done by the academic support department was not being well received by newly-appointed academic staff members. The newly-appointed academic staff members from UoT-X were not satisfied with the ASD they received. In UoT-Y, they also reported that their needs were not taken care of. They also reported that the ASD that was conducted was boring. This indicates that UoTs should update their ASD conventional practices to meet the needs and expectations of the newly-appointed academic staff members.

At UoT-Y, respondents indicated that the orientation was generic and did not relate directly to their needs and key issues. This shows that there is a need for more evaluation of the academic development programmes, which should be done based on the feedback and suggestions from the academic staff members so that they can be fully engaged and participate. Some new academics (respondents) at UoT-Y reported that the current Academic Staff Development programme was uninteresting, and the issues discussed did not relate to them. The ASD programme is there, but is not well received by the newly-appointed academic staff members. The newly-appointed academic members feel that the current ASD does not talk to their needs. The newly appointed academic staff members at UoT-X felt that they received very little assistance in the form of mentoring and coaching. They have to rely on their own knowledge and skills. The UoT just gives them the job description without properly assisting them with the basic teaching skills. They refer to that situation as being thrown into the deep end. The newly-appointed academic staff members show the frustration and neglect they have experienced in their initial stages of teaching in the
UoT. The academic support and the academic leadership at least should be near them to see and understand their situation.

The newly-appointed academic staff members at UoT-Y also felt that there should be a needs assessment done as so the institutions can focus on the pertinent issues of academic development required by the new academics. The newly-appointed academics in UoT-Y feel that they also need a chance to have an input into the ASD. Their reason is based on the fact that they are qualified with PhDs, so they know their weakness and strengths. This shows that the current ASD programme does not conduct a needs assessments, but offer what they have been offering over the years. The newly-appointed academic staff members from UoT-Y conveyed that the institution should be cognisant of current challenges faced by the UoTs, such as large classes, diversity of students and technology-related challenges. This must be taken into account when it comes to academic development. The conventional method of ASD seems to be challenged by the complexities of the 21\textsuperscript{st} century.

In UoT - X, the academic leadership reported that there was need to benchmark with other UoTs and find out how they conduct their ASD. Therefore, an improvement in Academic Staff Development is needed in the following ways: to be a structured programme as there seemed to be a complete lack of a structured programme in terms of academic development. There was no standard operating procedure or uniformity in development programmes. Things happened on an ad-hoc basis.

\textbf{6.2.3.2 Need for more discussion platforms and opportunities}

There was a lack of discussion platforms across both UoTs where new academics could raise their concerns and needs. Hence, more platforms were needed so that academic issues can be discussed openly, and advice and guidance can be sought. This should become part of departmental initiatives. In UoT–Y, there are special meetings that were arranged for interactions – meeting of all lectures who teach first year classes. The problematic situation that newly-appointed academic staff raise is that their specific needs are not addressed. This shows that newly-appointed academic staff members need some coaching and mentoring by experienced academic staff members.
In UoT–X, HOD reported that sometimes, newly-appointed academic staff members are attached to older and more experienced lecturers in order to gain practical knowledge and experience. However, this is not a formal process. Learning within informal situations is seen as critical, although more formal support may also play a role. Former research work investigating academic induction and university departments as workplaces showed the importance of the quality of routine interaction of the newly-appointed with departmental leadership (Mapesela, M, Strydom, 2005; Quinn, 2012b). This shows that the interactions are very important for the newly-appointed lecturers to learn from experienced academic members. From the systems approach point of view, the academic workplace of the newly-appointed academic staff members is seen as a collective, dynamic, object-oriented system in which rules, tools and division of labor influence activity and contributions by participants. Dialogue will also decrease the likelihood of unstructured ASD and academic orientation processes as newly appointed academic staff are likely to forward their views. Moreover, dialogue will have positive effects on mentoring, coaching and leadership support, and vice versa. These two will also increase the processes of implementing a holistic ASD, hence there should be the establishment of formal coaching and mentoring as it will increase holistic ASD processes. Ensuring that newly appointed academic staff members have an input into the ASD process from the beginning to the end through expressing mental models and reflecting on the ASD process will decrease the chances of implementing a conventional ASD process and increase a systemic ASD process. At the same time, ensuring that newly appointed academic staff views are considered will increase interaction and enhance mentoring and coaching and increase leadership support, thus improving on a systems approach to the ASD process.

To ensure that the process is systemic, according to Checkland and Howell (1998), there needs to be application of a generic systemic methodology to the process of ASD, as mentioned in the methodology chapter. This should be the primary trajectory followed by the ASD process for ensuring rigorous and deep reflection on the process and in-depth understanding of ASD from a broad perspective. Secondly, to ensure that a holistic model of ASD is applied, the method of ASD development should be led by a systemic methodology such as SSM, which has the ability to confront mental models of both the designers of the process and the newly appointed academic staff. SSM
also ensures participation of all stakeholders in a systemic process which is always reflective and iterative.

6.2.3.3 Academic supporting departments in promotion of ASD in UoTs

In UoT – X, the academic supporting department reported that they are complementing ASD through different mechanisms. All academic staff members are encouraged to do a Post-Graduate Diploma in Higher Education (PGDHE), which is a well-rounded qualification relating to all duties of an academic. The curriculum for the PGDHE is relevant in addressing all duties of academic staff members in the UoT. The only problem is that only those who want to enroll can do so but it is not compulsory. In UoT – X, the academic support department shows that they see a need for ASD, hence they made a provision by encouraging their academic staff members to enroll for the PGDHE. The PGDHE curriculum is relevant as it covers all needed skills in higher education.

Studies of other universities show that a formal programme is followed for Academic Staff Development. Reddy et al. (2016) describe the formal course that was developed by the University of KwaZulu-Natal (UKZN) for developing teaching skills for academics and early career academics (ECAs). According to Reddy et al. (2016), this programme is structured to support ECAs in the higher education environment. The UKZN programme is set as a University Education Induction Programme (UEIP). This shows that the UoTs have got to take the ASD process seriously. UoT- Y has a programme that deals with newly-employed academic staff members, but the participants of that programme reported that it did not address their needs. In UoT- X, participants reported a lack of the programme that supports them. There were also problems relating to schedules whereby there was no proper plan or schedule orientation from all concerned departments. There were also no clear guidelines relating to orientation and induction on teaching and learning. Furthermore, there was a lack of support and teamwork with regard to academic orientation. This is outlined below.

There seemed to be a lack of teamwork at the academic support department of one institution. The academic support department at UoT-X conveyed that there seems to be a lack of interest from the newly-appointed academics as well as the academic
leadership when it comes to attendance of programmes. The focus group at one of the institutions was firm in relaying that there was no academic support in terms of teaching and learning. The report from UOT-X shows that there is need in the following aspects: more courses needed in assessments and moderation. There should be initiatives to bring together both old and new lecturers for knowledge and experience exchange.

Universities around the world are now launching different ASD programmes to help and support their teaching staff. In Ireland, the first national professional development framework (PD Framework) for all who teach in Irish higher education was launched in 2016 (Donnelly and Maguire, 2018). The evidence has demonstrated the many positive short and long-term impacts of engaging with the national PD Framework. The Irish report showcases and demonstrates the positive impact of the professional development process on individual participants. The transformative potential on teaching and learning practice of engaging with the Framework is highlighted. The individuals who engage with the Framework can gain confidence in their teaching. The Framework can build strong, inclusive learning communities across all professional identities and the Framework can be effective across a wide range of professional identities of those who teach in higher education. The shared understanding of different types of professional development, the values that underpin the Framework and the domains that give it structure can work in practice (Donnelly and Maguire, 2018).

ASD programmes, to be efficient and successful, need commitment and support (mandate or By-in) from the authorities – hence a senate mandate to be binding and compulsory.

6.3 Constructivist approach to the model design

The model draws upon a constructivist approach. Constructivist theories explain how human beings learn. The idea is founded on the view of a continuous building and adjusting of structures in the mind that ‘holds’ knowledge (Fry, Ketteridge and Marshall, 2009). Constructivist learning usually begins with a problem. The newly-appointed academic staff members work on a problem by themselves, then the leader or a supporter intervenes only as required to guide in the appropriate direction (Kocevar-Weidinger, 2004; Deyhim et al., 2006; Sato et al., 2019). Constructivists
believe that newly appointed academic staff members construct their own meaning. They are not passive receptacles. They do not easily process or transfer what they passively receive. In order to make knowledge useful in a new situation, they make a deliberate effort to make sense of the information that comes to them. They own information, manipulate, discover, and create knowledge to fit their belief systems.

New learning builds on prior knowledge. The Constructivist approach is supported by the SSM process. SSM is based on continuous learning in a system. SSM proposes dialogue within a system. The newly appointed academic staff members need the teaching and learning methods in order to transfer their knowledge to the students. In making an effort to make sense of information, they make connections between mode one knowledge production and new information. They compare and question, challenge and investigate, accept, or discard old information and beliefs in order to progress. Additionally, learning is enhanced by social interaction. The constructivist process works best in social settings as newly appointed academic staff members have the opportunity to compare and share their ideas with others (interactive learning). Learning occurs as newly appointed academic staff members attempt to resolve conflicting ideas. Although social interaction is frequently accomplished in small group activities and discussions, meaningful learning develops through "authentic" tasks. This aspect of constructivism is frequently mis-interpreted (Kocevar-Weidinger, 2004; Deyhim et al., 2006). It simply means that activities are chosen to simulate those that will be encountered in real life or in an assignment.

6.4 Complexity leadership in ASD in UOTs

Based on the findings of this study, leadership is very important for the implementation of ASD in the UoTs. Leadership, by contrast, is about coping with change, while management is about producing order and consistency, whereas leadership is about generating constructive change (Plesk and Wilson, 2001; Bonnette, 2015; Baltaci and Balci, 2017a). Adopting this perspective, the primary effect of organizational leadership would be significant change in a direction valued by the UoTs. The academic leadership in the UoTs should be playing their role as change agents in helping newly appointed academic staff members to perform their duties efficiently. In practice, of course, distinguishing between leadership and management behaviours can be extremely difficult (Baltaci and Balci, 2017a). This is because the distinction
rests not on the nature of the behaviour but its effects. If behaviour produces order and consistency, then it must be management; if it produces change in a valued direction it must be leadership. Concepts and theories about leadership can be divided between those that focus on individual, formal or hierarchical forms of leadership and those that focus on collective, participatory or shared forms of leadership (Baltaci and Balci, 2017a).

Academic leadership and managers need ‘to learn how to hold units accountable without establishing mechanisms that stifle motivation, creativity and effectiveness. HoDs and senior academic staff members have to give direction setting helping members of their departments establish a widely agreed on direction or set of purposes considered valuable for the organization; and influence: encouraging newly appointed academic staff members to act in ways that seem helpful in moving toward the agreed-on directions or purposes.

Complexity leadership theory is loaded with values and has a moral dimension. Leadership is shared. Leadership is determined by the individual’s emotional intelligence, ability to be collaborative, and ability to link entrepreneurialism, accountability and globalisation to educational leadership (Anderson and Anderson, 2019).

The academic leadership should be encompassing the complexity leadership which suggests incorporating a focus on four key dimensions that recognize the interrelatedness and systemicity of leadership in UoTs. The behaviours of individuals interact with wider UoT processes and contexts that together are considered to produce overall leadership effects. Four dimensions are put forward in the complexity leadership development model comprising (1) network conditions, (2) shared leadership, (3) organizational learning and (4) leader skills and knowledge (Uhl-Bien, Marion and McKelvey, 2007; Uhl-Bien and Marion, 2009; McCaffery, 2018).

The importance of modelling from a root definition and the views expressed on a rich picture, as a product rather than an appreciation of a situation. Gave the impression that these three techniques not only are useful tools but that they constitute the essence of the process (systemic approach). SSM is a powerful methodology for stimulating much-needed conversations between diverse stakeholders who may not have many opportunities of engaging at a level where mental models are surfaced and challenged, and diversity capitalised on so as to provoke collective intelligence.
newly appointed academic staff members’ focus group interactions, interviews with the academic leadership and academic support department representatives produced a model, moving the system to new levels of order of thinking. The heterogeneity that participants presented, viewed in diverse objectives and multiple perspectives of reality, is not easily dealt with using conventional methods that organisational science has tended to recommend in investigations (Checkland and Winter, 2006; Reynolds and Holwell, 2010; Mingers and Taylor, 2016). SSM provided an ideal approach with which to handle social complexity through emphasising relationships, viewing the ASD system holistically.

6.5 Chapter summary

In this chapter, the researcher was able to discuss the information obtained from the interviews and focus group discussions. The data collected from the instruments was presented and subsequently discussed in detail, with focus and emphasis on the problem raised in Chapter 1.

In this chapter, it has been noted that there are clearly weaknesses in the current Academic Staff Development process and it is not as effective as it should be. This should be driven from academic leadership level. More engagement is needed and programmes that are suited to the needs of the newly-appointed academics developed. Chapter 7 follows and provides the contributions, conclusions and recommend produced on the basis of empirical evidence that emerged in this study.
CHAPTER SEVEN
CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

Chapter six unearthed that the process of ASD is not an atomistic process. This study originated from the realisation that no formal research has been conducted to explore academic staff development programmes in the universities of technology aimed at addressing the needs of the newly appointed academic staff members. It is evident that the engagement of a systems approach to ASD can contribute greatly to the UoTs academic staff development practices.

7.2 Achieving the research aim and objectives

7.2.1 Study aim

The aim of the study was to explore how Academic Staff Development can be attained using a systems approach. Hence the study objectives which were in line with this aim were as follows:

7.2.2 Objectives of the study

i). To explore how the Academic Staff Development processes can be contextualised for the newly-appointed academic staff members in the Universities of Technology.

ii). To assess how leadership at various levels interact with the newly-appointed academic staff.

iii). To investigate the current practices of Academic Staff Development and create a model for the newly-appointed academic staff members in the Universities of Technology.

To the knowledge of the researcher at the time of conducting this study, no systems approaches have been considered in ASD, especially the Soft Systems Methodology (SSM) which was developed originally in the late 1970s by Checkland. This becomes a nascent approach to designing programmes for assisting newly-appointed academic
staff members (NAASM) in executing their duties effectively as university teachers. Armed with mode one of knowledge production, NAASM need an aggregate approach to nurture their knowledge and effectively deliver it according to the dictates of the ever-evolving 21st century 4IR era. Realising the interconnectedness of the economy, industry environment and academia, graduates who are the final products of the university system have to be aligned to current and future labour requirements in a VUCA environment.

Taking this into consideration, the first objective thus sought to explore how the Academic Staff Development process could be contextualised for newly appointed academic staff members in Universities of Technology. This was fulfilled by doing a literature review and from themes that arose from focus group discussions and interviews. This was also informed by a SSM rich picture analysis. The second objective was to assess how leadership at various levels interact with the newly-appointed academic staff. This was informed by a SSM rich picture analysis, focus group discussions and interviews. The third objective was concerned with the current practices of Academic Staff Development to create a model for newly-appointed academic staff members in the Universities of Technology. This objective was informed by qualitative data from literature, focus groups discussions and interviews. SSM as an organized set of principles used to guide action, in an attempt to manage a problem situation which, exist in the real world. It is an interactive tool, useful in exploring the problem situation and its context.

7.3 Contributions of the study

This study contributed to the UoTs’ ASD process, Academic leadership and academic supporting departments. From the explorations of the study, there was unravelling of various factors which affect ASD in the form of hard and soft factors. The research also revealed that these factors interact between themselves and the whole, with each of them influencing ASD differently. The study also uncovered an underlying structure which determines the ASD process and was the basis for the proposed ASD model.
7.3.1 Proposed ASD Model for the newly appointed academic staff members in UoTs

The Model seeks to provide a direction through which newly appointed academic staff will fulfil their potential and achieve consistently high standards of performance, enabling them to make a significant contribution to the University of Technology.

7.3.2 Principles that underpin ASD Model

- Academic supporting departments and academic leadership, have a role in supporting newly appointed academic staff members.
- Objectives should be clearly articulated, reflecting the needs and goals of the UoT as well as of the newly appointed academic staff members.
- ASD should come from a wide range of activities, both formal and informal.
- ASD will be most effective when it is acknowledged as an integral part of all work activity rather than as an additional and optional activity.
- Participation in ASD should be monitored and supported by the academic leadership.

7.3.3 The ASD as a system

As a soft system, ASD should be defined in terms of its purpose and not its components. ASD is the process to intervene appropriately to encourage interactions and synergies between academic leaders and supporting departments to create a holistic, supportive academic staff development programme for the newly appointed academic staff members.

The separation of the model into parts is done from a SSM perspective, interactive and flexible and not from a hard systems perspective where the total is simply seen as the sum of the parts.
Figure 7. 1 Proposed interactive academic staff development model.
<table>
<thead>
<tr>
<th>Component or action number</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive - 1</td>
<td>From a <em>soft systems methodology (SSM)</em> perspective, interaction, connections, and relationships between departments facilitates the holistic ASD system.</td>
</tr>
<tr>
<td>HR Orientation - 2</td>
<td>This represents the entry into a UoT (contract details and work policies)</td>
</tr>
<tr>
<td>Discipline or Departmental - 3</td>
<td>The discipline or a Departmental teaching has got a very important role to facilitate needs Assessment of the newly appointed academic staff members. This process will display the strengths, weaknesses, opportunities, and threats (SWOT) of a teaching department and assist it to source necessary assistance from within the UoT or elsewhere.</td>
</tr>
<tr>
<td>Academic support in teaching and learning department - 4</td>
<td>The academic support department teaching, and learning is the main facilitator of the ASD in the UoT. This model suggests that scheduled ASD strategies; workshops, seminars and other relevant scholarly sessions should be always tabled and be mandatory to all newly appointed academic staff members.</td>
</tr>
<tr>
<td>Needs for NAASM - 5</td>
<td>The academic support department should conduct the needs assessment for the newly appointed academic staff members, so that they can assist them properly as soon as they get employed in the UoT. The blanket approach that is done in the ASD conventional method in the UoTs is good but newly appointed academic staff members complained that it is boring.</td>
</tr>
</tbody>
</table>
The study proposed an incipient approach to ASD which researchers can further research on to improve the current approaches for both those who possess and those without ASD systems in place. The study also contributes to the field of complex dynamic systems and sustainability science in the higher education sector in coming up with a model for sustainable pathways for research into ASD. The research also contributes to the ongoing research in ASD in higher education discourse. Stakeholders of ASD in UoTs have to do their SWOT (strengths, weaknesses, opportunities and threats) analysis as this process will nurture interaction and dialogue as suggested in the model. This will ensure that future academic employees will be supported, talk about their problem areas that need to be strengthened and gain a better understanding of their expected duties. This can be achieved through attending industry and marketplace seminars, shows, workshops, awards, and any other functions, such as in-house training which articulates current industry trends. After a certain period, for example two to three years, UoTs should also then host various industrial, marketplace players and do a needs assessment using systems approaches such as SSM. Here, mental models of both industry players and academics are also elicited and a shared vision is arrived at.
such that it can feed into the continuous development of the Academic Staff Development process. The economic players should also be given other avenues of contributing to the development of staff through feedback reports, or constant contacts and reviews between deans of faculties and industry body leaders through established boards. Other nascent dialogue avenues can also be devised so that they foster dialogue, mentoring and leadership capabilities, thus promoting the model in the process. This will ensure that the ASD model adheres to Checkland and Howell’s (1998) generic systemic methodologies which encourage action, learning and reflection at the same time. It will also warrant that the ASD process remains dynamic and can evolve at any time as industry needs to evolve as there will be a model which can comprehend complexity. Additionally, as leadership of both academia and industry are involved practically in the process their skills of dynamic leadership will also be enhanced.

7.4 Conclusions from the empirical investigation

The empirical investigation revealed that ASD in the UoTs needs attention. The process of ASD is not linear and hence needs an approach which can comprehend the complexity associated with it. In UoT-X, the ASD was not structured so that makes it very difficult to count its existence. The academic leaders’ (HODs and senior lecturers) roles are not clear in assisting the newly-appointed academic staff members. In UoT-Y, there was a planned ASD programme which was conventional hence it did not meet the needs of NAASM. UoT-Y needs to revise their ASD programme to talk to the beneficiaries.

7.5 Recommendations for future research

This study provides an opportunity to learn more about Academic Staff Development in Universities of Technology. Future research can explore better ways of integrating all academic staff members in courses on teaching and learning to improve current practices.

After the thesis explored the academic staff development process, it makes the following recommendations to researchers:
• Research on systemic avenues of implementing the model in individual areas of the model.
• Further research into the role of leadership from a systems perspective.
• Institutional policy that supports the prioritisation of teaching and learning as an institutional culture should be put in place.
• Research into further developing the model into a computer-based model which can then outline how the soft and hard factors can be further explored in their relationships is suggested.

The following recommendations are also made to institutions seeking to possess or improve their ASD programmes with the underlying structure and model in mind:

▪ Universities of Technology need to re-think and modernise their Academic Staff Development programmes and processes.
▪ Institutional policies that support the prioritisation of teaching and learning as an institutional culture should be put in place.
▪ Universities of Technology Academic Staff Development should be taken seriously by the academic leaders, Human resources, and all supporting departments.
▪ The power struggle in the leadership roles between academic departments and supporting departments should be addressed.
▪ The existing silo approach on orientation, induction and the culture of the institution should be corrected.
▪ The needs of newly-appointed academic staff members should be considered, not a "One size fit all" approach without assessing their needs and their different levels of academic development.
▪ The soft issues that institutions should take care of are:
▪ Structuring intensive orientation and induction that relates to teaching and learning.
▪ Comprehensive induction and orientation programmes to be communicated to academic leaders so that they can be part of the plan and be able to support the newly-appointed academic staff members.
A well-conceived, collaborative approach to orientation and induction to teaching and learning that will assist the newly-appointed academic staff members to become better University teachers is advocated.

Individualised Academic Staff Development plans should be ongoing for personal support in assessment, feedback on teaching performance and reflection.

There should also be continuous educational opportunities that address current needs, connections, interactions, relationships (collaborations) and socialisation to all structures and practices.

Establishment of mentors, maybe senior academic staff members who are discipline-specific for the articulation of mode one knowledge production is suggested. Established university teachers can also be incorporated as deemed so.

Newly-appointed academic staff members should be given time and realistic workloads that facilitate participation in Academic Staff Development undertakings.

From the study findings and discussion, the following conclusions were drawn: Universities of Technology should offer clear structured Academic Staff Development programmes for their newly-appointed academic staff members.
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27 November 2018

Mr. M Lecheko
35 Selborne Road
Umbilo
Durban
4001

Dear Mr. Lecheko

The impact of Academic Staff Development on Students Performance in Higher Education: Case studies of Universities of Technology

The Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC SOP's.

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

Professor J K Adam
Chairperson: IREC
Appendix B - MUT ethics committee permission

11 October 2018

Dear Mr Lecheko

Title: The Impact of Academic Staff Development on Students Performance in Higher Education: Case studies of Universities of Technology Ref: M10/16/22

The interim MUT Ethics Committee considered and noted your application for the proposed study at their meeting held on 11th October 2018. The permission for the study was granted.


Your reference is ME 10/16/22. Furthermore, permission to conduct the project is granted on the condition that any changes to the project must be brought to the attention of the MUT Research Ethics Committee as soon as possible.

Good luck with your research.

Yours faithfully,

Dr Z.L. Kwitshana
Interim Chairperson
Ethics Committee
Mangosuthu University of Technology
Tel: 031 8196273, Email: kwitshana@mut.ac.za, Twitter: @yje_endlxkwitshana
14\textsuperscript{th} November 2018

Mr Matthews Lecheko  
c/o Department of Entrepreneurial Studies and Management  
Faculty of Management Sciences  
Durban University of Technology

Dear Mr Lecheko

\textbf{PERMISSION TO CONDUCT RESEARCH AT THE DUT}

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research and Innovation Committee (IRIC) has granted full permission for you to conduct your research “The Impact of Academic Staff Development on Students Performance in Higher Education: Case studies of Universities of Technology” at the Durban University of Technology.

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings can be submitted to the IRIC on completion of your studies.

Kindest regards.

Yours sincerely

_________________
PROF CARIN NAPIER  
DIRECTOR (ACTING): RESEARCH AND POSTGRADUATE SUPPORT DIRECORATE
Appendix D - Letter of information

LETTER OF INFORMATION

Title of the Research Study: The impact of Academic Staff Development on Students Performance in Higher Education: Case studies of Universities of Technology.

Principal Investigator/s/researcher: Matthews Lecheko (Diploma in Environmental Health, Bachelor of Technology in Environmental Health and Master of Arts in Environment and Development)

Co-Investigator/s/supervisor/s: None

Brief Introduction and Purpose of the Study:
Twenty-first-century universities are faced with enormous challenges regarding the training and induction of newly appointed academic staff members in order to enhance teaching and learning in universities of technology. The study will focus on Universities of Technology. The purpose of the study is to develop a model for academic staff development programme for newly appointed academic staff members in the universities of technology, using systems thinking and complexity theory.

Outline of the Procedures: Participation in this research is voluntary and you are free to withdraw at any time. You will be interviewed, and participate in focus groups discussion. Sampling will be inclusive, considering age variables, gender variables and past experience. The whole duration of this study is four years.

Interviews: This will consist in a face-to-face interview whereby the student (researcher) will be meeting academic managers individually to ask them a few questions on the topics of the study. Each interview will last approximately 30 minutes.

Focus groups: Participants will be asked to share their views, opinions and wishes in groups about the impact of Academic Staff Development on Students Performance in Higher Education. Each group will be made of seven or eight members. Each participant will be free to withdraw from the discussion. They will be answering questions and speaking on themes related to the study. They will be allowed if the wish to consult each other when responding interacting and expressing their ideas and feelings in groups (a maximum of 2 hours to 3
hours will be allocated to each focus group).

**Risks or Discomforts to the Participant:** You will not be exposed to any risk and any form of discomfort.

**Benefits:** There will be some journal publications after the study is finalized.

**Reason/s why the Participant May Be Withdrawn from the Study:** You will not be subjected to any adverse consequences for the participation should you choose to withdraw.

**Remuneration:** You will not receive any monetary or other types of remuneration.

**Costs of the Study:** You will not be expected to cover any costs towards the study.

**Confidentiality:** Your name will not be used and all information relating to participation, you will be kept confidential and private.

**Research-related Injury:** You will not be exposed to research-related injury or adverse reaction.

**Persons to Contact in the Event of Any Problems or Queries:**

Please contact the researcher Matthews Lecheko tel 083 425 9095 – Email: lechekom@mut.ac.za, my supervisor Dr S. Bodhanya email Shamim @leadershipdialogue.co. Complaints can be reported to the Director: Research and Postgraduate Support, (Acting) Prof C Napier on 031 373 2577 or carinn@dut.ac.za

**General:**

Participation is voluntary and there will be approximate 20 participants. A copy of the information letter will be issued to participants. The information letter and consent form will be in English only since the target group can read and understand English.
CONSENT

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Matthews Lecheko about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: IREC 058/18. I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_________________________   __________   ______   ______________________
Full Name of Participant   Date   Time   Signature   /

Thumbprint

I hereby confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_________________________
Full Name of Researcher  Date

_________________________
Full Name of Witness (If applicable)  Date

_________________________
Full Name of Legal Guardian (If applicable)  Date

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