THE RELATIONSHIP BETWEEN POLICY-MAKING PROCESSES AND E-LEARNING POLICY DISCOURSES IN HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA

By

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PLAGIARISM DECLARATION

I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

Each contribution to, and quotation in this essay from the works of other people has been attributed, and has been cited and referenced.

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PATRICIA RUDO CHIKUNI

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~Dedication~

To my late mum, Sinanzeni Maboyi Ncube.

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Abstract

This study offered an explanatory critique of the implications of policy-making processes on policy discourses. Its objective was to understand how policy-making processes affect institutional e-learning policy outcomes in Higher Education Institutions (HEIs) in South Africa. The study analysed the conceptualisation and design of institutional e-learning policies in three universities.The case-by-case analysis for this study used a qualitative post-structuralist research methodology associated with case study research. This method provided deep insights and intimate knowledge of the individual cases which formed an important basis for cross-comparisons to be made within and across cases, to draw a relationship between policy-making processes and e-learning policy discourses.

Interviews were held with stakeholders who formulated e-learning policies at the three universities. The aim of interviews was to understand how the policies were formulated; to explore the factors impacting policy formulation; the composition of actors; and how policy issues were framed. The methodological and analytical lens of the study was based on the Stakeholder theory and Critical Discourse Analysis (CDA). The Stakeholder theory was used to analyse the policy-making processes, whilst CDA was used to analyse the policies. The analysis focused on the assumptions inherent in the views of policymakers on the nature and role of technology in education. Considering power relations that are implicit in policy-making processes, the study examined the competing discourses found in the policy texts and the different frames used by policy actors in framing the policy problem. The aim was to understand the socio-cultural, political and pedagogical implications of these discourses on teaching and learning with technologies in HEIs. This was achieved by comparing the views of policymakers with the discourses found in e-learning policy texts.

The study revealed that institutional policies are the products of complex inter-temporal exchanges among stakeholders who participate in the policy-making process. The features of the resultant policies depend on the interaction, interests and power of agents who are involved in the policy-making process. The interaction of agents is also hampered or facilitated by institutional structures, procedures and processes in place, including the institutional culture. Therefore, the ability of the stakeholders involved in the policy-making process to achieve cooperative outcomes plays a central role. An institution that facilitates interaction among policy-making agents is likely to generate policies that are adaptable to the environment, and that are less subject to changes. Contrary to this, an institution that does not encourage cooperation will produce a policy which results in few changes in practice. Whether the policy-making process facilitates or hinders cooperation will depend on some key features of this process, such as the number of actors involved, the level of involvement in the process, how they engage in dialogue and their ideological beliefs on the role of Information and Communication Technologies (ICTs) in this context.

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Acronyms

ANT	Actor Network Theory
CACE	Centre for Adult and Continuing Education
CDA	Critical Discourse Analysis
CEL	Centre for e-learning
CET	Centre for Educational Technologies
CHED	Centre for Higher Education and Development
CHE	Council on Higher Education
COER	Centre for Occupational and Environmental Health
CPUT	Cape Peninsula University of Technology
CS	Computer Sciences
DBE	Department of Basic Education
DoE	Department of Education
DHET	Department of Higher Education and Training
DT	Discursive Type
DVC	Deputy Vice Chancellor
E-learning	Electronic learning
EMS	Economic and Management Sciences
FOER	Free Open Educational Resources
FOSS	Free Open Source Software
HAIs	Historically Advantaged Institutions
HDIs	Historically Disadvantaged Institutions
HE	Higher Education
HEIs	Higher Education Institutions
HEQC	Higher Education Qualifications Committee
HESA	Higher Education South Africa
ICS	Information and Communication Services
ICT	Information and Communication Technology
IIS	Integrated Information Strategy
ITL	Improving Teaching and Learning
JISC	Joint Information Systems Committee
LMS	Learning Management System
MELISSA	Measuring the impact of e-learning in schools in disadvantaged areas in South Africa
MIS	Marketing and Information Services
MOOCS	Massive Open Online Courses
MOP	Minimum Online Presence
NCHE	National Council on Higher Education
NPHE	National Plan on Higher Education
OECD	Organisation for Economic Co-operation and Development
PNA	Policy Network Analysis
QMO	Quality Management Office
SA	South Africa
SAIMS	South African Institute of Management Sciences
SAPC	Senate Academic Planning Committee

SAHE	South African Higher Education
SAPC	Senate Academic Planning Committee
SAQA	South African Qualifications Authority
SATN	South African Technology Network
SCOT	Social Construction of Technology
SMEs	Small and Medium Scale Enterprises
SST	Social Shaping of Technology
TCA	Theory of Communicative Action
TG	Text Genre
TLTU	Teaching and Learning Technology Unit
UCT	University of Cape Town
UKZN	University of Kwazulu Natal
UNISA	University of South Africa
UWC	University of Western Cape
UoT	University of Technology
UoTs	Universities of Technology
USA	United States of America
VLE	Virtual Learning Environment

LIST OF PUBLISHED PAPERS:

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CHAPTER ONE

THE CONTEXT OF E-LEARNING POLICIES IN THE SOUTH AFRICAN HIGHER EDUCATION (SAHE) TEACHING AND LEARNING LANDSCAPE

> Computers have become a ubiquitous feature of South African universities and yet there is tremendous unevenness in institutional policy development, physical infrastructure, delivery capability and practitioners' understandings of ICTs, their meaning and their potential for educational change Czerniewcz et al. (2007: 4).

1.0 Introduction

The application of technologies in teaching and learning in Higher Education Institutions (HEIs) has challenged the way university education is understood and conducted. Electronic technologies such as the Internet, computer-based multimedia and the World Wide Web have re-organised the context of teaching and learning in universities. The term 'e-learning' is used to describe the various applications of such electronic technologies to teach (Bates, 2001). To date, most institutions have some kind of web presence supporting an e-learning system or Learning Management System (LMS). The changing context presents both opportunities and challenges for HEIs. One way in which HEIs have reacted to the challenge of teaching with technologies is through the development of e-learning policies, strategies, plans, tactics and other guidance documents to deconstruct the phenomenon of teaching with technology and to institutionalise the change from traditional ways of teaching in the classroom to modern ways of teaching with technology.

Globally, there has been a growing recognition of the role of Information Communications Technologies (ICTs) in teaching and learning in a variety of key policy documents (European Commission, 2001; European Union, 2003; OECD, 2005). In South Africa, the former Minister of Education, Naledi Pandor, expressed this acknowledgement as a foreword to the Draft White Paper on E-education which reads:

> Digital media has revolutionized the information society and advances in ICTs have dramatically changed the teaching and learning process DoE (Department of Education) (2004:6).

It is now widely accepted that ICTs play an important role in teaching and learning in HEIs. However, the nature of the link between education and technology remains unclear. E-learning has become an important research topic in Information Systems (Limayen & Chenge, 2009; Roca, Chiu & Martinez, 2006).It is

particularly interesting for Information Systems researchers in Africa because most HEIs in Africa continue to invest a lot of money in building their e-learning platforms and providing virtual learning platforms (Ambient Insight Regional Report, 2011). However, the success rates of using technologies to teach in South Africa remain low (Lewin & Mawoyo, 2014).

Decisions for investments in ICTs in most HEIs are technology-led rather than being focused on educational goals (Kirkwood, 2014). HEIs in South Africa base their choices of using ICTs in teaching and learning on technological possibilities rather than educational needs (Jaffer, Ng'ambi & Czerniewicz, 2007). Much of the discourse on using ICTs in Higher Education teaching and learning seems to focus on access to technology**,** availability of computers, Internet and bandwidth, rather than on the ways ICTs are being used to support teaching and learning (Mostert & Quinn, 2009). Institutional policy discourses are laden with ideological views that associate the presence of technological infrastructure with enhanced learning. Such technocratic discourses are also dominant in strategic policies that are meant to assist institutions to embed e-learning.

Despite a growing uptake of ICT, policymakers, academics and other practitioners in HEIs in South Africa are criticised for a lack of understanding on how the technology enhances teaching and learning processes and how it should be applied (Mlitwa, 2006). A number of different ontological and epistemological assumptions about technology in education account for different perspectives, conflicting theories and contradictory findings impinging on the use of ICTs for teaching and learning. Technocratic views continue to dominate the South African Higher Education (SAHE) policy space (Mostert & Quinn, 2009). Developing effective policies on e-learning is a challenge not only for SAHE institutions. Literature on e-learning in Higher Education (HE) notes that e-learning policy remains an area that needs improvement in most HEIs in Africa. From a study of 311 institutions in Africa, for most of the institutions, e-learning policies remained an area that still needed to be improved (Bichsel 2013:37).

Few studies have devoted their attention to analysing and understanding institutional e-learning policies in South Africa (Czerniewicz & Brown, 2009; Okem, 2010). This study considers the relationship between policy-making processes and e-learning policy discourses in HEIs. Its objective is to understand how policy formulation processes shape e-learning policy discourses in HEIs. This study is located within the context of two ongoing and unresolved debates in HEIs in South Africa:

1. The role of ICTs in teaching and learning and

2. Contradictions in the manner in which e-learning is conceptualised

This chapter sketches a bird's eye view of the competing views in the current conceptualisation of e-learning in HEIs. This is followed by a discussion on how e-learning has become important in the SAHE context, illuminating the role of e-learning policies in navigating a changing context of teaching and learning. The chapter then turns to review previous research on e-learning conducted in South Africa. Understanding the relationship between policy formulation processes and e-learning policy discourses in HEIs in South Africa is identified as a persistent problem which is located within the context of previous research. This chapter also discusses the approach this study took.

1.1 Conceptual debates on e-learning

The 'e' in e-learning stands for electronic. Given the diversity of electronic technologies in today's society, the term 'electronic' applies to a wide range of technologies and, as such, the term 'e-learning' becomes ambiguous. The term is understood from many angles and used with different meanings (Stein, Shephard & Harris, 2011). There is no consensus on the meanings of terms in e-learning and the implications of concepts used by various stakeholders (Nichols, 2003; Mlitwa, 2006). These contestations are not just a semantic difference, but have practical implications on how institutions engage with technology for teaching and learning purposes.

There is disagreement on whether e-learning encompasses online learning, distance learning, hybrid learning and blended learning, all of the above, or not necessarily any of the above (Bichsel, 2013).The overarching focus with all these terms is that learning either occurs online or offline, technically referred to as asynchronous and synchronous learning. Asynchronous e-learning refers to e-learning that is 'pre-recorded' or available to learners at any time of the day, potentially from any location (Rosenberg, 2001). Synchronous e-learning is 'live' and requires all learners to be in front of their computers at the same time. Given these two forms of e-learning, HEIs locate themselves in a continuum that shifts from blended courses that combine traditional face-to-face teaching with technology to full, online, synchronous and asynchronous virtual learning environments (Nawaz, 2012). Blended (using both approaches) learning has remained the dominant form of instruction for most universities in South Africa.

In a study of e-learning policies in Australia, Canada, Finland, Iceland, Korea, Japan, Sweden, the United Kingdom and the United States, Sangra, Vlachopoulos and Cabrera (2012:online) noted that in the policy

documents there is no generally accepted definition of e-learning. As shown in Table 1.1, they identified four different categories of e-learning definitions, reflecting the various ways in which e-learning is conceptualised.

Table 1.1 Types of e-learning definitions by Sangra et al. (2012: online)

Type of e-learning definition	Description
Technology-driven	Emphasises the technological aspects of e-learning, while presenting the rest of its characteristics as secondary. The definitions in this category portray e-learning as the use of technology for learning.
Delivery system oriented	A means of accessing knowledge (through learning, teaching and training). The focus is the accessibility of resources and not the results.
Communication oriented	This category considers e-learning to be a communication, interaction and collaboration tool and assigns secondary roles to its other aspects and characteristics.
Educational paradigm oriented	Defines e-learning as a new way of learning or as an improvement on an existing educational paradigm. The majority of the authors fall into this category work in the education sector.

There is no common understanding of e-learning. E-learning is currently a foggy landscape, making it difficult to develop transferable models from particular institutions, as many are still developing or experimenting with e-learning initiatives (Bichsel, 2013). A common understanding of how to define e-learning could assist researchers in identifying models and practices for applying e-learning and in determining the key factors for better and more effective use of this type of teaching and learning (Sangra et al., 2012).

1.2 The introduction of ICTs for teaching and learning in the SAHE sector

The HEI sector consists of 23 state-funded tertiary institutions (See Appendix 1).The university sector in South Africa is diverse in nature and programme offerings are due to deliberate government policies and historic-economic trajectories. One of the inherent legacies of apartheid in the HE sector is the classification of institutions based on historic and economic criteria, namely:

1. Historically Disadvantaged Institutions (HDIs) and

2. Historically Advantaged Institutions (HAIs)

DHET (2014:1) in *A Policy Framework on Differentiation in the South African Post-School System*, argues that:

> Some of the differentiation in the HE sector has been the result of historical legacies that have not been adequately redressed, resulting in a great inequality among the universities, some of which still find themselves with inadequate resources and capacity to provide for the basic needs of their students and other stakeholders.

Under apartheid, HAIs were better resourced for both teaching and research. HDIs were poorly resourced and suffered from low levels of research outputs. The democratic government opened doors to all HEs for all race groups to enter (IEASA, 2009). This saw an influx of learners entering into HAIs, resulting in the massification of HEIs. Another challenge faced by HEIs was how to deal with the diversity of learners received into the HEIs. Some learners from disadvantaged backgrounds came ill-prepared for tertiary education (Hodgkinson-Williams, 2009). In view of the foregoing challenges, the use of technology in teaching came with the promise of serving larger classes and providing learning anywhere, anytime, something which the traditional university classroom could not deal with. ICTs were seen as powerful tools that could increase access and redress for marginalised learners.

The government's commitment to the use of ICTs in teaching and learning in the HE sector was acknowledged in a number of key policy documents, including the Higher Education Act of 2001; National Plan for Higher Education; The White paper on e-education (2004) and the National Council on Higher Education (NCHE) Report (1996). However, the government has been criticised for the absence of a national policy on the use of ICTs in the HE sector, as is the case in other countries (Cross & Adam, 2007; Czerniewicz et al., 2007). Czerniewicz et al. (2007:55) aver that:

> To develop institutional frameworks and strategies, institutions have to rely on a series of fragmented statements scattered through policy documents that provide little direction.

1.2.1 Institutional e-learning policies in HEIs in South Africa

Despite the absence of a national ICT policy for the tertiary sector, most HEIs in South Africa have been formulating e-learning policies. Table 1.2 presents some of the policies.

Table 1.2 Institutional e-learning policies in HEIs in South Africa

Institution	Year	Document
Stellenbosch University	2003	E-campus strategy
University of Pretoria	2003	A telematic learning and education innovation strategy plan
University of Western Cape	2004	An e-learning strategy
University of Limpopo	2004	ICT policy document
University of Cape Town	2004	Educational Technologies policy
University of Witwatersrand	2009	E-learning strategy and tactics
University of Zululand	2009	E-Learning implementation strategy and plan;
University of Fort Hare	2009	The promotion of technology-enhanced learning concept paper
Cape Peninsula University of Technology	2011	E-learning policy

The formulation of e-learning policies in HEIs has been coupled with the establishment of structural subsystems to support the use of technologies in teaching (Madiba, 2009). New units and structures have been added into the organisational structures of most universities as centres that manage the use of ICTs in this changing context. There have been calls to have e-learning policies so as to ensure that different subsystems work in tandem to achieve the set outcomes. As new units are being established and new roles assigned, this would suggest new activities and tasks; however, in some cases there is duplication of duties (Madiba, 2009).

As shown in Table 1.2, e-learning policies in HEIs in South Africa are identified by various names. The Government of South Africa, through the Draft White paper on e-Education (notice 1869 of 2004), defined an e-learning policy as guidelines and processes that govern the implementation of flexible learning, using ICT resources, tools and applications, and that focus on interaction among teachers, learners and the online environment, as well as collaborative learning. Other notable definitions of e-learning policy in a South African context extend beyond that of formal policy documents to include the allocation of goals, values and resources (Czerniewicz & Brown, 2009).

In the absence of a national policy for using ICTs in the HE sector in South Africa, policy approaches to integrating ICTs in curriculum design and delivery have been varied across institutions. Czerniewicz and Brown (2009:122) group institutional policy approaches to e-learning into two types:

1. Institutions with structured e-learning policies and
2. Institutions with unstructured e-learning policies

Table 1.3 presents the conditions for the different policy types.

Table 1.3 Institutional e-learning policy types adopted from Czerniewicz and Brown (2009:122)

	Structured e-Learning policy*	**Unstructured e-Learning policy**
Senior-level formal Support	Policy document	No policy document
E-Learning structures	Centralised support unit	No formal support unit (possible fragmentary or ad hoc support)
Institution-wide system	Institutionally supported online learning management system (LMS)	No (or ad hoc) online learning management system (LMS)

* To consider an institution as 'structured', e-learning policy had to be present at all three levels of senior level formal support, e-learning structures and an institution-wide system.

In the structured type, there is a formal policy in place and also a dedicated unit for e-learning and, in most cases, an integrated e-learning system for the university. Institutions that follow an unstructured policy approach are diverse. Some have incorporated their e-learning policies in other policies such as the teaching and learning policy, while some have principles about teaching and learning that refer to the importance of ICT usage. Others have loose collections of documents that guide university processes and that refer to ICTs in education in a salient way, yet others have no policy frameworks in place but have structures to support e-learning.

1.2.2 The purpose of institutional e-learning policies

An e-learning policy at institutional level serves the following purposes:

- It enables the institution to follow well-planned and guided strategies in implementing the process of integrating ICT in teaching and learning (Sesemane, 2007).
- It creates a common vision on the use and development of e-learning (Gatimu, 2008).
- It can provide a rationale, a set of goals and a vision for how education systems might be with the introduction of ICT, and how students, teachers, parents and the general population might benefit from its use in schools (Jones, 2003; Kozma, 2003).
- It offers a participatory pedagogy coupled with cost-effective technology solutions to overcome the increase in market demand and socio-economic pressures facing HEIs (Tucker & Gentry, 2009).

A lack of policies could lead to unnecessary duplication of efforts and an uncoordinated duplication of investments, consequently making the creation of institutional support strategies and mechanisms untenable (Njenga, 2011). Rajaram and Peters (2010:6) argue that:

> . . . the absence of e-learning policy at institutional level makes it difficult for institutions to tap into the wealth of knowledge of various stakeholders involved in the implementation of e-learning in a university context.

1.3 Previous research on e-learning policymaking and discourses in HEIs in South Africa

A perusal through the literature for previous research that speaks to e-learning, policy making and discourse in HEIs in South Africa revealed that researchers have discussed five key areas of e-learning, policy making and discourse, as shown in Table1.4.

Table 1.4 Five key focus areas of previous research on e-learning, policy making and discourse in HEIs in South Africa

Focus area	Studies done	Findings
1. Policies and strategies	Czerniewcz and Brown (2009) Cross and Adam (2007) Okem (2010) Njenga (2011) Bagarukayo & Kalema (2015) Isabirye and Dlodlo (2014)	There is little research on e-learning policies. Institutions with e-learning policies have more courses online; have a higher frequency of individual use of e-learning systems; have better support for e-learning; and more resources being channeled towards e-learning. Institutional policies may stifle innovation and create barriers in pedagogical exploration. Lack of policies lead to duplication of tasks. There is a need for institutional leadership, policy and awareness programmes to encourage e-learning use; also to improve institutional policy and delivery performance in HEIs. The involvement of faculties in policy decisions and investment in technological innovations in HEIs is necessary. Some of the challenges of adopting technologies include lack of university policy.
2.The e-learning context	Jaffer et al. (2007) Hodgkinson-Williams (2009) Bozalek and Ng'ambi (2015)	There is a strong belief that electronic technologies should solve the country's teaching and learning challenges. E-learning is linked to government's agenda of social transformation. It emphasises the importance of focusing on pedagogy that is informed by context, learner needs and appropriate pedagogical principles.
3.Competing perspectives in e-learning	Ravjee (2007) Czerniewcz and Brown (2009) Bladergroen et al. (2012)	There are contestations and competing perspectives pertaining to the role of ICTs in teaching and learning in HEIs. There is need to understand the role of ICTs in teaching and learning in this context.

4.Dominant discourses in e-learning	Roode et al. (2004) Ngambi (2008) Mostert and Quinn (2009) Njenga and Fourie (2010) Bladergroen et al. (2012)	Technological optimism pervades the e-learning literature in South Africa. Decisions to invest in technologies in HEIs are technologically deterministic. The absence of critical discourses is lamented.
5.The use of language in e-learning research	Njenga and Fourie (2010) Mlitwa (2006) Ravjee (2007)	Practitioners in HEIs in South Africa have little understanding of what e-learning is. E-learning appeared with new language and vocabulary which is confusing for practitioners.

Table 1.4 does not provide a comprehensive review of all articles relating to e-learning policy making and discourse, but rather the articles chosen had something meaningful to contribute to a discussion on the relationship between policy-making processes and e-learning policy discourses. Some of the articles have been used to develop country reports on the uptake of ICTs in HEIs in South Africa. Czerniewcz et al. (2007:53) contributed a chapter in a report by the Council on Higher Education (CHE) which reviewed the state of ICTs in HEIs in South Africa. A recent article by Bozalek and Ng'ambi (2015:3) explores the context of learning with technology. As shown in Table 1.4, there has been an attempt to research e-learning policies but, to the researcher's knowledge, the literature is still thin in this area. Few researchers have focused on e-learning policies in South Africa. Other studies in the literature have made subtle references to the need for HEIs to develop coherent policies and strategies to deal with the changing context of teaching and learning brought about by the use of electronic technologies (Mostert & Quinn, 2009; Okem, 2010; Bozalek & Ng'ambi, 2015). Appendix 2 provides a more detailed summary of previous research done on e-learning, policy making and discourse in HEIs in South Africa.

1.4 Rationale and research questions

There is a paucity of research in the area of e-learning policies (Okem, 2010). In view of the discussion in Section 1.3, this study attempts to close this gap. The broader literature has shown that institutional policy is crucial for the way e-learning is embedded and used in institutions of learning (de Freitas & Oliver, 2005; Cross & Adam, 2007; Sesemane, 2007; Stoltenkamp, Kies & Njenga, 2007; Awidi, 2008; Nichols, 2008, Bagarukayo & Kalema, 2015). Policymakers as e-learning advocates play an integral role in developing policies that can enable the effective use of ICTs in this context (Czerniewcz & Brown, 2009). However, in South Africa, policymakers have been criticised for having limited understanding on how ICTs should be

appropriated into teaching and learning (Mlitwa, 2006). Whilst the literature places a profound responsibility on policymakers in HEIs to develop e-learning policies, there is a dearth of research on how e-learning policies are formulated and which factors influence e-learning policy-making processes. Considering that e-learning is a contested policy space, it is important to explore how e-learning policy issues are framed, who is involved in the process of formulating these policies and what discourses inform e-learning policies in HEIs in South Africa. For this reason this study asks:

How do policy-making processes shape e-learning policy discourses in HEIs?

To answer this primary research question, the following secondary questions were posed:

1. What factors impact on e-learning policy-making processes in HEIs?
2. How are policy issues framed?
3. How are the actors constituted?
4. How is power exercised in the policy formulation process?

In a policy environment where technologically deterministic discourses pervade much thinking on e-learning issues, this study also sought to establish answers to the question:

5. What are the discourses informing e-learning policies in HEIs in South Africa?

To this researcher's knowledge, there is no study focusing on the views about teaching and learning found in e-learning policies in South Africa. Little is known about how institutional policymakers conceptualise the role of ICTs in teaching and learning, and how this thinking affects the framing of e-learning policy issues in HEIs.

1.4.1. Aims of the research

The aim of this study is to understand the implications of policy-making processes on policy discourses in HEIs. The study seeks to understand how important decisions are reached on the ground and the factors influencing the processes of designing e-learning policies. This relationship needs to be problematised in the context of changing organisational forms introduced by the emergence of e-learning in HEIs, where new organisational units to manage e-learning are being added into organisational structures. Czerniewcz et al. (2007:57) observed that there is need to investigate the important decisions being made on the ground which are framing an emerging policy framework, whilst making explicit the subconscious allocation of values.

1.5 Research approach

This study is based on a multiple case study of e-learning policy making in three universities in South Africa.

1. University A – a university formed from a merger of a HAI and a HDI,
2. University B – an HDI and
3. University C – an HAI.

Interviews were held with actors who participated in formulating the e-learning policies at the three universities. The study used the Stakeholder theory to understand the processes of developing e-learning policies. To gain a broader understanding of e-learning policy discourses in South Africa, the study embarked on a multiple-case analysis of e-learning policies at the three universities, to see how the discourses play out in different contexts and to understand their implications for teaching and learning. The policies were analysed, using Critical Discourse Analysis (CDA) informed by Fairclough.

1.6 Definitions of terms

The definitions used in this thesis are mostly theoretical. This means that they are conceptually grounded in the theoretical frameworks from which one conceives them. For this reason, their meaning is contested, depending on which theoretical lens one uses to deconstruct their meaning. Since this study is located within the critical paradigm of policy analysis, the definitions and meanings of the concepts used are aligned to the critical approach in which this study is positioned.

Discourse analysis	A method of text analysis which looks at the ways in which language is used purposely to encourage certain practices. It is used in this thesis to analyse the ways in which policies are written, revealing certain beliefs and preferences.
Discursive	The space where policies are deliberated, discussions are held and policies are produced.
ICTs	A combination of communication networks, hardware and software that enables the processing, management and exchange of data or information.
Policy analysis	Diverse approaches applied to the study of policy making.
Stakeholders	Any individual or group who can affect or is affected by the decisions taken and the policies formulated in an institution.

Text Broadly used in the context of this thesis, refers to the content of the policies.

1.7 Structure of the thesis.

This section provides a synopsis of each chapter of the thesis.

Chapter 1 introduces the context of e-learning policies in the SAHE landscape. The chapter notes that e-learning is a complex policy area to navigate, due to the lack of understanding on the role of ICTs in teaching and learning and the various contestations on the meanings of terms used to describe the concept. The chapter presents the objectives of the study and research questions.

Chapter 2 reviews literature on the theories used to understand policy making. It traces the trajectory of approaches to policy making, from traditional rational models to pluri-centric models. The chapter notes that no single model of policy making is superior to others.

Chapter 3 reviews literature on the hidden contradictions in the theories applied to explain the role of technologies in education teaching and learning. These contradictions are embedded in the discourses of these fields and are present in the positions that various stakeholders in HEIs take on what constitutes learning, what constitutes technology and what constitutes learning with technologies.

Chapter 4 discusses the theoretical dimensions of the study, focusing on Stakeholder theory and CDA.

Chapter 5 outlines and explains the methodology used for the entire thesis. The chapter discusses how a multiple-case-study research design was used to investigate the research problem in the thesis. Various methods were used to gather data, combining policy analysis with responses from semi-structured interviews and document analysis.

Chapter 6 describes the case studies and explores the contexts in which the universities are located within the broader HE context in South Africa.

Chapter 7 traces the policy-making processes of e-learning policies at universities A, B and C, from the identification of the policy problem to the development of the policies, focusing more on the discursive construction of the policies through discourse and the views of actors in the process.

Chapter 8 explores the different philosophical positions on the role of ICTs in teaching and learning embedded in the three e-learning policies. By looking at the interaction between texts, discourses and practices, the analysis exposes the discursive power relations that are promoted through various text genres and discursive types in writing policies in different contexts.

Chapter 9 explores the link between policy-making processes and e-learning policy discourses.

Chapter 10 presents the conclusions and recommendations of the study. It reflects on the limitations encountered and the contributions made by the thesis. The chapter also identifies areas for further research.

CHAPTER TWO

POLICY MAKING

2.0 Introduction

The taxonomy of theoretical approaches informing policy making is vast. This chapter provides a review of models that are of particular relevance to the research problem under investigation in this thesis. The chapter also reviews literature on the organisational structures affecting policy making in public universities in South Africa, looking at the ways in which universities are managed as organisations which impact on policy making.

Policy making in large complex organisations such as universities has been theorised through the application of a variety of models. Traditional theorists of policy making in HEIs view policy making as occurring in a purposively rational linear manner. Rational linear models stem from the bureaucratic view of organisations. As such, policy making is viewed as a linear process consisting of causally linked phases. However, a conviction has grown among researchers that a policy process is far more intricate and irrational than is suggested by the traditional view. New methods for analysing policy making, centering on the 'argumentative', 'deliberative' 'constructivist' and 'discursive' approaches have emerged in the last two decades (Fischer, 2012). Consequently, the focus of much higher education policy-making research has moved from the simple process analysis to studying the interactive dimension of the policy process as a whole. New approaches to analysing policy making focus more on the actors involved in policy making and the ways in which interactions between these actors affect the outcomes of the policy process (Hermans et al., 2010).

2.1 Approaches to policy making

In this thesis, the trajectory in the dynamics of policy making in universities led the researcher to explore five theoretical models for analysing policy making:

1. Rationalism 2. Process models 3. Incrementalism 4. Elitism and 5. Pluralism

Table 2.1 provides a summative overview of theoretical approaches to policy making, as will be discussed in this chapter.

Table 2.1 Theoretical approaches to policy making adopted from House (1987:145), with modifications

Model	Focus	Use	Limitations	
Rational comprehensive or bureaucratic	How are decisions made? (Rationally, bureaucratically)	Describes a rational scientific decision making process	May be unrealistic, exaggerate the time, resources and information available to the decision maker, may not take group or elite power into account	UNI-CENTRIC AND RATIONAL MODELS
Process models	How does policy making occur? (recurring steps, as a process)	Describes the process or system, multiple decision points and fragmentation of power	May overlook changes in the social political environment; content of the process may be overlooked	
Incrementalism 'Muddling through' (Lindblom,1959)	How are decisions made? (Incrementally)	Highlights the manner in which officials make decisions	May overlook the role of elites, systematic stages in the process and possibility of innovative policy changes	
Institutionalism	How are decisions made? Based on individual rationality (rational choice institutionalism). Incrementally-based (historic institutionalism).	Illuminates the local authority structure, rules and regulations followed in a given context	Over-emphasis on organisational factors affecting policy making	
Elitism 'Kings & Kingmakers' (Wolfe, 1977)	Who has the power? (elites)	Illuminates the role of institutional leaders, reveals hidden power brokers who influence policy	May overstate the role of elites, understate the role of groups and the multi-dimensional nature of policy making; can be hard to identify the elites over time	PLURI-CENTRIC MODELS
Pluralism or Group theory 'Clusters Iron Triangle' (Wolfe,1977)	Who has the power? (groups)	Describes the central role of groups, allows for incrementalism	May overstate the group role and understate the role of public officials and institutions; may overlook environmental factors	

The models presented in Table 2.1 provide a cross-section of some of the theoretical approaches to policy making. Traditional rational models of analysing policy making focus more on:

i) what happens during policy making
ii) when policy making takes place
iii) how policy making takes place

Traditional rational models concentrate less on who the participants are in policy-making processes and why particular outcomes occur. However, current approaches to policy making view policy making as a cycle without a beginning or an end. Policy making in recent models functions as a perpetual cycle of phases of interactions between the participants (Bates, Lewis & Pickard, 2011).

This study hypothesises that internal policy making in universities involves a number of stakeholders and decisions are not always reached in a purposively rational manner. Policy making is explored as a multi-actor activity that does not occur in any rational order. For this reason there is need to bridge the gap between stakeholder interests (Timmermans, 2004). In multi-actor policy-making settings, power and authority are important (Kornov & Thissen, 2000). The theories reviewed in this chapter were particularly important for this study because they address different questions pertaining to policy making, as shown in Figure 2.1

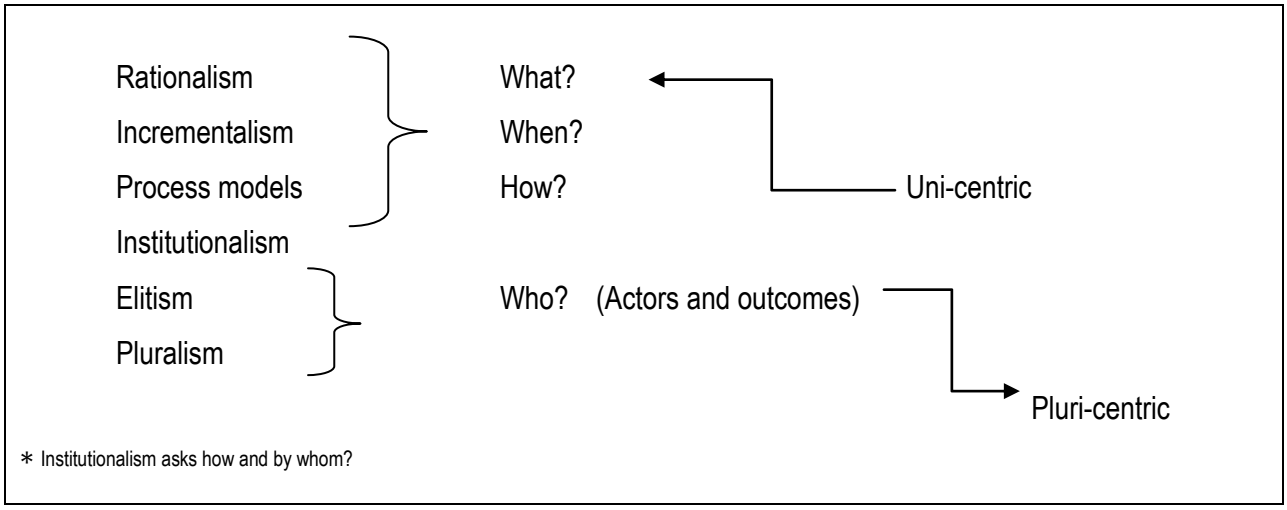


Figure 2.1 Questions answered by different theoretical approaches to policy making

Figure 2.1 shows that these models can be classified into two:

1. uni-centric and
2. pluri-centric models

The former tend to be based on the decisions of a single unitary actor in most cases, whilst pluri-centric models recognise the multiplicity of actors who formulate policies (Timmermans, 2004).

2.2 Traditional rational approach to policy making

Traditional rational linear policy-making models are based on the idea that scientific knowledge is superior to the knowledge of actors participating in policy making. According to the rationalist model, informed decisions and successful strategies in the development of policies result from sound scientific reasoning (Abbot & Wilson, 2015). Central to this model is the belief that the truth and validity of scientific knowledge will be able to mitigate conflicting ideologies through its value-free metaphysical position and thus be able to arrive at the right decisions which will benefit all (Abbott & Wilson, 2015).

Rational purposive policy-making models presume that incumbents in formal positions of the organisation have the prerequisite information, expertise and authority to make decisions relating to their areas of responsibility. Policy making in this organisational model is viewed not only as a rational process, but as a unitary activity undertaken by the person who has been assigned the responsibility for overseeing that particular part of the operation. The decision maker goes through the rational process of judging the merits of alternative solutions to each problem and selects the alternative which maximises the goals of the organisation. Policy analysts located in this school of thought concentrate on understanding the content and nature of the policy problem and designing and weighing amongst alternative solutions to the problem.

Organisations that opt for rational policy-making approaches base the process of policy making, the interactions taking place and the decisions being reached on the strength of scientific knowledge which policy actors apply to the problem to come up with the best solution to the problem. The way to achieve such rationality in policy-making processes is to assume that actors bring objective scientific knowledge to the policy-making process which is devoid of individual beliefs and interests. The policy-making process assumes an uncomplicated, positivist view of knowledge in which the messy business of competing values and interests are made subordinate to the 'truth' of scientific knowledge (Heazle, 2010). Rational policy-

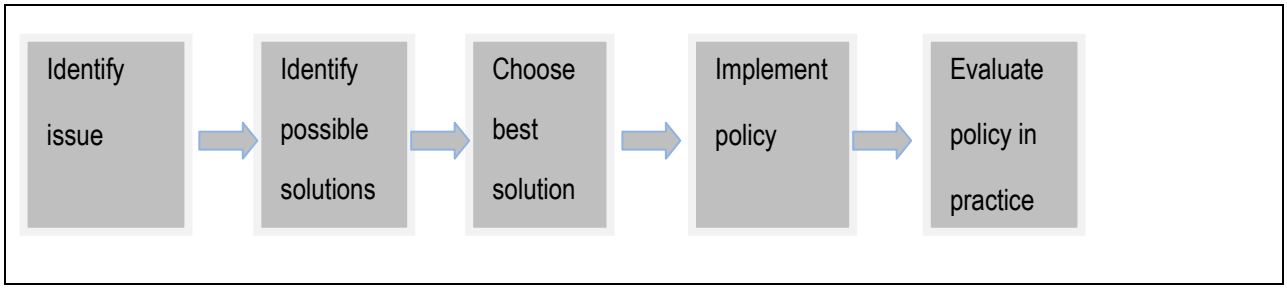
making approaches have been critiqued for their dismissal of the more fundamental issues that expose the messiness of policy making.

Rationalist models are closely associated with science, technical expertise and value-free facts. Linear rationality is reflected in the seemingly ubiquitous Stages model. Different varieties of rationalist models have resulted, depending on the extent to which they accept or reject these attributes of rationalist models, such as 'incrementalism' and 'bounded rationality'. All these variations revolve around what is known as the linear rationalist model, rejecting or accepting some of its attributes (Abbott & Wilson, 2015).

2.2.1 Rational purposive model of policy making

The Stages model depicts policy making as occurring in distinct stages: agenda setting, formulation, decision making, implementation and evaluation. The process is believed to start with the identification of a problem and proceeds in a linear fashion towards the identification of a solution to the problem. Rational purposive models assume a linear development, from the identification of an issue or problem to the implementation of policies or practices that are designed to ameliorate it (Trowler, 2003), as shown in Figure 2.2.

Figure 2.2 Rational purposive model of policy making, adopted from Trowler (2003:35)



Hahn (1987:223) argues that rationalism typically includes:

> . . . the stages of clarifying and ranking goals, identifying an array of alternatives for reaching the goals, predicting the consequences of each alternative, comparing the anticipated consequences of the various alternatives and selecting the alternative that maximizes the attainment of goals.

Policy making by policymakers is treated as an intellectual process that is clean and linear, whilst negating the fact that policy making is a political process that involves interactions between various stakeholders with sometimes competing interests. Various studies have used rational purposive models of policy making

to understand policy making in higher education. Li and Lin (2008) used the rational framework to study the policy-making process in China's higher education.

Allison and Zelikow (1999:18) defined rationality as making consistent value-maximising choices within specified constraints. In policy making, the best alternative is considered after weighing the costs and benefits, advantages and disadvantages of each alternative. First, rational purposive models of policy making assume that those who are entrusted with making decisions can identify what the problem is, no matter which field they are from or how much they know about the area (e.g., application of technologies in pedagogy).The second assumption of the model is that policy makers' goals, values and objectives are clear and that they can be ranked in order of importance. Third, it is assumed that, once the policy makers have identified the problem, they are able to come up with the best alternatives to solve the problem.

The rational purposive models assume a 'means ends'-driven approach to policy making. First the 'ends' are isolated and the 'means' to achieve them are sought. Malen and Knapp (1997:423) believe that in rational purposive models of policy making, policy is cast as the instrumental means for achieving the stated ends. It is assumed in rational models that decision makers are able to specifically state the ends which they hope to achieve and also analyse the means to attain them. However, in some instances, it is important to note that policy makers may not be able to agree on what they want to achieve, nor agree on how to reach those goals.

2.2.2 The linear stages model of policy making

The linear model of policy making divides the policy-making process into sequential steps and each is analysed separately. Each stage is treated as an individual, once-off activity which is distinct and time-bound. In linear models of policy-making, different stages involve different institutions and actors. Policy formation may proceed in stages, but the process can be derailed at any point. The issue either gets into the agenda or is dropped on the way. There are clearly defined phases separating decision making from implementation. Figure 2.3 presents the linear model of policy-making.

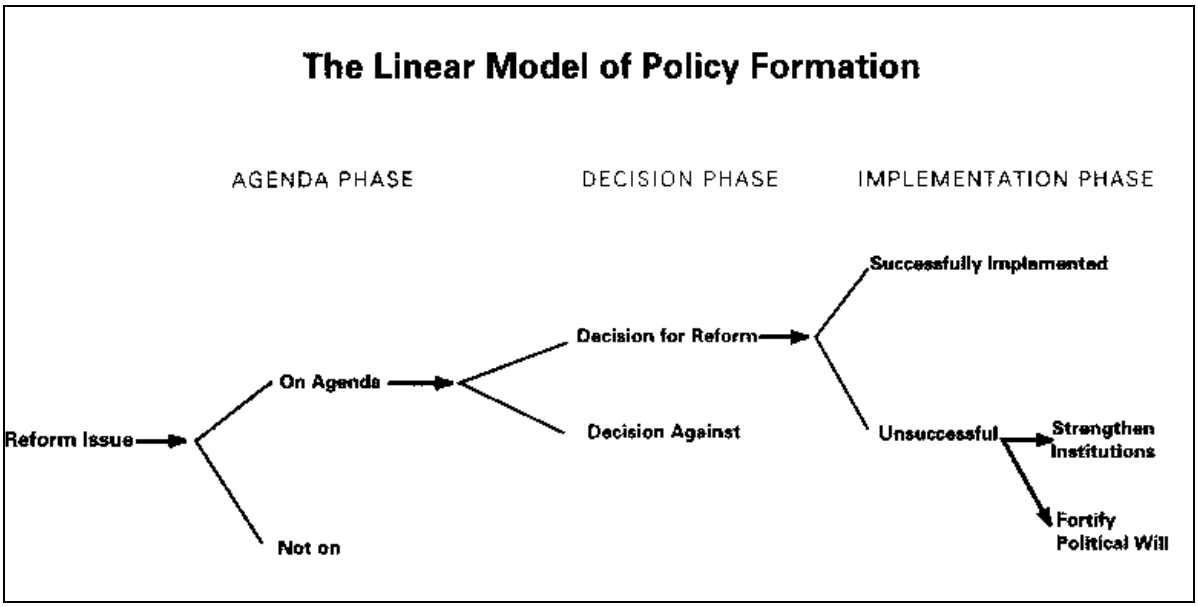


Figure 2.3 The linear model of policy making, adopted from Grindle and Thomas (1990)

The framework shows that the policy process starts with the recognition of a problem that needs to be solved. At every stage, a decision can be made for or against a policy issue. Some issues get into the agenda, others are dropped. Decisions are made for and against the policy. Some decisions are implemented and others are not.

2.2.3 The policy circle

Rational purposive models and linear models have been criticised for failing to capture all the key components of the policy-making process. The policy circle is preferred by some researchers as it tries to capture all the key components of the policy-making process. Hardee et al. (2004:4) used 'P' designations to describe the different components of the policy-making process (See Figure 2.4).

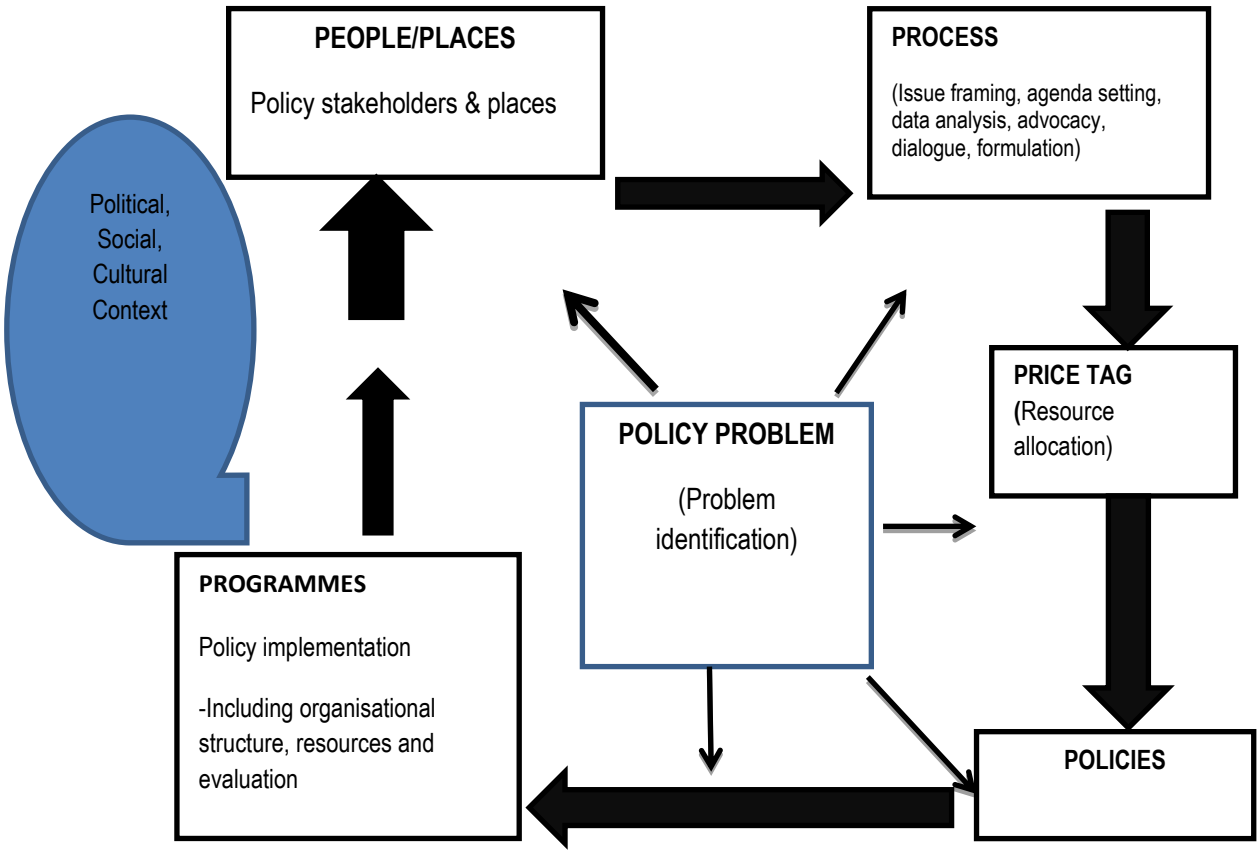


Figure 2.4 The policy circle, adopted from Hardee et al. (2004:4)

The arrows in the policy circle join each of the six components with the other components to depict the complex and non-linear nature of policy. In this model (Figure 2.4), the arrows are used to simply emphasise that policy making can be interrupted at any point. The 6 P's include:

P1-Policy problems
P2-People who participate in policy making
P3-Process of policy making
P4-Price tag of the policy (the cost of policy options and how resources are allocated)
P5-Paper produced (actual policies)
P6-Programmes that result from implementing policies' goals and objectives

One of the first components of the policy-making process are the issues or *problems* to be addressed through policy, *people* or stakeholders who participate in policy making and the places they represent

within the organisation. Patton and Sawicki (1993:56) observe that part of the problem definition is to understand the positions and influence of various individuals and groups. In this case, the analyst asks: Who is concerned about the problem and why? What are their stakes in the issue? What power do they have to affect a policy decision and the *process* of policy making? Table 2.2 describes some of the activities during the policy-making process.

Table 2.2 Activities associated with policy making

The process of policy making includes:	**Activities associated with the process include:**
• Framing the 'problem' (issue framing)	• Advocacy for the issue to be addressed through policy and how
• Getting the issue on the policy agenda (agenda setting)	• Policy dialogue on what the policy will include
• Formulating the policy (policy formulation)	• Data analysis to aid each step of the process

The process of formulating the policy starts with framing the issue (See Table 2.2). This stage involves defining the issue and understanding the policy problem. Framing is a way of structuring, presenting or naming a problem or an issue to which a solution is being sought. Hajer (1993:45) posits that to frame is '. . . to distinguish some aspects of a situation rather than others'. Framing is the lens through which people see a problem or an issue to which a solution is being sought (Frameworks Institute, 2002). When framing a policy issue, the policy champions or change agents should ask themselves: What is the problem? What is not right that needs a solution? The challenge for the policy champion is to identify key concerns that resonate with everyone, without marginalising others. It is important in that it helps to identify the policy problem. By understanding how issues are framed, one can note how policy makers prioritise and apply stakeholder opinions to the problem.

In a policy network, it is rare to find actors who have the same views on the policy issue. Often, policy stakeholders take different sides of an issue. When this happens, it is important to note whose views become dominant, who has the power to define issues and whose voice is silenced. Hardee et al. (2004:27) noted that:

> In prioritizing stakeholder opinions, dominant discourses or ways of thinking become established, making clear certain priorities, simplifying complex problems and providing guidance on certain policy directions in solving policy problems.

However, as a starting point it is important that the policy network has a shared understanding of the 'problem' in order to map the right solution to the problem. Policy issues should be framed in a broad way to achieve common ground and reduce polarisation among stakeholders. Agenda setting facilitates the prioritisation of issues or problems to be dealt with by an institution. It lists those problems that the university would like to deal with as a matter of priority.

2.2.4 Criticism against traditional rational models of policy making

Some authors have criticised the mechanistic view of policy formulation processes based on rational models. These models fail to evoke or suggest the distinctively political aspects of policy making, its apparent disorder, and the strikingly different ways in which policies emerge (Corkery, Land & Bossuyt, 1995). The traditional view of policy formulation provides little understanding of the process of designing policy alternatives, nor of the politics, rules and inter-group competition that influence policy making (Corkery et al., 1995). Rationalism has been criticised for being unrealistic in terms of information and analytical requirements and being unable to deal with situations in which goals are unknown or in dispute.

Another critique against rational purposive models is that of the multiplicity of alternatives and the assumption that there is a single decision maker who influences policy making. In most real-world policy situations, there are many possible alternatives, many uncertainties, stakeholders and consequences of interest (Walker, 2000). Also, there is usually no single decision maker and little chance of obtaining agreement on a single set of preferences among the consequences (Walker, 2000). The reality, however, is that policy making involves considering various peoples' interests.

The complexity of the dynamics involved in the policy-making process means that it is unlikely that one phase neatly follows another or that one finishes before another begins. The linear sequence of the phases can be deceiving, as the reality of the policy process involves simultaneous activity in the differing phases. Walker (2000:11) expounds on the complexity of the process of policymaking:

> The word 'complex' means that the policy being examined deals with a system that includes people, social structures, portions of nature, equipment and organizations, the system being

studied contains so many variables, feedback loops and interactions that it is difficult to project the consequences of a policy change.

The rational purposive notion often informs the thinking of institutional managers and others charged with bringing about change in HEIs (Trowler, 2002).There is a tacit notion that policy making in HEIs follows a clear path, starting from the carefully considered intentions of those in formal positions of power, often in response to a problem that they would have identified in the university. Policymakers express their intentions or visions in formal policy statements. They make explicit decisions on how these policies will be implemented. These policies are normally intended to effect change in a particular area. The expected changes are often attitudinal and behavioural in nature, usually addressed to staff and learners. The assumption made by policymakers is that as long as the implementers agree with the goals of the policy, the policies will become implemented and successful. From an academic perspective, the rational purposive model of policy making almost self-evidently fails to capture adequately the messiness of policy making and its implementation (Trowler, 2002).

To reiterate this point, some authors have argued that the rational approach to policy making is more normative than explicative (Casey, 1998). Rational purposive models are flawed as to explanatory critique of what policy making entails on the ground. To sustain the viability of policy making as reflected in the rational model (Figure 2.3), there needs to exist a combination of factors that rarely reflect the reality of the dynamics of public action. For example, there needs to be consensus of the definition of problems, the goals to be attained and the values to be applied, which in fact is contrary to what happens on the ground when various stakeholders interact to produce policy. There has to be access to the resources necessary to carry out the labour-intensive work of identifying and evaluating alternatives. Casey (1998:10) avers that for this and other reasons beyond the interest of this thesis, rationality was of restricted utility as a policy-making model. As a result, other less rational models were put forward, notably Lindblom's (1959) Incrementalism model, and the Garbage-can model postulated by Cohen and March (1974).

2.3 Incremental approach to policy making

The incremental model aims to address the criticisms of rationalism. Incrementalism involves making small changes to existing policies. In this model, policymakers look at a small number of alternatives for dealing with a problem and tend to choose options that differ slightly from existing policy. The advantage of incremental models is that policymakers use the knowledge gathered from previous failures to inform the

decisions they take next. Policymakers make decisions based on limited information, aiming for small tentative adjustments to existing policies. Lindblom (1959:79) dubbed it "the science of muddling through", suggesting that policymakers muddle through the process by making small tentative decisions, trying to appease different groups and making small changes. Incremental models mostly fit change processes in long-established public institutions such as universities, where there are established ways of doing things. People in general fear instant change. Incremental approaches incubate their fears as small incremental changes are made over a period of time.

2.3.1 Criticisms against incremental models

Incremental decision making is remedial, it corrects apparent policy problems as they arise but does not holistically solve the problem. Its concentration on small changes means that it does not support dramatic fundamental policy changes. The incremental model only considers a small number of alternatives which differ slightly from the original ideas (Sutton, 1999). It takes a cautious approach that may limit radical policy changes in some cases.

2.4 Institutionalism

Some approaches to analysing policy making have taken an institutional turn, where arguments about a particular change have given way to broader questions about how policy actually gets made, and by whom (Healy,1998). Models based on institutionalism look at the lines of authority in organisations, which determine the ways in which policy is made. Such models also focus on the accountability mechanisms in place, which determine the ways by which various offices within the institutions interact with each other during decision-making processes. The literature distinguishes between three types of institutionalism: 1. rational choice, 2. historical choice and 3. sociological choice or neo-institutionalism (Hall and Taylor, 2003), as depicted in Table 2.4.

Table 2.4 Three variations of institutionalism, adopted from Hall and Taylor (2003:193-224)

Type of institutionalism	Focus	Description
1.Rational choice	Individual rationality	-Individual interactions and games people play
2.Historical	Sectoral	-Decisions set sectors on a given path from which a shift is costly. -Policy choices are limited by past choices.
3.Sociological/Neo-institutionalism	Organisational	-Actors are embedded in cultural contexts that imbue values and codes of appropriate behaviour. Goals of actors are strongly shaped by institutions.

2.4.1 Rational choice institutionalism

Hahn (1987:222) defines institutionalism as:

> . . . the traditional classical approach to understanding policy making focusing on the structures, organization, duties and functions of governing bodies within the institutions.

When used in the context of analysing policy making within HEIs, institutionalism relies on the use of organisational charts to understand what unit of the organisation is responsible for what. It is based on the belief that it is important to understand the individual roles played by actors, their interactions and the games they play in decision-making processes.

2.4.2 Historic institutionalism

Historic institutionalism, as the name implies, is based on a history of prior decisions made. It focuses on sectoral analysis of institutions, where it is believed that decisions set individuals on a given set or path. When actors commit to a decision today, it is difficult to completely overlook that decision. Future decisions are based on prior decisions, a concept which they call 'path dependency'.

2.4.3 Neo-institutionalism

As shown in Table 2.4, neo-institutionalism stresses the importance of rules for decision making and implementation in influencing policy outcomes (Marques, 1997; Souza, 2007). Neo-institutionalists believe that institutions have an important role to play in shaping the actions of actors and resultant policies (Pereira, n.d). Neo-institutionalism believes that individuals in organisations have little impact on policies, but that the structure and design of institutions and the context in which they are located affects the outcome of policymaking processes. On one hand, institutions determine the degree of power that one actor or set of actors has over the policy outcomes (Steinmo, Thelen & Longstreth, 1992). On the other hand, the organisational structure influences an actor's definition of his or her own interests, by considering his or her institutional responsibilities and relationship to other actors (Steinmo et al., 1992). As a consequence, organisational factors affect both the degree of pressure an actor can bring to bear on policy and the likely direction of that pressure.

2.5 Pluri-centric models of policy making

Elitist and pluralist models are known for their emphasis on power. Each of these theories believes that power during policy-making processes is vested in different groups of people. Power in policy making

resides in small authoritative groups within the institutions, who are directly involved in making institutional policies. Pluri-centric models of policy making believe that power is vested in interest groups which compete in policy-making processes. It points out that new policies arise from a process of bargaining, negotiation and compromise amongst these groups.

2.5.1 Elitism

Elitist models perceive universities as institutions which are stratified with the masses at the bottom and the ruling class elite at the top. Casey (1998:4) argues that elites can be conceived in a purely Marxist sense of:

> . . . the owners of the means of production, the bourgeoisie, who protect their economic interests through a diversity of social agents . . . most notably the capitalist state itself which creates a democratic façade.

Elites are the influential university managers and well respected academics within institutions who share common beliefs and use their influence to dictate institutional policies. One of the core assumptions of the elitist theory is that a small group of elite groups in institutions runs the universities. If one is to analyse policy making based on this assumption, it is inevitable to say that policies are then determined by those elite groups, thus reflecting their interests (Gomes, 2009).

Although it is true that sometimes elites act in the interest of others, it is largely apparent that they act in their own interests as well. Voting is considered to be largely symbolic in reaching decisions in elitist models of policy making. Here the elites usually exercise their influence behind the scenes. Even though the presence of conflict within the elites cannot be denied, its members are assumed to share fundamental consensus which is critical for decision making. Policymaking approaches dominated by elites generally ignore the presence of other non-elite interest groups (Casey, 1998). In elitist models of policy making, it is assumed that when organisations that represent the interest of marginal groups emerge, they are easily overcome by the interests of the elites.

2.5.2 Pluralism or Group theory

Group theory hypothesises that policies are the result of an equilibrium reached in group struggle, which is determined by the relative strength of each interest group (Latham, 1965). Pluralistic approaches suggest that universities comprise a coalition of interest groups that may have conflicting goals but are capable of

collaborating to arrive at an agreed outcome (Hardy, 1991). Pluralist models are especially helpful in emphasising the diversity of participants and interest, the likelihood of conflict and the importance of willingness to work on conflict resolution. Here policy making is the result of the influence by groups. Conflict and competition have prominent roles in this model. Hardy (1991:127) maintains that the pluralistic perspective is necessary if universities are to be managed effectively, because of the potential for conflict among the many diverse groups that influence decisions.

2.5.3 Power in pluri-centric models

Pluri-centric models are known for their emphasis on power and its distribution in the policy process. However, power remains an essentially contested concept and there is little consensus as to what constitutes its basis. To participate effectively in the policy process, an actor must have the power to induce others to act in a manner that is coherent with that actor's interests (Casey, 1998). Max Weber explained the issue of authority as power (Weber, 1958). He identified three sources of authority, namely traditional authority, rational legal authority and charismatic authority, as shown in Table 2.3.

Table 2.3 Sources of power in different types of authority, adopted from Weber (1958:1-11)

Traditional authority	Rational legal authority	Charismatic authority
1. Power as a way of everyday life	Power enforced in rules and procedures	Power based on a leader with strong personal attributes
2. Conformity to power due to socialisation	Power resides in the office of authority	Others follow him because of his charisma.

The differentiation between these three lies in the source of power. Traditional authority is manifest when actors conform to power during policy-making processes because they regard it as a way of everyday life. They justify conforming to power because of their socialisation. People believe in this kind of authority because they believe that the rules have been enacted in a proper manner. Second, Weber (1958) discusses rational legal authority which is based on rules and procedure. In this case, power is based more on the office of authority than on the personal attributes of the office holder. The office holder, regardless of his or her training, is in authority and has power. Charismatic authority is when a leader exercises power over others, based on his strong ideologies or personal beliefs. Others are willing to follow the decisions made by such a leader, for example, Nelson Mandela, because of his charisma.

2.5.4 Criticisms against pluri-centric models

The pluri-centric model has been criticised for being unstable as compared to uni-centric models. In the pluri-centric, perspective actors' preferences are unstable and diverse. Timmermans (2004:4) argues that decisions are contingent on the social environment in which they are reached and, if the same problem is dealt with by different actors, it will result in other solutions. Pluri-centric models tend to suffer from the complexity of having multiple actors, as a result of different preferences, diverse ways of seeing problems and views of reality. In pluri-centric models of policymaking, there is need for one to manage the interests of different stakeholders.

2.6 Organisational structures affecting policy making in public universities in South Africa

One of the earliest organisational theorists who theorised about the organisational nature of universities noted that universities have a dual structure; this means that they are accountable to the top and bottom (Clark, 1983). At the top, universities should respond to regional and national demands, economic conditions and other enabling and disenabling conditions in this environment. At the bottom, the university is accountable to staff who are entrenched in various disciplines, research projects and the development of learners. In most public universities in South Africa. Winberg, Engelhills & Rip (2013:7) noted that there are three distinct levels of authority, as shown in Figure 2.5.

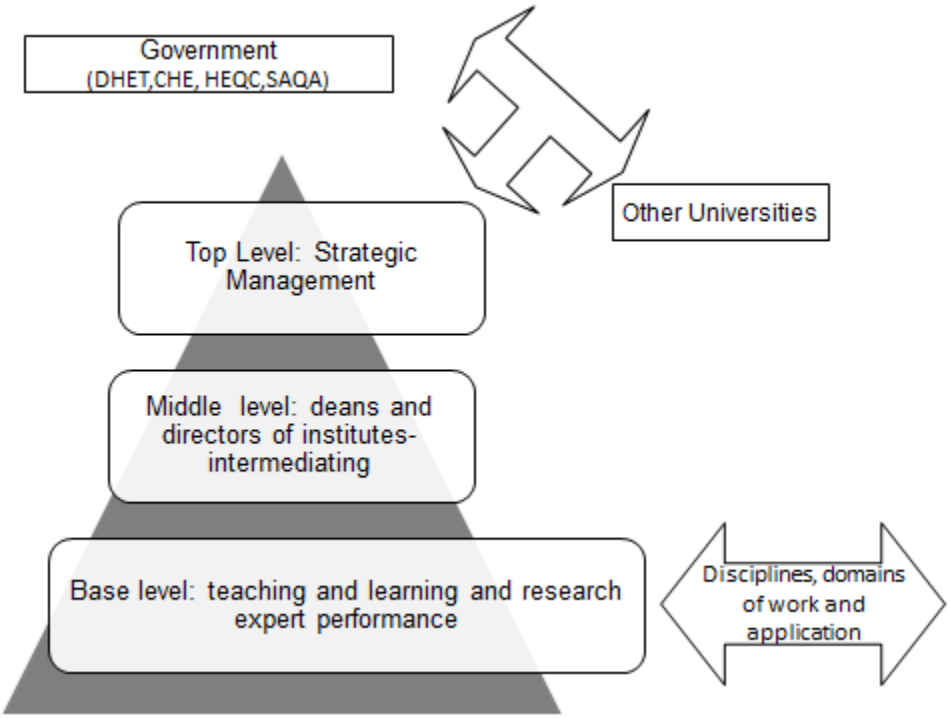


Figure 2.5 The structure of public universities in South Africa, adopted from Winberg et al. (2013:7)

As shown in Figure 2.5 there are bodies that govern the sector such as DHET, HEQC, a permanent sub-committee of the Council on Higher Education and SAQA. There is also:

1. A level of strategic leadership
2. A middle level of deans, directors and project leaders
3. A base level of expert performance where academics work together to achieve results

Winberg et al. (2013:8) observed that in terms of strategic planning and decision-making processes, the tensions which arise between the layers of the university are both structural and vertical. Vertically, tensions arise from a form of organisational bureaucracy; horizontally, from the dynamics of research and teaching 'performance groups' and, to some extent, faculties orienting themselves to their disciplines, domains of application and the future careers of their learners (Winberg et al., 2013). For these reasons, they note that universities have opted for various ways to curb these tensions.

The traditional way of responding to this tension is to limit the role at the top level of management, making support staff and advisory groups responsible for managing the daily managerial functions and strategic

decision making. However, most universities are turning towards a stronger top management that runs the institution as a corporate entity. These changes are mostly fostered by depreciating financial support from the government. The overall strategies of the university steered by top management become more important than the teaching and research expert groups (Van Vught, 2008).

In South Africa, at the middle level of university management is where things start going wrong. Deans and Directors of institutes are, in some cases, inclined to think and practice according to their professional expertise and, in other cases, they feel the need to assume a more managerial role as delegated by top management. This could result in two possible scenarios, mostly in Universities of Technology (UoTs), where core competencies are based on practitioners who are oriented to their professional domains (Winberg et al., 2013). In the first scenario, Winberg et al. (2013:8) observe that the middle level allies itself to the top level and tries to implement strategies and measures on an unsuspecting base level. In the second scenario, the middle allies itself to the base level and resists top-down policies. The middle level is strong and can mobilise external support such as external research funding. In the most extreme cases, they might break away from the university.

Having discussed the organisational structure of most public universities in South Africa, the following section discusses how the organisational nature of universities impacts on policy making.

2.7 How the organisational nature of universities impacts on policy making

The way universities are run and managed as organisations affects the ways in which they engage with processes such as policy making. The literature in organisational theory has proposed a number of models to understand how universities are managed as organisations and how decisions are reached. Similarly, Dobson and McNay (1996:106) aver that universities are variously managed as collegial, bureaucratic, entrepreneurial and corporate organisations, as shown in Table 2.5.

Table 2.5 Decision making models of universities, as adopted from Dopson and McNay (1996:106)

COLLEGIAL	BUREAUCRATIC	ENTREPRENEURIAL	CORPORATE
Cult of individual	Rules and regulations	Awareness of the market	Directorate with power
Management by consensus	Management by committees	Management by marketing	Management by meetings
Person culture	Role culture	Task culture	Power culture

When it comes to the development of institutional policies, universities take different approaches, largely influenced by the ways in which they are governed as institutions. Universities in most countries have moved from the traditional bureaucratic and collegial governance structures to more entrepreneurial and corporate styles of management (McNay, 1996). This move has been precipitated by a number of pressures such as reduced funding from government, changing enrolment patterns and the need for greater accountability to the public (Recall Section 1.2). These pressures have forced many universities to rethink the way they function as organisations, turning more towards business-oriented governance models to manage the changing context. In the United Kingdom, Deem (1998:127) refers to this move as the 'new managerialism' in universities.

2.7.1 Universities as bureaucratic organisations

The view of universities as bureaucratic organisations presumes that incumbents in the formal positions of the organisation have the required information, expertise and authority to make decisions relating to their areas of responsibility, such as e-learning (Taylor, 1983). In bureaucratic institutions, policy making is an activity that can be undertaken solely by the person who is responsible for a particular section of the operation following a largely traditional uni-centric approach. In universities that are governed in a bureaucratic manner, policy making follows a structured linear approach where there are clear lines of hierarchical decision making delegated to specific officers (Bolman & Deal, 1997). Formal rules, policies and other forms of regulation govern much of the work that takes place in bureaucratic organisations. Committees are the arenas for policy development in bureaucratic organisations (McNay, 1996). McNay (1996:106) avers that "the bureaucratic model has an appearance of rationality with a tendency to use statistical arguments in reaching decisions".

2.7.2 Universities as collegial institutions

Collegiality assumes that universities are comprised of colleagues in the same profession who work together towards a common purpose or goal and are united and trust each other's ability to reach that goal (Baldridge et al., 1978). Collegiality borrows much from rationality, as it assumes that human beings are rational beings who know their goals and can work towards a common purpose to effect rational decisions. When it comes to policy making in the collegial model, interactions among the entire community are extensive and informal and decisions are usually reached by consensus after thorough and lengthy deliberation (Edelstein, 1997). Although university faculties and administrators may strive to reach consensus, the model overlooks the fact that, in some cases, the various stakeholders may differ in their

preferences when it comes to policy. There is a relative lack of coordination, a relative absence of regulations and a loose definition of policy for the organisation as a whole, which translates to loose control over activity or the implementation of any policy.

2.7.3 Universities as corporate enterprises

When universities are managed as corporate enterprises, authority is assumed by the executive, with the vice chancellor as chief executive. This model is usually unpopular as a governance model as it often leads to resentment. In a corporation, committees such as those found in bureaucratic institutions are replaced by more dynamic and flexible working groups and teams. Committees are slimmed down and dominated by managers. The corporation model of governance in universities is mostly used to manage crisis situations and positional power, while tight control of funding is used to promote conformity to corporate objectives.

2.7.4 Universities as political institutions

An alternative to the collegial model was proposed by Baldridge (1971) who suggested that the "political system" model best describes the policy-making process of the modern university. He used this model to understand policy making at New York University, Portland State College and Stanford University as early as 1971. While the collegial model is based on consensus, the political model is characterised by a diversity of interests, a lack of shared goals, differential access to power and resources, and problem solving based on bargaining and compromise. Viewing universities as political institutions illuminates how power dynamics shared by different groups play out in policy-making processes. When universities are managed as political institutions, policy making is largely based on pluralism (Recall Section 2.4.2).

2.8 Summary

A systematic examination of the literature on theoretical approaches to policy making in this chapter shows the gaps and limitations of existing theories; however, no single model is superior. The variation amongst the models provides an interesting analytical point and discussion on e-learning policy making in HEIs in South Africa. This chapter provides the necessary starting point in understanding the relationship between policy-making processes and e-learning policy discourses in HEIs in South Africa.

The next chapter presents an overview of the discourses informing the role of ICTs in teaching and learning in HEIs in South Africa.

CHAPTER THREE

THE ROLE OF ICTs IN TEACHING AND LEARNING IN HIGHER EDUCATION (HE)

3.0 Introduction

Various ontological and epistemological perceptions on the role of ICTs in teaching and learning account for different views and varying ways in which institutions write policies and appropriate technologies in this context. A survey of literature on ICTs in HEIs in South Africa reveals that there is tension within ICT and education discourse, between those who see ICTs as the education saviour and those who are more sceptical and attempt to draw attention to the politics within which educational institutions are embedded (Ravjee, 2007).There are hidden ideological contradictions in the theories applied to explain the role of technologies in teaching and learning in Higher Education. Amory (2010:69) avers that:

> These contradictions are embedded in the discourses of these fields and are present in the positions that various stakeholders in HEIs take on what constitutes learning, technology and learning with technologies.

The Status reports on ICTs in eight African countries (2007:104) reported that the policies adopted by South African HEIs on e-learning are closely aligned to the institutions' predominant ideas about the nature of and role of ICTs in teaching and learning. E-learning practitioners in HEIs in South Africa are invariably located within four contesting macro-discourses of technologies and change, namely: 1. Technological Determinism. 2. Instrumentalism. 3. Substantivism. 4. Criticalism (Mlitwa, 2006). These four perspectives reflect serious thought about the issues surrounding technology, clearly placing competing ideas about teaching and learning at the centre of the e-learning debate (Czerniewcz, Ravjee & Mlitwa, 2006). These divisions and contradictions are not only reflected in institutional policy discourses on e-learning, but ultimately impact on how technologies are appropriated into the teaching and learning environment. These discourses are associated with a number of theories which explain the role of technology in social contexts (Feenberg, 1999).

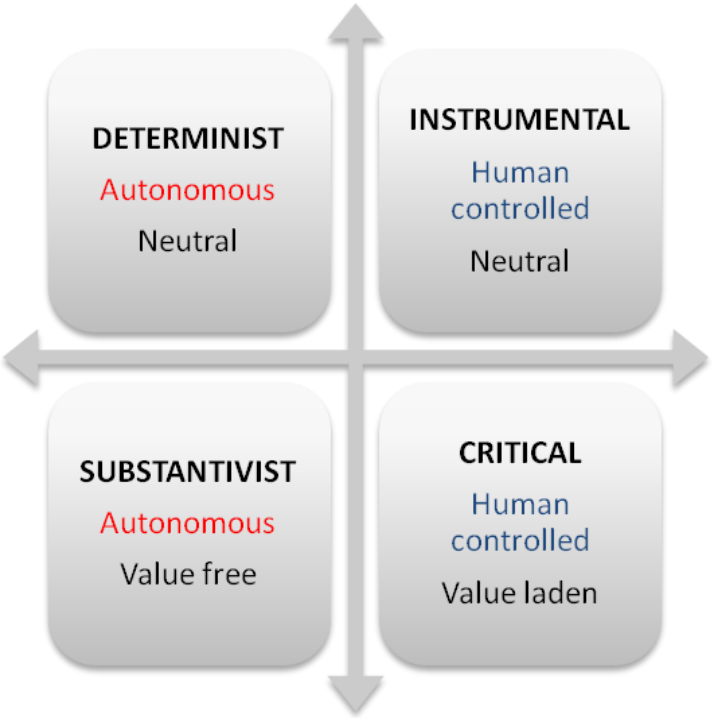
In light of the above, this chapter aims to provide a theoretical critique of the polarised views on the role of ICTs in teaching and learning through an exploration of various theories on the role of ICTs in social contexts. The chapter then discusses the four major contesting views on how practitioners in HEIs in South

Africa conceptualise the role of ICTs in teaching and learning. The chapter lays bare the assumptions behind these discourses, their strengths and limitations as well as their implications on how practitioners engage with ICTs in teaching and learning.

3.1 Theories on the role of ICTs in teaching and learning

There are a number of theories that attempt to address the role of ICTs in teaching and learning. Most of these theories prompt questions about autonomy, human agency and determinism, both technological and social. Feenberg (1999:9) explores the variety of theories that have been applied to the role of technology in social contexts, as shown in Table 3.1.

Table 3.1 The varieties of theory on the role of technology in social contexts, adopted from Feenberg (1999:9)



As illustrated in Table 3.1, first there is the top tier of views that believe that the role of technology in society is neutral. Based on these views, technologies are efficient in any setting; the only inhibiting factor would be the cost. Feenberg (1999:9) explains the neutrality of technology by introducing the imagery of a 'hammer' and explaining that a hammer as a tool is efficient in any setting. Instrumentalism is seen as a better alternative to technological determinism, as it acknowledges the value of human agency. Second, there is

the bottom tier where Substantivism is compared to Critical views. Substantivism believes technologies have the power to effect changes in societies as well as to change humans and the way they function (Feenberg, 2008). Substantivism does not acknowledge the power of human agency. Critical theory argues that technology is not a 'thing' in the ordinary sense of the term (Feenberg, 2008). It should not be conceived of as an object, but rather as a scene of struggle over values and interests which are present in the very designs of systems.

The two dominant perspectives which guide most of the e-learning development and use practices around the globe posit that ICTs either have an instrumental or substantive role to play in teaching and learning (Nawaz & Kundi, 2010). The view of ICTs as instrumental tools posits that technologies on their own are simply neutral as their uses define their role, a concept identified as 'uses determinism' (Darlberg, 2004).Instrumentalists believe that any kind of technology is just a tool that needs a user to use it and define its uses. By viewing technologies as tools in the teaching and learning environment, there is a temptation to think that the tool can be applied in any context and bring the same results, as long as the user knows how to use it. Such views fail to consider the varieties in the contexts of learning where some learners may be more technologically inclined than others. As a result, a number of writers have argued for the need to develop critical perspectives on educational technology use (Selwyn, 2010; Oliver, 2011). Friesen (2008:181) avers that researchers need to conduct research in e-learning that questions the ways of talking about and justifying e-learning and that obscure a more complicated reality presented by contextual variations.

Feenberg's model has been used to shed light on the complexity of views on the role of ICTs in teaching and learning held by e-learning practitioners and policymakers in HEIs in South Africa (Mlitwa, 2006). When policymakers in HEIs deliberate on problems associated with e-learning technologies, it is important that such interactions become wary of recommending a single solution to every problem. Instead of being driven by the technology craze, it is important that policymakers become mindful of the genuine needs of their institutions and recommend solutions that work for them based on their contextual nuances.

The next section explores technological determinism as a macro-discourse. It looks at the assumptions of the discourse and the practical implications of technological determinism on the use of ICTs for teaching

and learning. Other discourses that share certain elements of technological determinism, such as instrumentalism and substantivism, are also discussed.

3.2 Technological determinism

Technological determinists are enthusiastic about technology-enabled teaching and learning. They view technology as neutral, outside human control (deterministic) and predictable. Technological determinism persists in the actions taken and justifications given by many actors; it persists in analysts' use of the discourse to make sense of the introduction of technology in a variety of social settings (Wyatt, 2007). From a determinist perspective, a computer is a machine that brings about predictable results; in reality a single technology can serve a variety of purposes. This perspective assumes that when ICTs are introduced into educational contexts, and the students are instructed on how to use them, more or less automatically educators will innovate their pedagogical practices and will develop better quality educational processes with their students (Ornellas et al., 2009). The technologically determinist view fails to take into consideration the existence of a multitude of factors that condition the curriculum integration of ICTs from a perspective of educational change and innovation.

It is easy to dismiss the presence of technologically determinist opinions amongst actors who formulate e-learning policies in HEIs, as practitioners are often not aware of the philosophies that inform their practice. Marx and Smith (1994:x) observed that:

> Most people in modernized societies have been habituated to the seeming power of advancing technology (and its products) to change the way they live and work. For them the steady growth of technological power is an obvious feature of modern society that needs no more contestation as much as the obvious fact that humans need air to breath.

However, many university administrators and some faculty staff presume a self-serving technological determinism, where they envision a technology-enabled education that reinforces their visions and vested interests (Hughes, 2001). Their vision and interests cannot be separated from the values that they have, since their values shape their predictions of how technology is and how they approach problems associated with the use of technologies in teaching and learning. Selwyn (2010:66) avers that technological determinists tend to have a 'means-end' way of thinking about how best to harness the presumed inherent educational potential of electronic technologies. Administrators who are inclined towards such views tend to

look for a technological solution to every educational problem, which limits their understanding of the problem and how to deal with it. Some problems may arise because of poor pedagogy and ill-defined tasks.

Technological determinism is often associated with a sense of technology's power as a crucial agent of change (Marx & Smith, 1994). Actors who hold a determinist view of technology see technology as a determinant of progress and change in higher education teaching and learning. For such theorists, technology is viewed as neutral, but not human controlled (Feenberg, 2003). Mlitwa (2006:4) avers that a number of constructivist theorists who see technology as an agent for change fall into this category. He goes on to say that in this model of thinking, there is an assumption that "technology enhances education", "it breaches many walls created by distance and time zones", "it unites people and creates powerful and synergistic partnerships at local, regional and global scales", "it motivates students and energizes the classroom". Such views result in agents focusing more on the material artifact and the changes it presumably effects, stressing the need to acquire more material artifacts to effect change.

In a study conducted by Ornellas et al. (2009:59), these authors aver that ICT policies for teaching and learning in Catalonia, Spain have seen an inflection from protagonist discourses of ICTs in education to placing an emphasis on the educational possibilities offered by these technologies. They argue that alternative ways of thinking about technology should be conceptualised in different ways of understanding the curriculum and in different pedagogical models (Ornellas et al., 2009). Literature on educational technology use points out that alternative theories to technological determinism should focus on the socially-contested and socially-shaped nature of technology (Selwyn, 2010).

3.2.1 Practical implications of technological determinism on practice

Technological determinism places a profound significance in the way technologies influence societies. One of its criticisms is that it subverts the role of human agency to that of technologies. It focuses human minds on how to adapt to technological change, not on how to shape it (Mackenzie & Wajcman, 1999). Another practical implication of technological determinism is that it minimises human power to control technological development.

3.3 Instrumentalism

The Instrumental theory offers the most widely accepted view of technology in educational settings (Feenberg, 2003). Instrumentalism views technology as neutral but human controlled. The view that technological artifacts are neutral tools is determinist; however, instrumentalist discourses in educational

settings tend to be favoured because they emphasise that humans control technologies. Instrumentalism has been identified as 'uses determinism' (Dahlberg, 2004). Uses determinism focuses on the technological uses of e-learning artifacts. It looks at the way technologies are used in teaching and learning transactions. According to this school of thought, e-learning technologies are neutral tools simply meant to extend the users' capacities. In this view, technological artifacts used for educational purposes such as Learning Management Systems (LMS), are viewed as neutral tools, able to serve the aims and objectives of the agents (e.g., educators) using them. This view is appealing to most stakeholders in HEIs as it asserts that, as individuals, we have control and autonomy over the technology.

Instrumentalist discourses also share a technologically determinist notion that technological tools stand in the name of efficiency in any setting. This is why instrumentalism and determinism have been viewed as 'strange siblings' (Davison, 2001).

Instrumentalism is premised on four basic claims:

1. That technology is indifferent to the variety of the ends it can be employed to achieve
2. That it is indifferent with respect to politics
3. That its neutrality is due to some universal rational character
4. That the same standard of measurement, usually efficiency, can be applied to technology across situations (Hick, 1997)

One of the most dominant assumptions of instrumentalism is that technology is neutral. It is important, however, to understand what this neutrality of technology actually entails. Feenberg (1991:5) explores four points associated with the concept of 'neutrality':

1. Technology is indifferent to the variety of ends it can be employed to achieve.
2. The transfer of technology is only inhibited by its costs and not the context in which it will be implemented. A hammer is a hammer, a turbine is a turbine and such tools are useful in any social context.
3. It offers a 'one- size-fits-all' approach to solving technological needs in various social contexts.
4. Technologies are neutral because they stand essentially under the very same norm of efficiency in any and every given context.

The belief is that technology is merely a tool and an indifferent instrument to further human goals (Feenberg, 2003). According to Feenberg (1991:5), technology is deemed 'neutral', meaning that it has no valuative content of its own. Instrumentalism is based on the common sense idea that technologies are tools standing ready to serve the purposes of their users. To that end, the use of technologies in teaching and learning is seen as a rational process with technologies being universally applicable, thus allowing similar standards of measure to be applied in different settings. Instrumentalist discourses of technology do not question the value of technology. They argue that technology is a neutral artifact that is human controlled. According to instrumentalists: 'Guns don't kill people, people do', or that a knife can be used to 'cook, kill or cure'. Those who believe the opposite counter with evidence that technology cannot be evaluated in a vacuum.

In ICTs and education discourse, instrumentalist discourses assume that the Internet, which facilitates learning online, is a value-neutral tool that potentially allows individuals to overcome the constraints of traditional elitist spaces and gain unhindered access to learning (Gulati 2008).Educators and administrators who uphold the view that "electronic media such as the Internet are neutral conduits of learning, display symptoms of a cultural context in which the idea of transparent mediation functions to obscure forms of oppression and disenfranchisement" (Hoofd, 2011:1). This common-sense discourse is historically related to Eurocentric and masculine ideas of the subject and their potential to autonomously and intentionally transmit, as well as control, meaning and knowledge through any medium of communication (Hoofd, 2011).

The advancement of e-learning in HEIs in South Africa represents an intricate aspect of the post-colonial context in which South Africa's education system operates. The neutrality of technology thesis, as conceptualised from the instrumental point, assumes that the only rational action for people to take is to unreservedly commit to technology (Feenberg, 1991). Another common assumption of this theory is that technology is not inherently good or bad and can be used to whatever political or social ends desired by the person or institution in control. Pacey (1992:2) described the person who holds to an instrumental theory of technology:

> For such a person when technology fails them or when it has negative consequences, it is not the technology but the improper use of it by "politicians, the military, big business and others".

Given these assumptions, the only response when it comes to using technologies to teach and learn is to unreservedly commit to using them.

Another assumption of Instrumentalism is that the transfer of technology is only hindered by costs (Feenberg, 1991).In reality the use of technologies in HEIs in South Africa is not only hindered by costs but by a multiplicity of other factors such as user attitudes and a lack of understanding on how to use technology. Instrumentalism also assumes that what works in one institution should be able to work in another. Hick (1997:2) avers that instrumentalism is uncritically positive about the development and use of technology. He argues that nearly everyone who takes a position of advocacy towards technologies in the use of computers to teach find themselves operating from an instrumentalist discourse at one time or another (Hick, 1997). Those who argue for instrumentalism may sometimes win the argument by way of separating between technology and the humans who are its users, designers, consumers and marketers, a philosophy which has been referred to as de-contextualisation, where humans are seen as subjects ruling over and benefiting from a harmless tool (Feenberg, 2003).

Davison (2001:100) avers that instrumentalist and determinist explanations of technology share *a priori* a logical structure of dualism. By this he refers to the issue of human agency in using technologies to teach. On one hand, Davison (2001:100) believes that, from an instrumentalist perspective, technological artifacts are the 'external faithful servants' of their users. It is the users who determine how they will be used and these tools serve the purposes of their masters. On the other hand, however, he believes that determinism views technology as our 'governing master'. In this second view, human agency to control technology is diminished as technology assumes more power to control humans.

There is a dominant line of thought amongst Higher Education practitioners in South Africa which views ICTs as a tool which varies in nature (Czerniewicz, 2006). Such a view is instrumental and socially shaped, with ICTs generally perceived as neutral tools that can be used to teach. The instrumental discourse in most educational ICT discourse is notable in arguments which use the vehicle metaphor when describing the use of ICTs in teaching and learning. By viewing technology as a vehicle or tool that can be used in learning, one would tend to associate any educational problem with a technological tool that can solve the problem. The most dominant question for instrumentalists would be to ask what kind of vehicle or tool is needed for specific kinds of tasks. Whilst it is true that certain technologies have particular strengths in different aspects of teaching and learning, one should, however, not assume that every educational problem can be solved through the appropriation of a certain educational technology.

3.3.1 Practical implications of instrumentalist discourses on teaching and learning in Higher Education (HE)

Viewing technologies as tools or instruments enforces the arguments that the purpose of technologies in educational contexts is to extend or enhance human capabilities. Such arguments ignore the fact that in some cases a technology can strongly influence peoples' actions for good or bad (Jonassen, 1996). Computers should be used as tools for helping learners build knowledge; they should not control the learner. Viewing e-learning as a neutral tool assumes that there is a techno-logical fix to every educational problem (Dahlberg, 2004). Such thinking tends to limit the various uses to which a technological artifact can be applied; it fails to encourage some innovative uses of technology in teaching.

3.4 Substantive theory

In contrast to the Instrumental theory is the Substantive theory of technology. The Substantive theory has been espoused by the writings of Jacques Ellul and Martin Heidegger who aver that technology has become part of a larger cultural system that is reconstructing society and that universities have not been spared from this transformation. Substantivist positions are occupied with the pervasiveness of technologies in contemporary societies and the ways those technologies shape our life worlds (Carmichael, 2003). Substantive theorists believe in the unremitting power of technologies to change societies and humans. Heidegger (1977:7) comments that humans have become raw materials or mere objects to be mobilised by the technologies as they evade society. Heidegger (1977:7) argues that:

> . . . we are engaged in the transformation of the world and ourselves into standing reserves, raw materials waiting to be used up in the process.

The first assumption associated with a substantive discourse is that technologies have the power to change us and our societies. This discourse leaves very little choice for human agency. Substantive theorists believe that technologies have taken over to the extent that humans have been left as mere objects. According to Feenberg (1991:7), "Heidegger asserts that the technical restructuring of modern societies is rooted in nihilistic will to power, a degradation of man and beings to the level of mere objects". However, the issue is not that machines have 'taken over', but that, in choosing to use them, people make many unwitting cultural choices, to the extent that technology ends up controlling them (Feenberg, 1991).

Substantive discourses also assume that technology is not simply a means but has become an environment and a way of life. Fitzsimons (2002:173) argues that substantive theories contradict the

commonly held view that technology frees us from the ravages of nature, but rather suggests that our current condition is actually produced by technology. That is its 'substantive' impact. Fitzsimons (2002:173) avers that substantive theories have a substantive value bias and, through this bias, transform what it is to be human. Substantive theorists in HE believe that how we do things technologically becomes our identity. The substantivist criticism is that technology constitutes a new cultural system that restructures the entire social world as an object of control (Fitzsimons, 2002). According to substantive theories of technology, technologies have the impact of subjugating humans (Heidegger, 1977). The more we become affected by technology, the less of our life is under our control and we become controlled by it.

The substantive view posits that technologies have the power to change the society and simply their existence can make a difference. Substantive theorists also take a strong position on the efficiency rendered by the use of ICTs in teaching and learning. Substantive theorists believe that the manner in which technology has, and continues to, transform society is such an important substantive change that it is unwise to claim that technology merely renders the means more efficient. Substantivists do not believe that technologies (e.g., e-learning technologies) merely render efficiency to teaching and learning. They believe that efficiency does more than simply streamline our ways of getting the things we always wanted, and changes those things. Substantive theorists believe that technologies come with a substantive bias. The potential benefits to be derived from the technologies, such as efficiency, are enormous; so are the challenges of preparing for their impact. They believe that efficiency in technology changes us. We use technology to facilitate task completion, enabling the pursuit of other goals for accomplishment. However, efficiency in technology is not necessarily beneficial. The more one accomplishes, the greater the stress to accomplish even more, using the time saved from efficient technologies. Eventually, one will take on too much and the technology that was once deemed efficient becomes a burden.

Substantive theorists also assume that technology is a vehicle of a culture of domination. A substantive theorist views the computer as a technology that is the product of a variety of cultural or ideological forces which, depending on the context in which the technology is used and discussed, can be positive or negative (Hick, 1997). Those who hold substantive views believe that technology comes with certain biases derived from cultural and technical codes and that adopting technology will result in significant changes in human behaviour (Thomas, DeVoss & Hara, 1998).

3.4.1 Practical implications of substantive views on teaching and learning in Higher Education (HE)

When relying on a substantive discourse, actors have certain assumptions on the aspects of the education system which they think needs to change to facilitate teaching and learning with technologies in HEIs. The adaptation could take diverse routes, depending on how stakeholders view the new post-modern culture. Strong adherents to the post-modern culture would recommend radical changes in the school structure (Aviram & Tami, 2004). Antagonists of the post-modern culture would opt for preserving and strengthening the existing structures of education.

Substantive discourses view technologies as pervasive to our society. They believe that HEIs have to go through radical changes if they are to survive the ICT revolution (i.e., the focus on theoretical teaching and learning, the institutionalised division between adults and children, teachers and students, the reliance of schools to a large extent on the 'unity of time and place' principle, etc.). To put it differently, the radicals believe that there is no chance for the potential of ICTs to be expressed and for active learning methods to be implemented without such radical changes. Radicals align themselves most closely with social determinism (Kanuka, 2008). The implications of social determinist discourses in practice is that they promote a radical approach to teaching and learning .The biggest problem associated with the use of e-learning technologies for radicals is not so much the technologies per se, as the fact that most educational institutions use technologies that are owned by large corporations (Kanuka, 2008). Commercialised products such as Web CT, Blackboard, Lotus Notes are viewed as enforcing a corporate communication paradigm onto the learning process. For example, a risk-free and trusting environment is not achievable with corporate technologies that have surveillance features. Alternatively, open-source technologies (e.g., Moodle) would not be problematic for most radical educators. Another criticism of substantivism is that, in believing that technologies are transforming our societies and changing us, it awards magical manipulative powers to technology, rendering human agency obsolete.

3.5 Critical theory

There is a tendency for academic reports, policy documents and policymakers' statements in HEIs to focus more on the gains and the effects of technologies on society and not the impact of society on technology. By studying how policy formulation processes shape e-learning policy discourses in HE, this study seeks to develop a critical position on e-learning policy formulation in this context. There is need to develop a critical position on the policymakers' thinking behind the use of ICTs in HEIs. This critical stance must look beyond

the immediate context of learning gains offered by the e-learning technologies to question what has shaped the technologies that are having effects on learning in this context. E-learning policy formulation processes can partially provide an answer as to how e-learning technologies have been shaped by actors who produce policies that, in turn, inform practice.

Critical theory has a dual meaning that stems from its etymology. Critical theory as a general term means theories that are critical of capitalism and domination. As a more specific term, Critical theory means the work of the Frankfurt School (Fuchs, 2009). It is the diverse body of work produced by members and associates of the Frankfurt Institute of Social Research, commonly known as the Frankfurt School, between 1930 and the present. Famous names associated with this particular school of thought include Theodore Adorno, Walter Benjamin, Jurgen Habermas, Max Horkheimer and Herbert Macey (Friesen, 2008). Whilst critical theory is commonly linked to the original members and subsequent followers of the Frankfurt School, the term 'critical theory' has come to represent a range of evolving critical perspectives which offer diverse meanings and interpretations on the role of ICTs in teaching and learning (Coverdale, 2009).

The critical approach calls for the problematisation of technology, its assumptions, role, effects and meaning. Ravjee (2007:31) points out that "ICTs always operate within a broader socio-economic, political, cultural context and educational contexts which determine not only the rules governing how and where they will be used and towards what end, but also who will use them". Critical theorists seek to bring to light the often compromised and constrained realities of the uses of technology in education. Critical discourses, according to Ravjee (2007:31), accept that "the use of technology may sometimes improve pedagogical practices whilst at other times it may function to stigmatize and exclude people".

Critical theorists reject the neutrality of technology thesis and argue instead that "technological rationality has become political rationality" (Feenberg 1991:14). In other words, the values and interests of ruling classes and elites are embedded in the very design of rational procedures and technological tools even before these are assigned a goal. Feenberg (1991:14) argues that "technology is not a thing in the ordinary sense of the term, but an ambivalent process of development suspended between different possibilities". This ambivalence of technology is distinguished from neutrality by the role it attributes to social values in the design and not merely the use of technical systems. In this view, technology is not viewed as a destiny, but a scene of struggle.

Friesen (2008) proposed a number of stages to adopting a critical approach:

- Identifying ideas or claims that are presented as obvious, inevitable or matter of fact in dominant bodies of knowledge
- Scrutinising these ideas or claims in the context provided in other more marginal knowledge forms or sources
- Revealing through this scrutiny that behind dominant claims and ideas lay one or more politically charged and often contradictory ways of understanding the issue or phenomenon in question
- Using this underlying conflict as the basis for developing alternative forms of understanding and pointing to concrete possibilities for action

3.5.1 Practical implications of critical views on teaching and learning

Critical theory questions ways of talking about and justifying e-learning that obscure a more complicated reality (Friesen, 2008). Critical theory empowers one to stop viewing technology as separate from people, and instead to view learners, educators, policymakers and all stakeholders in HEIs as important in shaping educational technologies in our society. Critical theorists seek to challenge and destabilise knowledge which is seen as definitive and unitary. Instead, knowledge is seen as fundamentally pluralistic and incongruous, subject to multiple and sometimes contradictory perspectives (Coverdale, 2009). By developing critical views, educators can enhance curriculum delivery and improve the quality of education, whilst paying attention to appropriate pedagogies (Bytheway et al., 2010).

3.6 Social shaping of technology (SST)

SST, as cited by Mackenzie and Wacjman (1985:5), concentrates on the social factors that shape technological change. SST as a discourse emerged as a critique of post-enlightenment discourses such as technological determinism. Williams and Edge (1996:866) point out that SST has been promoted as a discourse that broadens the technology policy agenda. Instead of looking at technology from a narrow perspective of being neutral and not human controlled, SST concentrates more on the social aspects that impact on how technologies are used for teaching and learning. Unlike technological determinists who state that technology has some inner logic which determines the way it will be used, SST studies contend that technology does not develop according to an inner technological logic, but is instead a social product, patterned by the conditions of its creation and use.

SST argues for the role of human agency in shaping technology to its own needs. One central assumption of SST is the conviction that "there are choices inherent in the design of artifacts and in the direction or trajectory of innovation programmes" (Williams & Edge, 1996:866). Actors who subscribe to the social shaping of technology theorise that e-learning technologies open up choices for people. They also assume that human beings have agency to determine the trajectory of innovation programmes such as e-learning. Significantly, these choices could have differing implications for the institutions they serve and for particular social groups within these institutions. In view of policy formulation, it is believed that SST can open up policy issues that have been obscured by technological determinism, and other related simplistic models, by problematising the social processes of technological innovations.

3.6.1 Practical implications of SST on teaching and learning in HEIs

A number of scholars have criticised the social shaping of technology. Sawyer (2001:304) opined that theories and models about the social shaping of ICTs are relatively immature and that their conceptualisations of ICTs in these models have no commonalities. Another theory that has been particularly influential in the development of the social shaping of technology is the Social Construction of Technology (SCOT).

3.7 Social Construction of Technology (SCOT)

SCOT theory argues that technology does not determine human action, but that human action shapes technology (Pinch & Bijker, 1984). According to SCOT, policymakers must look to the social world in trying to address e-learning policy problems. SCOT as a discourse asks that policymakers must not impose what they think are the best e-learning solutions on HEIs, but they must ask themselves what criteria have been used to say that it is the best and also what groups and stakeholders participate in defining it as the best. SCOT argues that in order to understand the ways in which a technology is used, one needs to also understand the social context in which the technology is embedded.

The SCOT perspective was developed by Wiebe Bijker and Trevor Pinch (Bijker 1995). Gyambrah (2007:49) identified three key concepts associated with this theory. These include:

1) Interpretive flexibility. Technological artefacts are culturally constructed and interpreted, which means that not only is there flexibility in how people think of or interpret artefacts, but also that there is flexibility in how artefacts are designed.

2) Relevant social groups share a particular set of meanings about an artefact.

3) Wider context. This implies that the socio-cultural and political situation of a social group shapes its norms and values, which in turn influence the meaning given to an artefact.

The first assumption of SCOT is its belief in the interpretive flexibility of technology. Mackenzie and Wajcman (1999:21) define interpretive flexibility as the way in which different groups of people involved with a technology can have different understandings of that technology, including different understandings of its technical characteristics. Interpretive flexibility means that each technological artifact has different meanings and interpretations for various groups. These interpretations generate different problems to be solved.

The second assumption of SCOT is that relevant social groups are identified as the producers and users of the technological artifact. The principle of symmetry holds that in explaining the success or failure of educational technologies, the same kind of explanation should be offered in the cases of success as in cases of failure. The symmetry principle addresses the problem that social scientific researchers may face in trying to explain the success or failure of technological systems such as e-learning. They may tend to attribute the success of technological artifacts to their 'objective truth' or their inherent or inbuilt technical superiority whereas, in explaining the failure, they may tend to look more at sociological explanations such as political or economic influences.

The success or failure of technologies can be gauged by whether or not they work, what Bloor calls the 'sociology of knowledge symmetry'. The idea is that 'machines work' because they have been accepted by relevant social groups (Bijker 1995:270). Bijker and Pinch's theory has been criticised for a number of reasons. One of these is that of structural exclusion. Gyambrah (2007:49) asserts that the SCOT theory links the activities of individuals to wider social processes, power, internal structure of technology and new ways to internally ground the relationship between society and technology.

3.7.1 Practical implications of SCOT on teaching and learning

From Pinch and Bijker's (1984) approach, the social groups relevant from the point of view of a certain technology, for example, e-learning technologies, are identified empirically through historical research. "For example, we can identify what social groups are relevant with respect to a specific technological artifact by noting all social groups mentioned in relation to that artifact in historical documents" (Bijker 1995:46). The trouble with this approach is that those social groups that do not have an empirically discernible influence

will be excluded, such as women and other ethnic groups who may have a secondary influence in shaping the technology. Another deficiency of SCOT includes its failure to consider the social consequences of technical choices (Winner, 1993). Under the SCOT approach, a technological artefact is analysed from the perspective of all the different social groups and social interests that may be associated with its early development and thus may act to help shape its development. SCOT has been dismissed as a kind of social determinism.

3.8 Summary

This chapter grappled with the complexity of views associated with the use of technologies in teaching. The polarised views expressed over the place of technology in higher education teaching and learning reflect differing philosophical perspectives on the application of technologies in this context. As information technologies have become an integral part of teaching and learning in HEIs, it is important to recognise the inevitability of various opinions regarding technology and its implementation and use in this context. By focusing on the theories informing the role of ICTs in HE, this chapter illuminates a broader understanding on how policymakers interact about e-learning technologies. Their interaction provides for a discourse within the university out of which a sustainable body of knowledge should emerge to direct and support decisions regarding the development and uses of ICTs in teaching and learning.

The chapter provides alternative conceptions of technology which are important in developing an understanding of the relationship between technology and learning, as well as identifying practical implications and limitations of different discourses in the practice of teaching and learning in HE. Appendix 3 provides a summary of all the views on educational technologies discussed in this chapter, their assumptions and implications for teaching and learning.

CHAPTER FOUR

THEORETICAL FRAMEWORK

4.0 Introduction

This chapter discusses the two theories used to explore the relationship between policy-making processes in HEIs and e-learning policy discourses. Stakeholder theory, a network analytical theory, was used to analyse the e-learning policy-making processes at the three universities. Further to this, Critical Discourse Analysis (CDA) by Norman Fairclough was used to analyse the resultant policies on e-learning. The following chapter consists of two main parts. The first part looks at network analysis approaches used to analyse policy making. It discusses Policy Network Analysis (PNA), Actor Network Theory (ANT) and Stakeholder theory, which are used in the study. The second part looks at two variations of CDA theories. The discussion departs from Harbermas' Theory of Communicative Action (TCA) and then follows CDA by Norman Fairclough. In this chapter the researcher explains the relevance of Stakeholder theory and CDA by Fairclough, which informed this study. To finalise the chapter, the discussion looks at the relationship between Stakeholder theory and CDA in the thesis, explaining how they were utilised to map the interplay between policy-making processes and e-learning policy discourses in HEIs.

4.1 Actor network models of analysing policy making

Studies on institutional policy making in HEIs in South Africa require a critical appreciation of the role of various stakeholders in policy making and how these impact on the contents of the policies. An actor analysis approach allows for the study of the characteristics of multiple actors and their interest in the policy issue. In this section, Policy Network Analysis and Actor Network theory are discussed.

4.1.1 Policy Network Analysis

Policy Network Analysis is an attempt to explain policy development by examining networks of actors. Networks are clusters of actors who are brought together by resources or other interests (Borzel, 1998). Policy network actors meet to negotiate and try to influence policy processes, outputs and outcomes. Policy networks can be understood as non-hierachical but interdependent societal relations where actors share interests, beliefs and understandings to meet a desired goal. Policy networks may work to ensure the success of policy processes and in some cases they may exist to the detriment of policy making (Borzel, 1998). Policy network approaches can be understood through various theories including Actor Network theory and Stakeholder theory.

4.1.2 Actor Network theory (ANT)

ANT is a type of critical social theory introduced in the 1980s by Callon (1986), Latour (1987) and Law (1987). ANT treats social interactions such as policy making in terms of networks. In this study, ANT could have been used to understand how e-learning policy issues were framed by the actors and how power was exercised during the policy-making process. In ANT, policy networks can be de-stabilised by a redistribution of power, or a change in the beliefs of actors, new information and policy shifts. ANT could have been used to understand how a stable network was maintained through the translation of interests that bind all actors (Rhodes, 2009). The ANT approach follows actors to see how they attempt to impose worlds upon one another and to describe the dynamics and internal structures of the actors' worlds (Rhodes, 2009). In order to establish a relationship between policy-making processes and e-learning policy discourses, it would have been possible to use ANT, as it has been used to reconcile conflicting perspectives on the position of learning technologies in social processes (Mlitwa, 2006). However, the next section explains why Stakeholder theory was preferred in this study.

4.2 Stakeholder theory

Freeman's Stakeholder theory was used as a framework for understanding the factors impacting e-learning policy-making processes in HEIs in South Africa, how actors are constituted, how actors frame e-learning policy issues and power. Stakeholder theory focuses on the relationship between a firm and its stakeholders. The purpose of using Stakeholder analysis in this study was to:

- Identify the composition of actors in e-learning policy-making processes
- Understand the level at which stakeholders were involved
- Gauge their understanding of the policy issue
- Identify other stakeholders that could have been involved in the process
- Understand how power was exercised by stakeholders in the policy-making process

Stakeholder theory developed from the field of business management. Richard E. Freeman, the original author of the theory, wrote a seminal piece in 1984 entitled: *Strategic management: stakeholder approach,* which brought a stakeholder mind-set into strategic decision making in organisations. Freeman (1984:46) defined stakeholders as "any group and individuals who can affect, or is affected by the achievement of an organization's objectives". Similarly, Carrol (1996:74) defined a stakeholder as

". . . any individual or group who can affect or is affected by the actions, decisions, policies, practices or goals of the organization".

4.2.1 Identifying stakeholders and prioritising them in the policy process

Stakeholder theory stresses the importance of identifying stakeholders and prioritising them in the decision-making process, an exercise known as 'stakeholder analysis'. The goal of the stakeholder analysis in this study was to gain a thorough understanding of the actors who have a direct or indirect stake in e-learning policy formulation processes in HEIs in South Africa, and to understand their perception on the policy issue relating to the use of ICTs in teaching and learning. Stakeholder analysis tries to guard against the risk of leaving out some important people in the policy-making process which could lead to sub-optimal decisions being reached. However, it is not possible to include all stakeholders. One must be able to decide a point to stop or draw the line. This exercise normally results in the categorisation of stakeholders into different groups depending on their importance, the places which they represent in the policy-making process, their levels of interest or the power they have to influence the decision-making process. Table 4.1 shows the different categories by which stakeholders are defined.

Table 4.1 Different categories and types of stakeholders

Category used	**Type of stakeholders**	**Examples of published works**
1.Importance or involvement	Primary – "those without whose continuing participation the organization cannot survive as a going concern" Clarkson (1995, 106) Secondary- those stakeholders that the organization does not directly depend upon for its survival. Marginalised- "Marginalized stakeholders lack the recognition or capacity to participate in collaboration efforts on an equal basis, and particular effort must be made to ensure and enable their participation" (WWF, 2005:3).	Clarkson (1995,106) WWF (2005: 3).
2.Places represented	Internal – (customers, employees, suppliers, owners) External – (government, competitors, special interest groups)	Freeman, 1984
3.Importance and influence	Important – those stakeholders whose problems, needs and interests are the priority of the intervention Influential – how powerful the stakeholder is	Suthersanen (2003:598) (Clarkson, 1995)
4. Power and Salience	Promoters – are stakeholders who attach a high priority to the reform policy and whose actions can have an impact on the implementation of the policy. Defenders – are stakeholders who attach a high priority to the reform policy but whose actions cannot have an impact on the implementation of the policy Latents – are stakeholders whose actions can affect the implementation of the reform policy but who attach a low priority to this policy Apathetics – are stakeholders whose actions cannot affect the	(WorldBank, 2001).

	implementation of the reform policy and who attach a low priority to this policy	

Stakeholders can be categorised into primary and secondary stakeholders. This categorisation depends on an assessment of whether they are immediately affected by, or can immediately affect, the system. Some stakeholders are either internal or external to the organisation. Stakeholders can also be categorised by their influence and importance (Suthersanen, 2003). Suthersanen (2003:598) further describes influence as how powerful a stakeholder is and the extent to which people, groups or organisations (i.e., stakeholders) are able to persuade or coerce others into making decisions and following certain courses of action. Important stakeholders are those whose problems, needs and interest are or should be the priority of HEIs.

The categorisation of stakeholders by order of their importance, influence, power or interest results in an analytical matrix known as a 'stakeholder map' where stakeholders are placed in a grid according to their level of dominance or salience. There are two dimensions to the matrix – the level of interest of the stakeholder on the policy issue, i.e., e-learning, and the stakeholder's power to influence the decisions made concerning the issues proposed in the e-learning policy, as shown in Figure 4.1.

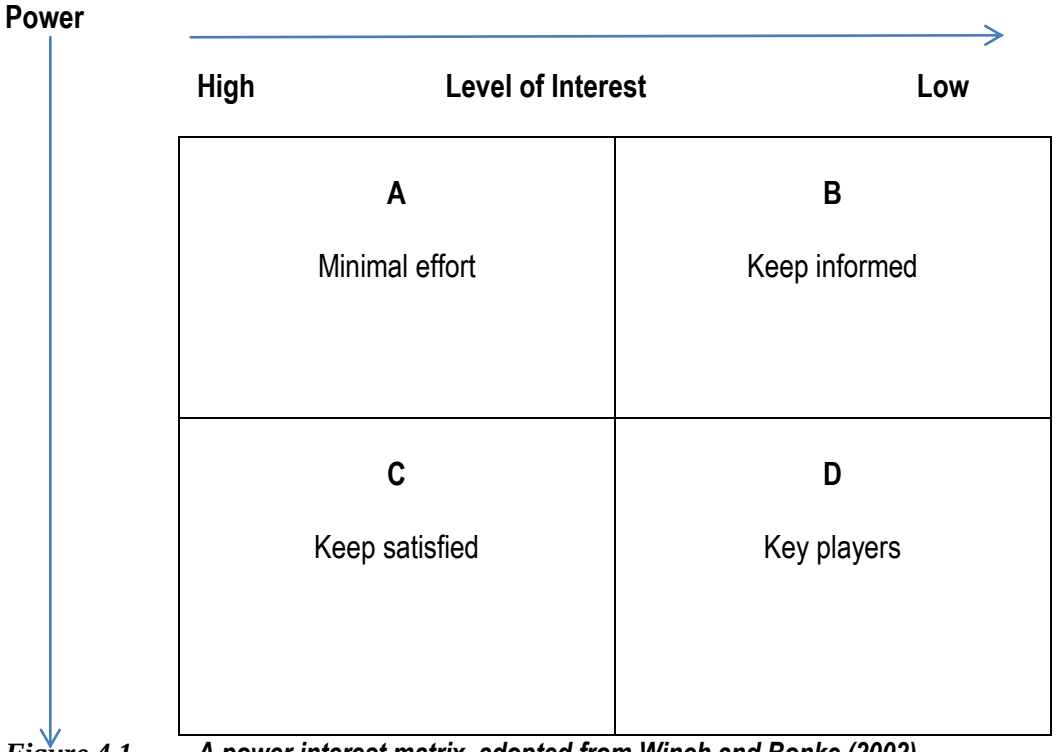


Figure 4.1 ***A power interest matrix, adopted from Winch and Bonke (2002)***

Stakeholders in Category A require minimal effort to convince when it comes to decision making but they should still be watched in case their power or interest rises as circumstances change (Winch & Bonke, 2002). Those in Category B are managed by whoever is leading the process by keeping them informed of progress. This is so because most stakeholders who fall into this category may hold alternative definitions of the policy mission and need to be treated with diplomacy. Again, the sign that stakeholders in this category may gain power as the process unfolds also needs to be watched. Category C stakeholders need to be kept satisfied. Often this category includes those who have funding for the project to continue, so have a vested interest in investing in the idea. Their power over the project is considerable but their interest is low, as they will pull out their finances whenever they are dissatisfied. The final group, D, are the key players.

4.2.2 Stakeholder engagement in e-learning policy-making processes

Stakeholder engagement illuminates the dialogue processes that policy makers engage in. An organisation's success depends on creating real dialogue with its diverse stakeholders (Freeman, 1984). Stakeholder engagement or dialogue processes exposes a number of factors that lie beneath policy problems, decisions undertaken and processes followed to develop policies. The concept of 'stakeholder engagement' has its origins in organisational literature and strategic management as a stakeholder approach to managing firms (Freeman 1984; Donaldson & Preston, 1995). The idea of stakeholder engagement is closely tied to stakeholder theory, suggesting that stakeholders need to be involved in decision making and dialogue processes.

4.2.2.1 Benefits of stakeholder engagement in policy-making processes

The involvement of stakeholders offers a number of benefits to policy-making processes. When stakeholders are involved, policy choices and alternatives are widened, policy deliberation also expands as new perspectives and ideas are brought into the dialogue process. The involvement of stakeholders reduces conflicts and disagreements in policy making and it also ensures that the goals of the resultant policy are met. Stakeholder involvement in decision-making processes may also lead to ownership of policy. The Victoria State Government (2011:2) stated that "effective stakeholder engagement enables better planned and informed policies, projects, programs and services". Stakeholder engagement is a way of bringing the stakeholders closer to decision-making processes, as a way of ensuring that these processes are democratic, legitimate and deliberative (Pederson, 2006).

4.2.2.2 *Levels of stakeholder engagement*

There are various levels through which stakeholders can be engaged in e-learning policy-making processes. The International Association for Public Participation developed a participation model with five levels of stakeholder engagement, namely: to inform, consult, involve, collaborate and empower (IAP2, 2007).These levels are based on the extent to which information is disseminated to policy actors and how it is exchanged, with variations from low to high levels represented in a tabular fashion, as shown in Figure 4.2

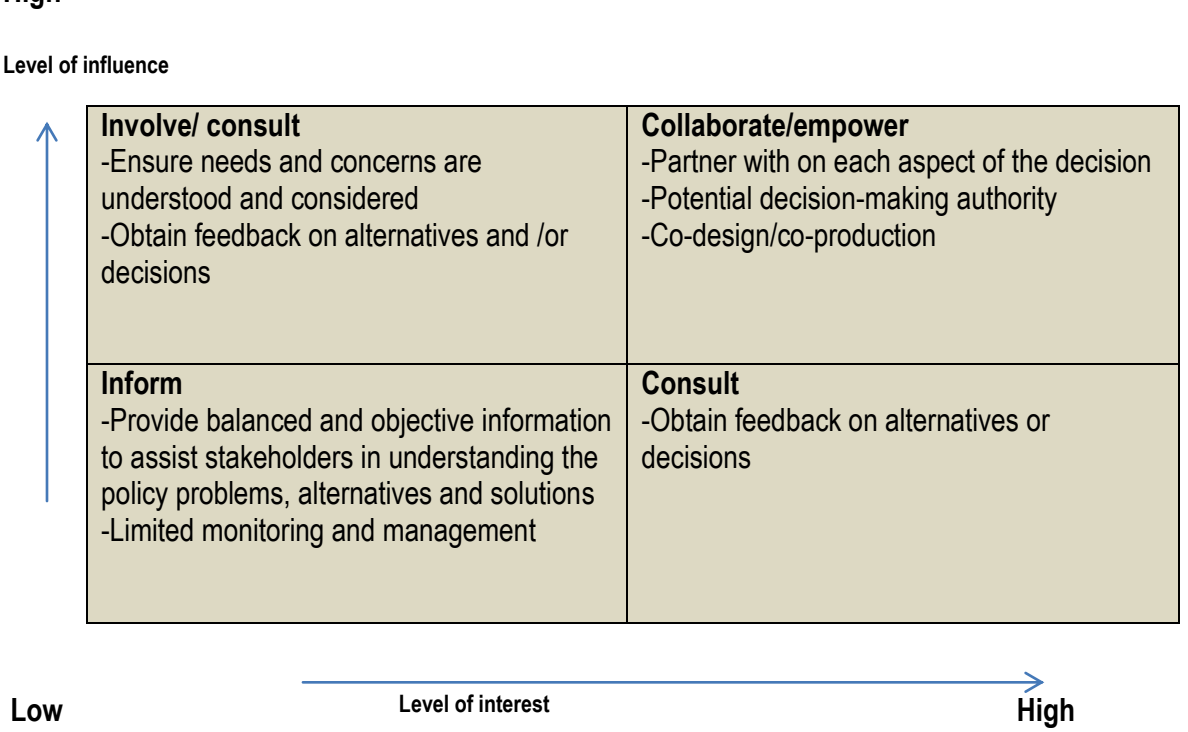


Figure 4.2 Levels of stakeholder engagement, adopted from Victoria State Government (2011: online)

As shown in Figure 4.2, informing and consultation present the lowest levels of stakeholder engagement. The level of interest and influence of the stakeholders is mapped into a quadrant that describes the type of engagement that pertains to different stakeholders. Informing means stakeholders are merely informed about the policy, for example, via websites, fact sheets, newsletters or allowing visitors to policy discussions (State Government Victoria, 2011). Consultation is the lowest level of stakeholder engagement in decision-making processes (Dawes et al., 2015). Dawes et al. (2015:181) defined 'consultation' as conducting interviews in various forms, conducting surveys, opening up draft policy for public comment, and using Web 2.0 tools to gather ideas from various stakeholder groups. This can be done at the problem

identification phase as a way of listening to ideas and concerns of stakeholder groups in order to find and formulate a problem that needs to be addressed through policy.

To *involve* is to work directly with stakeholders throughout the process to ensure that their concerns and aspirations are consistently understood and considered (IAP2, 2007). To empower would be when the stakeholders are given full responsibility in the decision making – when the university says we will implement what you as the e-learning policy stakeholders decide.

4.2.2.3 Variations in stakeholder dialogues

Pedersen (2006:141) explored the concept of stakeholder engagement in dialogue processes and came up with a categorisation that represents various levels by which to judge if an organisation's interaction with its stakeholders has been highly engaging or hardly engaging at all, as presented in Table 4.2

Table 4.2 Levels of stakeholder engagement in dialogue processes (Pedersen, 2006:141)

Level of engagement

	Low		**High**
Inclusion	Only a few privileged stakeholders	↔	All relevant stakeholders included in the dialogue
Openness	Dialogue is structured around a fixed set of questions/problems/issues	↔	Dialogue is structured around open questions/problems/issues
Tolerance	One position has priority over all the others	↔	New alternative and critical voices are respected
Empowerment	One stakeholder dominates the dialogue and decisions	↔	Freedom and equality in dialogues and decisions
Transparency	No access to information about the process and outcomes of the stakeholder dialogue	↔	Full access to information about the process and outcomes of the stakeholder dialogue

The model provides a frame of reference for one to appraise the extent to which an organisation's dialogue with stakeholders is either participatory and inclusive or hierarchical and exclusive. Dialogues should be open, allowing for open problems or issues to be brought to the discussion board. The dialogue should also be tolerant of everyone's views. Pedersen (2006:141) argues that "if some rationales take precedence over others, the dialogue will favor the stakeholders that hold these positions". Amaeshi and Crane (2006:249) argue that engagement in the dialogue processes should be "far-reaching, inclusive and balanced". The

idea behind having an open dialogue on e-learning issues is that it is bound to enhance stakeholder involvement in decision-making processes, which could translate to a realisation of policy objectives. However, effective dialogue requires stakeholders to be receptive towards alternate views (Pillay, 2010).

4.2.3 Different perspectives of Stakeholder theory

Literature identifies four theoretical perspectives of Stakeholder theory, namely: descriptive, instrumental, normative and convergent Stakeholder theory. In the practical usage of the theory, however, it is often difficult to delineate the type of theory as it is applied, although some researchers believe that the theory provides more value when one views it beyond being descriptive (Donaldson & Preston, 1995). It is very possible to work within any of these perspectives, maximising on the various strengths of each perspective. Table 4.3 summarises the different perspectives of Stakeholder theory, taking note of some of the criticisms which have been raised against each perspective.

Table 4.3 Theoretical perspectives of stakeholder theory, adopted from Bailur (2007:66), with a section on convergent stakeholder approach, adopted from Jones and Wicks (1999:206)

Stakeholder approach	**Theoretical underpinnings**	**Criticism**
Descriptive: understanding the relationship between an organisation and its stakeholders	Organisational behaviour	Unfocused aims of descriptive stakeholder theory are unclear – what is it trying to prove or disprove?
Normative: organisations should take all stakeholders into consideration, as a moral responsibility	Corporate social responsibility, Kantian theory of common good	"Business of business is business" Businesses are not charities but profit-making organisations. Not all stakeholders can be pandered to all the time.
Instrumental: organisations should take key stakeholders into consideration as this leads to success and competitive advantage	Utilitarian business and management	Stakeholder involvement is not feasible and/or is not always linked to organisational success
Convergent: combines normative and instrumental elements		

Descriptive Stakeholder theory stops at describing the relationship between an organisation and its stakeholders. Normative Stakeholder theory believes that the company should include its stakeholders for ethical reasons, as it is morally right to do so. Instrumental Stakeholder theory believes that stakeholders are instrumental in driving an institution to its competitive advantage; those organisations that involve their stakeholders will be more successful than those who do not (Jones, 1995). This type of approach takes a contingency approach which posits that if certain behaviours are adopted by policy stakeholders, then certain policy outcomes will be obtained. Convergent stakeholder theory has been proposed in the literature as an alternative to normative and instrumental theory, as it is a combination of both (Jones & Wicks, 1999; Donaldson & Preston, 1995).

4.3 Critical Discourse Analysis (CDA)

Critical Discourse Analysis (CDA) is a group of diverse approaches to the theorisation and analysis of discourse as an element of everyday social practices which have largely been developed by people with backgrounds in Linguistics (Fairclough, 2013). CDA stems from a critical theory of language which sees discourse as language use and the use of language as a form of social practice. One of the aims of CDA is to uncover the way in which societal level knowledge, assumptions and ideologies affect the detailed way in which we talk, write and interact and vice versa. Language in different organisational contexts determines the ways by which existing social relations are maintained or contested; it is also used to serve different interests (Janks, 1997). In this study, CDA was used as a theoretical framework to help understand the assumptions on the role of ICTs in teaching and learning that inform e-learning policies and to understand the interaction of stakeholders, their understanding of the policy issues and how they exercised power in the process of developing the policy.

CDA is also viewed as the study of "the relationship between discourse and power" (van Dijk, 2001:363). Janks (1998:195) argues that the word 'critical' signals a focus on the role played by discourse in establishing and maintaining relations of domination. In CDA, ideology is linked closely to the maintenance of unequal power relations, and thus it is possible to distinguish between discourses that are ideological and those that are not. Chiapello and Fairclough (2002:187) observed that, for Fairclough, ideology is a system of ideas, values and beliefs oriented to explaining a given political order, legitimising existing hierarchies and power relations and preserving group identities. CDA poses a number of questions pertaining to interests and power which help the researcher to understand how the policy-making process occurred and how the process affects the contents of the policies.

CDA does not simply provide the means to analyse and describe a text, but it also provides an explanatory critique which seeks to explain how the reality in the text is an effect or effects of structures or forces which the researcher seeks to study (Fairclough, 2012). Likewise, this study went beyond analysing e-learning policies to explaining how the processes of formulating these policies took place and how they could have affected the content. In order to understand how e-learning policy formulation processes take place in HEIs, this study uses Norman Fairclough's CDA of a communicative event. Fairclough (1993:135) defines CDA studies as studies that seek:

> . . . to systematically explore often opaque relationships of causality and determination between (a) discursive practices, events and texts, and (b) wider social and cultural structures, relations and processes; to investigate how such practices, events and texts arise out of and are ideologically shaped by relations of power and struggles over power.

4.3.1 Habermas's Theory of Communicative Action (TCA)

Policy analysis in this study could also have been achieved through Habermas's TCA. This is because TCA enables one to test the validity claims of what is said and the misconceptions which arise from certain discourses, to eliminate distortions in the writing of policies. TCA could have helped the researcher to understand how the organisational context enabled or constrained what was said and what ended up in the policies. Communicative action is when the writer's intention is to inform the reader about a certain state of affairs or decisions taken for the sake of establishing rapport instead of one-way communication (Ngwenyama & Lee, 1997). Writers of policies may write in such a way as to encourage instrumental action, where they try to make the reader succumb to what they are saying, being mostly manipulative in nature. Discursive action is when the text shows that actors engage each other in a debate of the issues until they agree on a course of action. Strategic action occurs when an actor exerts influence and alters other actors' behaviours so that they conform to his or her wishes or goals (Ngwenyama & Lee, 1997). The theory could have been used to search for validity claims in the policy statements made, establishing their truth, sincerity, legitimacy and comprehensibility and sincerity. The results of the tests would enable the researcher to detect communicative acts that are false, insincere or unwarranted in e-learning policies.

4.4 Norman Fairclough's framework of CDA of a communicative event

The policy-making process is viewed in this thesis as a process of interaction. Language is the tool that facilitates the process of interaction. Norman Fairclough's CDA of a communicative interaction is used in

this study to understand the discourses that inform e-learning policies and also to find out how power is reflected through the struggle of competing discourses. Policy texts are produced during an interaction between different actors to achieve certain ends in e-learning use. Ventola (1995:3) avers that "organisational interaction is seldom interaction for its own sake, but rather interaction fulfils a certain social function, goals and purposes". CDA reveals that the semiotic and linguistic features of an interaction are systematically connected with what is going on practically (Chuliaraki & Fairclough, 1999:113).

Norman Fairclough's model is made up of three levels. Figure 4.3 outlines how the three levels of analysis are related to each other.

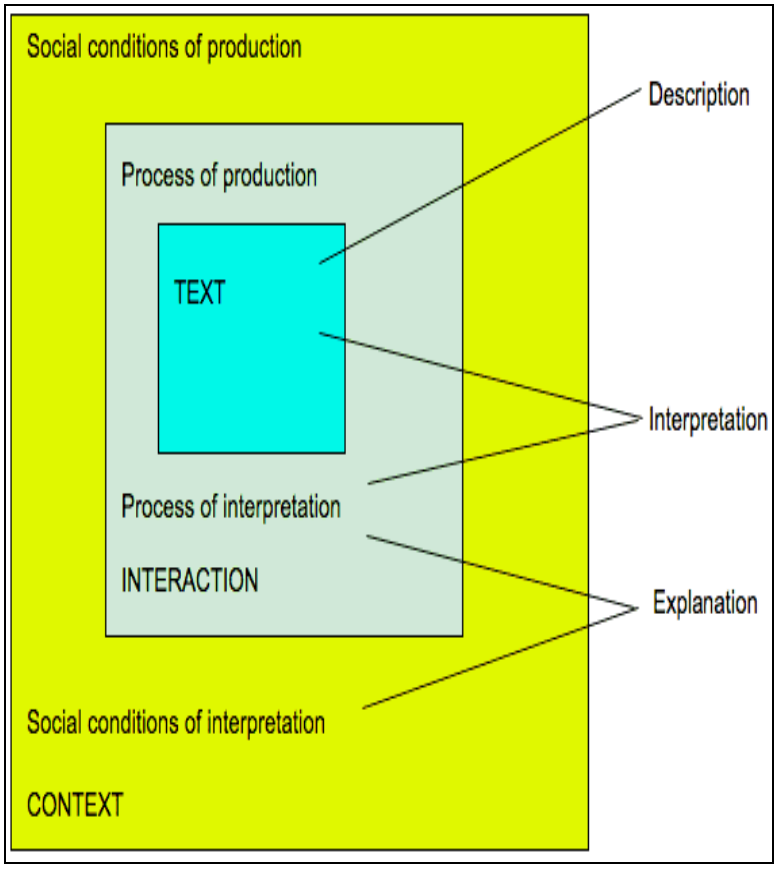


Figure 4.3 A framework for CDA of a communicative event (initially published by Fairclough, 1989; Fairclough, 1995)

Based on this model for CDA, the analysis of e-learning policies in this study consisted of three inter-related processes of analysis.

1. A *description* of the text

2. an *interpretation* of the relationship between the text and interaction (discourse)

3. *an explanation* of the relationship between the interaction (discourse) and the social context (Faiclough, 2001a)

E-learning policies in this study were treated as text. Fairclough (1989:24) argues that "a text is a product rather than a process, a product of the process of text production". The process of text production in this study is understood as policy formulation. Discourse is seen as the whole process of interaction of which text is only a part.

4.4.1 Description of the text

The first dimension of Fairclough's framework calls for the analysis of the 'texture of the text'; in other words, its form and organisation at all levels, including the grammatical and lexical, as well as the structures of argumentation used. Attention to the text can shed light onto the ways in which language works to construct identities and social relations, and thus the method has special relevance to policy analysis (Pinto, 2011). *Text* broadly refers to the content of the policy itself (Bell & Stevenson, 2006).

A close analysis of the wording of a text can reveal what a text producer values, their ideological beliefs and their interests regarding the position taken. People construct a text and choose its wording mostly as a matter of choice upon reflection, although sometimes it happens unconsciously. Through this understanding, the wording of the text in a policy does not get into the policy as a matter of chance, but as a matter of intent on the part of the policymaker who creates the policy. By studying the properties of the text (lexical and grammatical) features, one is able to understand the production process of the text as linguistic features are traces of the production process (Alford, 2005). As human beings exist in particular times and contexts, they tend to draw upon discourses that are available to them when constructing texts. Different texts privilege and also background different discourses (Janks, 1997).

This study looked at four aspects of texts to analyse e-learning policies in HEIs in South Africa. Taylor (2004:437) used these four aspects in her analysis of education policies in Britain.

1. whole text organisation (structure, e,g., narrative, argumentative etc. and the text genres)
2. clause combination

3. grammatical and semantic features (transitivity, action, voice, mood, modality)
4. words (e.g., vocabulary, collocations, use of metaphors, etc.)

(Fairclough, 2001c: 241-242)

The first focus of text analysis in this thesis concentrated on understanding how the whole policy as a text was organised by looking at text genres and discursive types found in the text. However, to understand the text structure, it was important first to look at the genre of the text. Understanding the genre of e-learning policies illuminates the various rules that guide the way official documents are written in HEIs. Bhatia (2002:10) asserts that an analysis of text genre will further an understanding on how members of specific discourse communities construct, interpret and use these genres to achieve their community goals and why they write them the way they do. Thompson (2005:7) looked at different types of text genres and the discursive types promoted by each genre, as shown in Table 4.5.

Table 4.5 Text genres and discursive types

Text Genre (TG)	**Discursive Type (DT)**
1. Confidence	1. Technocracy
2. Factual information	2. Legitimacy
3. Humour	3. Neutrality
4. Persuasion	4. Corporatism
	5. Technological optimism
	6. Pragmatism

(Thompson, 2005:7)

For this study, Thompson's categorisation was used to interrogate the micro-level properties of the text which tend to enunciate certain discursive types. As shown in Table 4.5, the language used in e-learning policy texts is meant to promote certain practices. Thompson's (2005:7) text genres and discursive types have been used by a number of researchers to make sense of various understandings of technology use in education contexts in South Africa (Roode et al., 2004; Ngambi, 2008; Rambe, 2012).

The text genres can be explained as follows:

Confidence- "This term is used in the sense of something confided between people" (Thompson, 2005:7).

Factual information – presented as a matter of fact, not to be disputed, objective

Humour – funny, light hearted, lacking seriousness

Persuasion – urging or trying to coerce

Rambe (2012:296) explained the discursive types as follows:

Technocracy discursive type refers to 'technocratic discourse' (Ngambi, 2008:34).
Legitimacy discursive type is founded on the expression of disciplinary authority.
Neutrality discourse type adopts a middle of the road approach where the text message reflects no inclination to a given position or side.
Corporatism discursive type is reflected by mutual partnership and collaboration.
Technological optimism discursive type stresses the affordances of technology in academic engagement.
Pragmatism discursive type is founded in the search for realistic/practical solutions.

Text genres (TGs) and Discursive types (DTs) are traces of the processes of text production and interpretation. Text genres describe ways of acting or interacting and relating (interactions) in a given social context (Fairclough, 2003). The process of identifying TGs and DTs and applying them to pieces of text is subjective; however, understanding the conditions of production and interpretation of text provides insight into the social practices of a community in which policymakers are located (Ngambi, 2008). Focusing on micro-level relations in policy texts, discourse and discourse types informs the construction of social power in an institutional context (Rambe, 2012). Conducting the analysis using tables demonstrates the value of using CDA in investigating policy formulation processes in HEIs by focusing on the use of language in the writing of e-learning policy texts that privileges certain discourses and marginalises others.

The second point of analysis of the text looks at the grammatical and semantic features of the text. In trying to understand the grammar used in a text such as a policy, Fairclough (1989:166) recommends that one needs to ask such questions as: What types of processes and participants dominate? Is agency unclear? Are processes what they seem? Are sentences passive or active? Are sentences positive or negative? Looking at the grammar and semantic features of the words used was important for this thesis. Policies are often seen as an expression of values. Fairclough (1989:110) advises that when analysing words, one must look at the values that are expressed by the words. What *experiential*, relational and expressive values do words have? Are there words which are ideologically contested? Is there rewording or over-wording?

Thirdly, the analysis also searched for the use of metaphors. The use of an emphatic language rich in adjectives is characteristic of political discourse because it aims to convey political conviction and commitment to ideas and causes (Pinto, 2011). Morgan (1997:347), who has written extensively about the use of metaphor in organisations in general (not specifically educational organisations), has observed that "any given metaphor can be incredibly persuasive but it can also be blinding and block our ability to gain an overall view". When this happens, the restriction serves to limit the parameters of legitimate debate about policy.

4.4.2 Interpretation: an analysis of discursive practice

The second stage as depicted in Fairclough' s model (Figure 4.3) is to interpret the relationship between the text (policy) and the interaction that led to the production of the text (policy making). CDA recognises the discursive (or semiotic, or linguistic) character of policy, policy making and policy analysis (Fairclough, 2012). CDA treats policy making as discursive spaces where discourse and language play a critical role in shaping policy options. In a critical analysis of discursive practice in policy texts, Jorgensen & Phillips (2002:63) argue that one seeks to understand how discursive practices, which are the processes of producing the text or policies, are ideologically shaped by relations of power and struggles over power. In other words, an analysis of the discursive practice in this thesis concentrated on the processes of production of e-learning policies. E-learning policy making was seen as discursive practice. The aim of the thesis then was to understand how the discursive practice (policy formulation process) was ideologically shaped by relations of power amongst different actors and how they bring in their personal ideologies on the role of ICTs in teaching and learning to be absorbed in the policies.

4.4.3 Explanation: an analysis of social practice

The third stage in Fairclough's model is that of explaining the relationship between the interaction and social context. Fairclough (1995:62) posits that social practice analysis pertains to three aspects of the socio-cultural context of a communicative event: economic, political (power and ideology) and cultural (values, etc.). Bell and Stevenson's (2006) writing about education policy defines the context *of policy as* the antecedents and pressures leading to the development of a specific policy. Like Fairclough, they aver that this requires an analysis of the economic, social and political factors that gave rise to an issue emerging on the policy agenda. An understanding of the context also requires one to investigate how the policy may relate to previous policy experience and to what extent it builds on, or breaks with, previous policy (Bell & Stevenson, 2006). E-learning as a form of social practice in universities does not occur in a

vacuum; it is closely tied to contextual ways of using ICTs for teaching and learning which are also historical. Social actors who produce e-learning policies do not exclusively make use of their individual experiences and strategies; they mainly rely upon collective frames of perceptions called social representations. Social representations include concepts, opinions, attitudes, evaluations, images and so on which result from daily life and are sustained by ways in which individuals in a group talk to each other.

4.5 Operationalising CDA in critical policy analysis

There is no typical CDA way of analysing policy, neither is there a typical CDA way of collecting data. Some authors do not even mention data collection (Meyer, 2001:23). In CDA studies, data collection is not considered to be a specific phase that must be completed before analysis begins: after the first collection exercise it is a matter of carrying out the first analyses, finding indicators to particular concepts, expanding concepts into categories and, on the basis of these results, collecting further data (theoretical sampling). In this mode of procedure, "data collection is never completely excluded, and new questions always arise which can only be dealt with if new data are collected or earlier data are re-examined" (Strauss, 1987:56).

Norman Fairclough suggested a stepwise procedure for operationalising CDA in an analysis of text such as a policy. He takes a practical 'problem-oriented approach', where the first step is to identify and describe the social problem to be analysed. He proposes the following:

1. Focus upon a specific social problem which has a semiotic aspect; go outside the text and describe the problem and identify its semiotic aspect.
2. Identify the dominant styles, genres, discourses constituting the semiotic aspect.
3. Consider the range of difference and diversity in styles, genres, discourses within this aspect.
4. Identify the resistance against the colonisation processes executed by the dominant styles, genres and discourses.

CDA analyses texts and interactions, but it does not start from texts and interactions. It starts rather from social issues and problems which people face in their social lives. CDA looks at these issues and problems in terms of their semiotic dimensions.

Norman Fairclough's CDA of a 'communicative event' is particularly relevant in answering both the researcher's cardinal and secondary questions, as it enables one to study policy text and the message

enacted in it by considering the linguistic elements from which the text arises (policy formulation process). CDA enables the analyst to find possible ideologies, assumptions as well as values (what is considered to be important), within the given text (Fairclough, 2001b).

Recognising that the communicative event has a social, a discursive and a textual dimension in a dialectical relationship, CDA requires an analysis of *the relationship between texts, interactions and contexts.* Norman Fairclough's framework was preferred due to its strength in explaining the dialectical relationship between social, discursive practices and the text. This approach is in line with the interest of this study of analysing policy as text and policy formulation processes as social practice in which the text is constituted. Fairclough's CDA of a communicative event is appropriate for this study, as it will help to explain the processes of text production as they manifest through e-learning policy formulation processes in HEIs.

4.6 Criticism of Fairclough's model in policy analysis

Despite the merits of Fairclough's approach, it is important also to look at the limitations of this theory. One of the criticisms that scholars have raised against the use of CDA in analysing policy is that there is no way of knowing from the text what deliberations took place before they issued the text or policy (Cheng, 2009). In other words, simply analysing the policy text will not provide you with answers on past experiences, history and background behind the policy's development. In the present study, carrying out a CDA of institutional e-learning policies would help the researcher to understand the discourses that informed the policies, but it would not answer to how the policy was formulated, how the actors were constituted and how power was exercised in the process.

Similarly, in a study of e-learning policies in education and training in Zambia, Konayuma (2012: iii) asserts that ". . . it is not easy to understand the views of policymakers and practitioners by merely reading e-learning policies", even if they have contributed to the development of those policies. To help overcome these criticisms, in this study the researcher turns to Stakeholder theory to further an understanding of who was involved in formulating the policy, how the deliberations took place and how that shaped the text in the policy.

4.7 Summary

The objective of this chapter was to discuss how Stakeholder theory and CDA by Fairclough were used as theoretical frameworks in the study. The chapter starts with a discussion on network analysis approaches

to the analysis of policy. It discusses Policy Network theory and Actor Network theory, showing how the two theories could have been used in this study. The discussion turns to Stakeholder theory and justifies why the Stakeholder theory was used in the study. The chapter discusses CDA used in the analysis of policies. Harbermas's TCA is explored. The chapter also explains why CDA, informed by Norman Fairclough, was preferred.

CHAPTER FIVE

METHODOLOGY AND RESEARCH DESIGN

5.0 Introduction

The aim of this chapter is to discuss the research methodology, the research design and methods used in the study. First, the chapter starts with a discussion on the qualitative research methodology used for the study. The chapter notes that the epistemological foundations of this research were critical. Second, the chapter discusses the research design used and the methods for collecting data. Third, the chapter discusses how sampling took place, how data were analysed and how the researcher made ethical considerations in conducting the study.

5.1 The qualitative research methodology

This study adopted a qualitative research approach. The qualitative methodology refers to a set of methods and techniques of collection and analysis of data in the form of words, impressions, sentences, explanations and context interpretations (Neumann, 2006). Qualitative research methods help researchers understand people and the social and cultural contexts within which they live. Qualitative research studies involve various methods such as case studies, action research and ethnography. There are a range of methods for collecting qualitative data which could include direct observation and participant observation (fieldwork), interviews and questionnaires, documents and texts, and the researcher's impressions and reactions (Myers, 2006).

The aim of this study was to investigate institutional e-learning policy-making processes in various institutional contexts. There has been a general shift in information systems research away from technological to managerial and organisational issues, hence an increasing interest in the application of qualitative research methods (Sidi et al., 2009). The motivation for using a qualitative research paradigm in this study was that the researcher wanted to understand processes of interaction that led to the conceptualisation and design of particular policies on e-learning. Qualitative research was ideal for this study because it allows one to preserve the chronological flow of events that took place in a given context, to see precisely which events led to which consequences, and derive fruitful explanations (Amarutunga et al., 2002).The major players in the processes were interviewed to understand their views and philosophies on e-learning, generating mostly qualitative information.

Second, a qualitative research methodology was used because the researcher sought to understand how policymakers conceptualise the role of ICTs in teaching and learning in HEIs and to understand what discourses inform the policies that they design to address issues of teaching and learning with technologies in their contexts. An analysis of policy discourses generated a lot of textual data that illuminated the ways in which actors in various HEIs talk and theorise about e-learning, their uses of language and the meanings and assumptions attached to the area of e-learning.

5.2 Philosophical approach

The epistemological foundations of qualitative research in Information Systems (IS) have generally been described as positivist, interpretive and critical (Orlikowski & Baraudi, 1991; Myers, 2006). The epistemological foundation of this study is in the critical paradigm of research in Information Systems. This section discusses the critical paradigm of research, distinguishing it from the interpretive and positivist approaches. Positivists have an objective view of reality that can be deduced using structured instrumentation techniques (Orlikowski & Baraudi, 1991). Unlike positivists, interpretive and critical researchers believe that reality is subjective and socially constructed by the people who live that reality. Interpretive researchers employ social constructs such as language, consciousness and shared meanings to make sense of reality (Myers, 2006). The aim of interpretive studies is to understand the context of the information system and the process whereby the information system influences and is influenced by the context (Walsham, 1993). Critical research departs from interpretive research in that it does not aim for mutual understanding of a situation, but to the emancipation of organisational actors from false or unwarranted beliefs, assumptions and constraints (Ngwenyama & Lee, 1997).

5.2.1 The aims of critical research

Critical research has two major aims:

1. To free the consciousness of individuals from limiting theories and assumptions
2. To emancipate individuals from their limiting circumstances and to bring about change, what some authors describe as pursuing the critical agenda (McGrath, 2005)

Ngwenyama (2002:116) argues that the primary objective of critical research is the improvement of the 'human condition'. By this, he explains that critical research should free or liberate people from social and psychological distortions and barriers to social progress that could arise from different conceptualisations,

assumptions and ideologies. As a result, critical research tends to focus more on the oppositions, conflicts and contradictions in contemporary society (Myers, 2006). It seeks to emancipate by eliminating the causes of alienation and domination (Myers, 2006). Avison and Fitzgerald (1997: 127) argue that:

> . . . the aim of critical research is to create knowledge with transformative and emancipatory intent by revealing how Information Systems serve particular interests, by developing a situated understanding of positions and experiences of people affected by the systems, and by linking such understandings with broader conditions, power relations and social structures.

Critical researchers tend to focus on understanding the language of the humans they are studying, interpreting the social rules and social structures of a particular group of people or an organisation and also critiquing these practices and relations (Orlikowski & Baraudi, 1991).

5.2.2 Issues on critical agenda

This study does not pursue a holistic critical agenda. It provides a critical analysis of e-learning policies in HEIs in South Africa (examining dominant and marginalised discourses). By engaging in the discourses informing e-learning policies, the study hoped to uncover the myths and assumptions associated with the role of ICTs in teaching, centrally locating the study within the critical paradigm which "aims to smash myths and empower people to change society" (Neumann, 2006:105). The study traced the e-learning policy-making processes at three universities, using them as a case to understand how policy-making processes shape e-learning policy discourses in HEIs. By analysing the policy-making processes at the three universities, the study took a critical approach that produced a critique that revealed true conditions. This critique could help to raise the level of consciousness of policymakers to some of the impediments to formulating good policies. The study does not conduct emancipatory social action to change e-learning practices in these universities. It is hoped that this study may provide a rich resource for critical self-reflection by the various policy actors and this may or may not influence their future actions or practices in the policy-making process. In this sense, this study could be described overall as a 'weak non-interventionist' form of critical policy analysis (Luckett, 2006:127). However, this does not discredit it from its contenders. As observed by Luckett (2006:124):

> Critical policy analysis is concerned to expose the workings of social structure and power and to clarify the value assumptions and value conflicts between those involved in formulating policy and those who must implement and be affected by it.

It is not unusual for empirical critical research in Information Systems to adopt interpretive methods. Critical research suffers from a lack of its own methodological identity, relying on the appropriation of interpretive methods. Cecez-Kesmanovik (2001:1447) postulates that this has not been a matter for controversy or concern, as most critical studies transform interpretive methods to serve critical ends, citing the case of CDA (Fairclough, 1995). McGrath (2005:90) suggests that the Information Systems field should accept broader definitions of what it means to be critical. She notes that in the Information Systems field there are approaches where the critical agenda is overt; others where the critical agenda is situational (arguments on which voices are lost, which discourses are marginalised) and some where the emphasis might be on gaining interpretive understanding (McGrath, 2005). Most studies in the Information Systems field with critical orientation exercise greater attention to contextualising the research – historically and culturally – and to exercising suspicion of all narratives given by subjects (Klein & Myers, 1999). Whilst the critical researcher would treat most narratives with suspicion, McGrath (2005:91) suggests that the critical researcher:

> should break away from suspicion to problematizing the observed behaviors of subjects, to present an account that neither relies solely on what the research subjects say, nor expects to unearth a different and deeper meaning of which the social actors are only dimly aware.

5.3 Research design: Case study

A case study is an in-depth investigation into real-life phenomena, which encompasses studying important contextual conditions of the phenomena (Yin, 2009). Case studies deal with common phenomena which includes 'decisions', 'individuals', 'organizations', 'processes', 'programs', 'institutions' and 'events' (Yin (2009). There are different categorisations of case studies in qualitative research (Stake, 1995). Of interest to this study is the collective case study where several cases are studied to form a collective understanding of the issue or question (Stake, 1995).

This study sought to understand the processes of formulating e-learning policies in HEIs. Three cases were used. These cases provide a collective understanding on how policy-making processes shape e-learning policy discourses – how the composition of actors, their role, influence and power, and the way they conceptualise the role of ICTs in education affects e-learning policy-making processes in universities. In a multiple case study, the researcher uses several cases to understand the similarities and differences

between the cases. A multiple case study allows the researcher to analyse within each setting and across settings (Baxter & Jack, 2008). Yin (2003:47) argues that multiple cases can be used for two reasons:

i) To predict similar results (a literal replication)

ii) To predict contrasting results but for predictable reasons (theoretical replication)

In a similar discussion, Goodrick (2014:1) avers that multiple case studies can be used when, how and why questions are posed about the processes or outcomes of an intervention and in cases where an understanding of the context is seen as being important in explaining the success or failure of a process or intervention. The strength of multiple cases is notable, not only in picking the similarities and differences, but in explaining causality and how certain interventions can be tailor-made to achieve their intended outcomes in certain contexts (Goodrick, 2014).

Multiple case studies often pose a challenge for the researcher in reporting the cases. "There is no correct way to report a case study" (Baxter & Jack 2008:555). Some ways that have been suggested include:

i) Telling the reader a story

ii) Providing a chronological report

iii) Addressing each proposition that answers the questions

5.4 Research methods

In this study different kinds of data collection methods were used to gather information: namely, through a CDA of e-learning policies in three institutions, through semi-structured interviews with policymakers at the three universities, and through an analysis of documents and reports. Table 5.1 summarises the data collection methods, sources and types of data gathered.

Table 5.1 Data collection methods, sources and types of data

Data Sources	Data collection methods	Data types
Informant based	Semi-structured interviews	Informant cognition
Archival documents	Policies Official documents	Policy making products

5.4.1 Analysis of policy texts

Empirical evidence for this section consisted of a corpus of policy texts drawn from three universities in South Africa. All three policies were available online. A critical approach to policy analysis was used. The analysis viewed policy documents as texts that represent views of reality that are shaped by dominant discourses at a particular place and time (Taylor, 2004). The aim in understanding these policy texts was to deconstruct the meanings of these policies and to analyse the language used and how issues were articulated, revealing how policymakers understand the role of ICTs in teaching and learning. An analysis of the policies was done in five stages:

1. Policies were read through to understand the issues covered.

2. dominant discourses on the role of ICTs in teaching and learning were searched for, using Feenberg's (1999) framework.

3. Dominant discourses were then coded under common themes associated with the discourse as identified in the literature.

4. This coding framework was then incorporated into the Atlas Ti software to generate sections from the policy that could be coded under the different discourses and themes.

5. Having observed how the discourses on the role of ICTs played out in the policies, a CDA of sections of the policy texts was then conducted.

The sections of the policy texts were chosen on the basis of their discursive and ideological weight (Luckett, 2008). The sections chosen are summarised in Table 5.2.

Table 5.2 Policy texts used for CDA

University A	Positioning e-learning in terms of its purpose and benefits
University B	The internal environment impacting on teaching and learning with ICTs at the university The goals and objectives of the e-learning strategy Categories of courses
University C	The rationale for an educational technologies policy

Appendices 5, 6 and 7 provide a detailed description of the extracts chosen from the three policies.

5.4.1.1 CDA of policy texts

Using Fairclough's framework as discussed in Figure 4.3, the analysis of policy texts involved three levels of analysis for each policy. The result of this analysis was a table that looks like Table 5.3.

Table 5.3 Graphical presentation of the analysis of text

Ref	*Raw text from the policy*	*Micro* **Description** **(Text analysis)**	*Link* **Interpretation** **(Discursive practice)**	*Macro* **Explanation** **(Social practice)**
		(TG1) confidence	Technocracy (DT1)	Explanation of why…

The analysis of the text looked at the linguistic features of the text such as the vocabulary and text genres used to discuss issues in the policy. At the level of interpretation, the researcher looked at the discursive type promoted by the text genre. This was followed by an explanation of why certain discourses and discursive types occurred in that particular social context.

A micro-level analysis of text exposed the discursive power relations that are promoted through various text genres and discursive types found in the policy texts (Rambe, 2012), since text genres and discursive types are products of text production and tools for interpreting the text. The text genres and discursive types were identified, considering issues of power and domination (Recall Table 4.5). Choosing the text genres and discursive types promoted by the text in the different extracts was a subjective process. However, the analysis was done in the form of tables to allow the researcher and the reader to carry out the analysis concurrently. Following this analysis, presented in graphic form in Table 5.3, a discussion of the analysis followed to explain the dialectical relationship between the text, discourse and social practice.

At the discursive level the analysis showed how authors of the text drew on already existing discourses and discursive types in the production and interpretation of the text. At the level of interpretation, the researcher also identified the dominant discourses informing the policy text and the underlying assumptions of dominant discourses and ideologies on the uses of technology for teaching purposes. To qualify the presence of dominant discourses, the researcher searched for common themes associated with discourses on the role of ICTs in HEIs, from studies done on e-learning in South Africa, as shown in Appendix 2.

5.4.2 Analysis of the policy formulation process

To understand the policy-making processes in HEIs, the study traced the processes of formulating institutional e-learning policies at the three universities**.** The policy formulation processes were analysed, using interview transcripts and other documentary sources.

5.4.2.1 Data collection for the analysis of policy making

Semi-structured interviews were used to gather data about the process of formulating e-learning policies at the three universities. An interview guide was developed for this purpose (See Appendix 12). The purpose of developing the guide was to ensure that all topics relating to the questions posed in the study were covered. Each interview lasted for 40 minutes. All interviews were conducted at the universities in quiet office settings. Telephonic interviews were also conducted at times convenient to the participants. They were recorded and transcribed by the researcher.

Table 5.4 shows the period of data collection at the three universities and the number of participants. Appendix 4 gives a comprehensive list of the participants and the dates they were interviewed at the three universities.

Table 5.4 Data collection period and number of participants interviewed at the three universities.

	University A	**University B**	**University C**
Data collection period	March –November 2014	March-November 2014 May to August 2016	March-November 2014 May to August 2016
Number of participants	14	4	3

The 6 'P's of the policy circle, as espoused by Hardee et al. (2004:4), were used as a heuristic to organise the data on e-learning policy-making processes at the three universities (Recall Section 2.2.3). To understand how actors were constituted in e-learning policy-making processes, a stakeholder analysis of the actors was conducted, focusing on the power they had to influence decisions, their interests in the policy issue and the roles of responsibility they hold in the institution with regard to policy making. A power interest matrix was used and analysed, using the categories in Table 5.5.

Table 5.5: Stakeholder characteristics around the development of an institutional e-learning policy

Stakeholders	Characteristics				
	Involvement in the issue	Interest in the issue	Influence or Power	Position	Impact of issue on actor

The analysis of the policy-making process also involved understanding the dialogues that policymakers engage in and the different levels of stakeholder engagement.

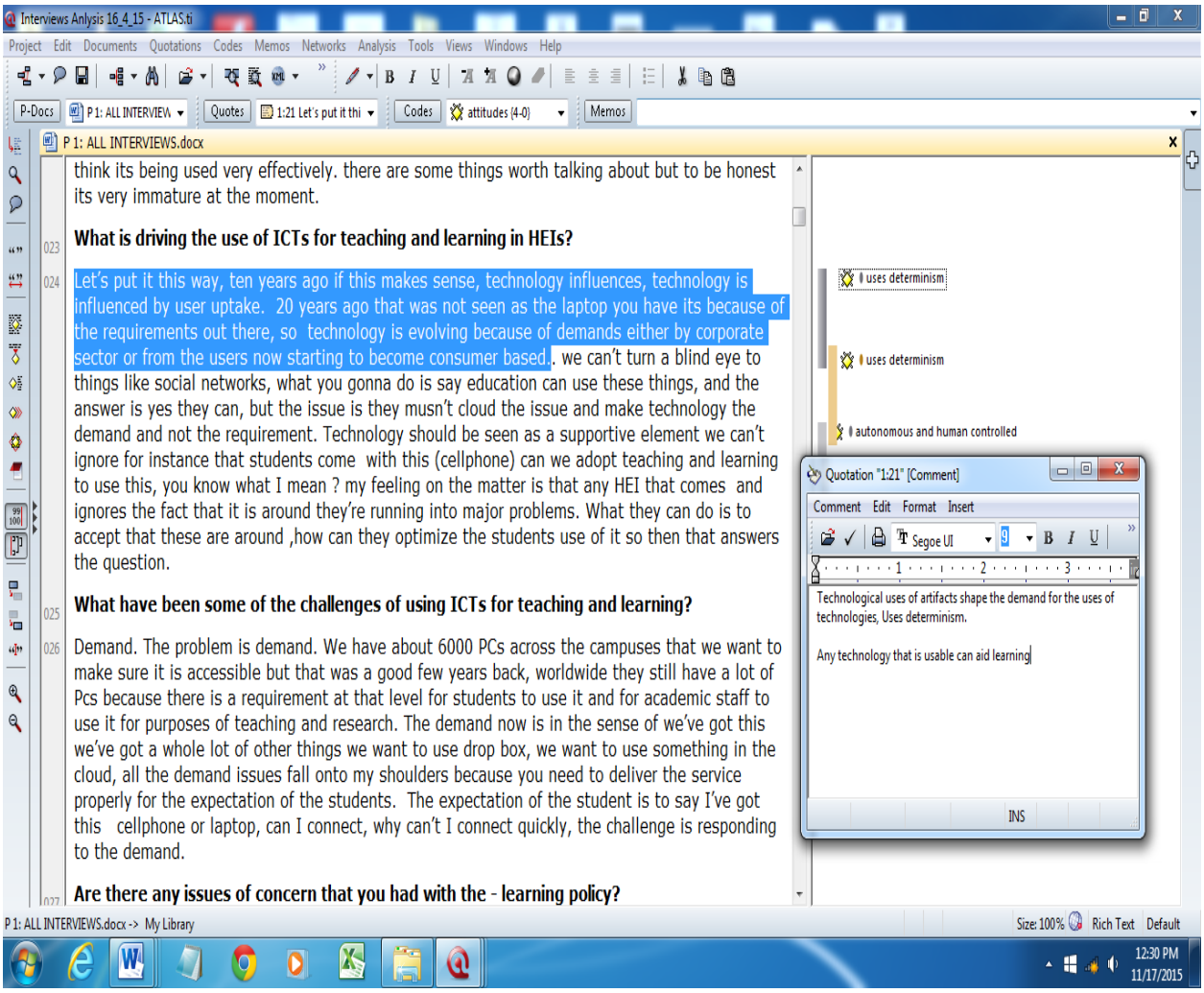
5.4.2.2 Analysis of interviews with policymakers at the three universities

The first step to analysing the interview material was to transcribe the interviews, followed by the cumbersome task of making sense of the data generated during the process. A multiplicity of ad hoc methods and conceptual approaches was used. According to Kvale (2007:116), bricolage refers to an eclectic form of generating meaning – through a variety of approaches including meaning making, linguistic analysis and theoretical reading.

The interviews sought to understand, first, the philosophical positioning of policymakers on the role of ICTs in teaching; second, how policy issues were framed by actors. In seeking to understand how policymakers conceptualise the role of ICTs in teaching and learning, the study sought to clarify the conceptual baggage that is imminent in the e-learning policy space. Theoretical reading, as espoused by Kvale (2007:117), was used to analyse the interviews, based on Feenberg 's (1999) framework (Recall Table 3.1). This approach was deductive in that the researcher imposed an existing theory on the data to analyse the interviews (Burnard et.al, 2008).This method was preferred, to allow comparability between the discourses present in the policies and those arising from the policy-making process, as represented by the interviews.

Table 5.5 shows how the interviews were analysed, using codes developed from a theoretical reading of Feenberg's (1999) framework. Atlas Ti was used for the analysis. The major codes used were derived from four discourses on the role of ICTs in teaching and learning: namely, determinism, instrumentalism, critical theory and substantivism.

Table 5.6 An analysis of interviews



Third, the interviews sought to understand the practical steps taken to formulate the e-learning policies and to clarify how policy actors were constituted and involved in the processes. The interview analysis exercise used a variety of approaches that led the researcher to answer the research questions. This data was triangulated with information gathered from the analysis of primary sources of archival documents relating to the processes of formulating policies at the universities.

5.4.3 Document analysis

Documentary sources such as reports, unpublished documents, minutes of meetings, emails, reports, documents and agendas were analysed thematically, identifying *processes* that could inform policy making and also context in terms of how they could further an understanding of the *context* of creation of e-learning policies and dominant discourses on the role of ICTs in the policies. The documents analysed are listed in

Appendix 18. Document analysis was one mechanism used to verify interview data. In addition to the actual policies, documents included reports, letters, discussion documents and emails exchanged by the policy actors. The archival documents were used to understand the chronological development of e-learning policies at universities A, B and C.

5.5 Sampling procedure

This study used two methods of sampling. E-learning policies from three universities were drawn through a purposive sample, whilst a snowballing technique was used to select the sample for the interviews at the three universities.

5.5.1 Sampling of e-learning policies

A purposive sample of e-learning policies from three universities in South Africa was used. Purposive sampling is the intentional selection of a sample that allows the researcher to focus in great detail on a certain issue, subject or phenomenon (Silverman & Marvasti, 2008). For a qualitative study, individuals or cases are chosen, not because they represent their population, but owing to their relevance to the research topic (Flick, 2009). Table 5.7 summarises the sample for policy analysis.

Table 5.7 Sample for policy analysis

Name of Institution	University category	Policy document	Year
A	HAI and HDI (merged)	University A policy on e-learning	2011
B	HDI	An e-learning strategy for university B	2004
C	HAI	Educational Technology (Ed-Tech) policy for University C	2003

First, e-learning policies from the three universities in this study were selected to achieve theoretical replication, as espoused by Bengtsson (1999:3). Theoretical replication means that the cases were selected, based on the assumption that they would produce contradictory or different results. Each case was used to confirm or disconfirm the findings drawn from another (Vohra, 2014:55). The policies were chosen in order to gather a wealth of diverse institutional e-learning policy discourses. The discourses represented multiple perceptions of practice from different institutional actors within each case. By choosing

the three policies, the diversity in the cases would provide a good analytical variety to enrich findings on critical mediating factors (Yin, 1994) in e-learning policy making in the different cases.

Second, based on the aims of multiple case-study research, according to Yin (1994a:143), the aim in choosing the sample for policy analysis was not to achieve analytic generalisability nor to achieve statistical generalisation. Yin (1994a:143) explains that in statistical generalisation, an inference is made about a population on the basis of empirical data collected on a sample. The cases are not sampling units and the study does not generalise the cases to the broader population, but rather to theoretical propositions (Yin, 1994a). It does not necessarily follow that all HDIs will develop the same e-learning policies, neither is this true for all HAIs. Yin (1994a:143) warns that "a fatal flaw in doing case studies is to conceive of statistical generalisation as the method of generalising the results of the case; this is because cases are not sampling units and should not be chosen for this reason". In this case, the cases have been chosen to achieve analytic generalisability. By this, a previously developed theory is used as a template to compare the empirical results of the case study. If two or more results support the theory, then replication is claimed.

Third, these e-learning policies were chosen because the three universities have a diverse practice environment, different sizes, structures, governance mechanisms and different histories. The dichotomy in such multiple cases increases the explanatory power of findings, as espoused by Miles and Huberman (1994:172).

In addition, the following additional considerations were made in choosing the e-learning policies:

1. The resultant samples of policies were from heterogeneous institutions.
2. They were convenient, having publicly available documents on the Internet. They were also easily accessible to the researcher, owing to their geographic location.
3. They had stand-alone e-learning policies.
4. One was unique because it was recent.

5.5.2 Description of the sample for interviews

The participants for interviews were chosen to provide information on the process of formulating the policies at the three universities, how policy issues were framed and how they influenced the process and outcome. The sample for the interviews in the three cases was drawn through a snowballing technique which started off with one key participant in each of the universities. Each participant would mention other participants until no new names appeared, creating a closed network (Neumann, 2006). The participants

chosen through snowball sampling were all individuals who had participated in the process of formulating the e-learning policies at the universities.

5.6 Confidentiality and ethics

Ethical clearance was granted by the Faculty of Commerce Ethics in Research Committee at UCT to conduct this research on the 11th of October 2013 (See Appendix 8). Ethical clearance was also obtained from the three universities. The targeted interviewees were notified of the aims, methods, anticipated benefits of the research and the confidential nature of their responses. Notice was given to all individuals who expressed an interest on becoming subjects of this research and consent was given freely by the individuals to participate (See Appendix 11). The identity of individuals from whom information was obtained in the course of the research was kept strictly confidential. No information revealing the identity of any individual has been included in the final report. No communication prepared in the course of the research or thereafter can reveal the identity of research subjects.

5.7 Validity

The literature has noted the complexity and contestation arising from the criteria used to validate qualitative case-study research findings (Lee & Fielding, 2004). The next sub-section details some of the measures taken to ensure the validity of research findings.

5.8.1 Consultations with e-learning experts in HEIs in South Africa

Two experts in e-learning shared their experiences of participating in the formulation of e-learning policies at two universities in South Africa. Consultations with e-learning experts took place after the analysis of the policies and the interviews with policymakers at the universities involved. The e-learning experts were consulted at this stage to aid in the analysis of data and to make sense of the findings. The conversations with experts provided a means of validating the processes followed to formulate the e-learning policies at the universities. Further to consultations with e-learning experts, the researcher also had informal discussions with some academics at the three universities (their identities will not be revealed for ethical purposes), to broaden her understanding of the policies.

5.8.2 Presentations to experts

In the course of analysing policies, textual and discursive analysis was supported by referring to the original document and using raw data extracted from the policies. It has been established that the intrinsic nature of a case-based analysis offers a partial means to assess validity (Lee & Fielding, 2004). After having

discussed the procedures used to analyse the text, it is possible to weigh the validity of the analysis. A presentation was also made to a panel of experts in management positions at various HEIs at the 27th South African Institute of Management Sciences (SAIMS) Conference on the 31st of August 2015, to ensure that the results obtained from the analysis of the policies and the conclusions drawn were valid. The researcher also had informal discussions with key staff at University A which helped her to reflect on the analysis of the discourses in the policies.

5.9 Limitations of the study

The process of formulating the policy at University A started in 2009 and was finally approved in 2011. The intervening years between the policy process and this study were a limitation in that some of the stakeholders could not fully remember the details of the process. This limitation was also noted at University B and C. To mitigate against memory loss, the interviewer probed the policy actors' memories before data were collected, by having conversations with the stakeholders. At this point, the stakeholders were given copies of the policy for them to read and refresh their memories before the interviews.

5.10 Summary

The chapter discussed the methodological considerations for the study. In summary, the study followed a qualitative approach and a critical philosophical approach. A multiple case-study design was used to understand policy-making processes at the universities and to analyse the resultant policies on e-learning. The chapter also discussed the sampling procedure, data analysis and ethical considerations.

CHAPTER SIX

THE HIGHER EDUCATION CONTEXT AND DESCRIPTION OF CASES

6.0 Introduction

The aim of this chapter is to further an understanding of the location of the case studies within the broader context of the South African Higher Education (SAHE) sector. Firstly, the chapter begins by exploring the functions of the various statutory bodies of SAHE sector that may directly or indirectly affect policy making in the institutions. Secondly, the chapter distinguishes between the different types of Higher Education Institutions (HEIs).The aim is not to present these institutions as binary opposites, but rather to capture the inherent contextual peculiarities that may have directly or indirectly affected policy making. Thirdly, the chapter describes the three cases, the actors involved in policy making and the processes followed to formulate the policies. (Some detail of the institutions will be hidden for privacy and ethical reasons.)

6.1 SAHE sector

SAHE sector falls under the Department of Higher Education and Training (DHET), the main body responsible for Higher Education in South Africa. However, there are other statutory bodies or institutions with various responsibilities, all of which aim to improve the Higher Education (HE) system and report in one way or another to DHET, as presented in Table 6.1.

Table 6.1 Statutory bodies and institutions responsible for the Higher Education Sector in South Africa

The Council on Higher Eduction (CHE).	The Higher Education Quality Committee (HEQC)	The Higher Education South Africa (HESA)	The South African Qualifications Authority (SAQA
• Advises the minister on the state of higher education through scholarly engagement at various levels.	• conducts audits of universities against a range of institutional criteria and external peer review. • also governs the process of course accreditation with the help of the national Qualifications framework (SAQA). • It is a permanent commitee of CHE	• HESA is the leadership body that represents the 23 public higher education institutions. Led by the vice chancellors of the universities, • HESA acts to support and advance the Higher Education Sector in South Africa • Currently changed its name to Universities South Africa	• was established via SAQA Act NO. 58 0f 1995 • Under this act SAQA seeks to uphold the underlying regulations ensuring access quality and redress for all learners as stipulated in the National Qualifications Framework

As shown in Table 6.1, CHE is the main body responsible for advising the Minister of Education on the state of HE in South Africa. After 1994, the National Council on Higher Education (NCHE) went through an intense investigation into the HE system in South Africa. It recommended that there was need to have a single coordinated HE system as a means for assuring quality across the diverse HEIs, both public and private, through an external evaluation undertaken by the national quality assurance agency. NCHE recommended that such an agency be established under CHE. As a result of this recommendation, HEQC was established in 1995, existing as a permanent committee of CHE, as shown in Table 6.1.

HEQC was publicly launched by the Minister of Education in May 2001 with a mandate, defined in the Higher Education Act of 1997 as:

> to promote quality in higher education, to audit the quality assurance mechanisms of higher education institutions and accredit programmes of higher education.

NCHE (1996:107) argued that quality assurance is an important element used for internal governance of HEIs and to promote cooperative governance between the government and the HEI, in which the state steers the HE system through incentive and evaluation rather than through detailed regulation and legislation.

6.2 Institutional differentiation

One of the many undesirable legacies of apartheid is entrenched inequalities within the HE system. DHET (2013:170) argues that almost two decades after apartheid's collapse, the country's HE system is still characterised by two sets of institutions:

1. Historically Advantaged Institutions (HAIs) and
2. Historically Disadvantaged Institutions (HDIs)

A number of researchers have used this distinction in the literature (Odhav, 2009; Parker, 2010).

> This distinction describes the distinct split along racial and ethnic lines of universities as set out in the apartheid policy (1959), which created separate universities for the different African ethnic populations (Zulu, Tswana, Sotho, etc.) and for coloured and Indian populations (Odhav, 2009:33).

HAIs are divided into two groups due to their respective mediums of instruction in the era of apartheid:

1. Historically English institutions and
2. Historically Afrikaans institutions

Historically, English institutions were the larger and older liberal English institutions that were well endowed due to their urban location, their historical networks, their links to business, their alumni and their capacity for research. Second were the Afrikaans institutions that were a result of Afrikaner affirmative action. The Afrikaner institutions were much smaller, with the exception of the University of South Africa (UNISA) (Odhav, 2009).The Afrikaans institutions also enjoyed some links with their alumni and business.

Table 6.2 HAIs prior to 1994, adopted from Bunting (2002:40)

Medium of instruction	**HAI**
Afrikaans	University of the Orange Free State Potchefstroom University The University of Pretoria The Rand Afrikaans University The University of Stellenbosch Dual Medium University of Port Elizabeth
English	University of Cape Town University of Natal Rhodes University University of Witwatersrand

On the other hand, the majority of HDIs were established following the enactment of the extension of the University Education Act (no.45 of 1959) which established separate institutions of higher learning for the country's non-white communities (DHET, 2013). HDIs were mostly located in government-created ethnic homelands to make them credible by having their own institutions, governments and administration. However, these institutions were mostly limited to teaching as opposed to research and were not well

resourced, being mostly located in rural areas where they could not benefit financially from industry, owing to their location. They also mostly attracted students from disadvantaged backgrounds.

Table 6.3 HDIs prior to 1994, adopted from Bunting (2002:44)

	HDI
Controlled by state Dept. of Education	Medunsa University University of the North Vista University University of Zululand
Linked to the independent republics	University of Transkei North West University University of Venda University of Fort Hare
Coloureds and Indians	University of Western Cape University of Durban Westville

To date, DHET (2013:170) avers that there are seven universities in South Africa that are identified as HDIs, namely:

1) University of Fort Hare
2) University of Zululand
3) Walter Sisulu University
4) University of Western Cape
5) University of Venda
6) University of Limpopo
7) Mangosuthu University of Technology

The 'institutional landscape reforms' introduced by the government in 2005 resulted in the creation of traditional universities, comprehensive universities and Universities of Technology (UoTs), to distinguish between the various programmes offered. This mode of differentiation has been criticised for not being able to draw a line at what constitutes the transition from one institutional type to the next (Odhav, 2009). However, the 'institutional landscape reforms' resulted in some HAIs merging with HDIs.

6.3 University A case description

University A is a typical case of a university in South Africa that was formed as a result of a merger between two Technikons, an HDI and an HAI to form a University of Technology.

6.3.1 The e-learning policy

The e-learning policy at University A is one of the key documents on the use of ICTs in teaching and learning that was formulated in 2011 when HEQC was undertaking institutional audits at the institution. The institutional audit had revealed that staff members at the university were frustrated with the ICT infrastructure. There was also evidence that most academics at the time were not using the Learning Management System (LMS), Blackboard, preferring to use other forms of technologies available publicly. For this reason the e-learning policy was formulated to encourage academics to use e-learning technologies to promote a multi-modal approach to teaching and learning.

The policy document was approved on the 25th of May 2011 after a process of rigorous consultation and feedback from various university committees, involving different stakeholders, spanning a period of two years. A number of concerns were raised by various policy stakeholders at the university when this policy was circulated. All the concerns raised were documented in the Frequently Asked Questions section of the policy, together with the policymakers' responses to the questions and remarks. One concern was on the narrow conceptualisation of e-learning. Most academics and other staff felt that the policy spoke more about the LMS, with little or no regard for other electronic technologies that could be used to enhance teaching and learning. Other critics of the policy felt that the policy was written with the technology first in line, without consideration for the teaching or learning intentions and pedagogies. The development of this policy sparked a lot of tension between two centres of power, the Centre for Higher Education and Development (CHED) and the Centre for e-learning (CEL), both concerned with the use of technologies in teaching and learning.

6.3.2 The policy problem in context

The socio-political context of a policy can affect how a policy problem is identified and prioritised, the process of its resolution and the actual policies and programmes that result from that policy (Hardee et al, 2004). Figure 6.1 shows the context in which the problem was located at University A.

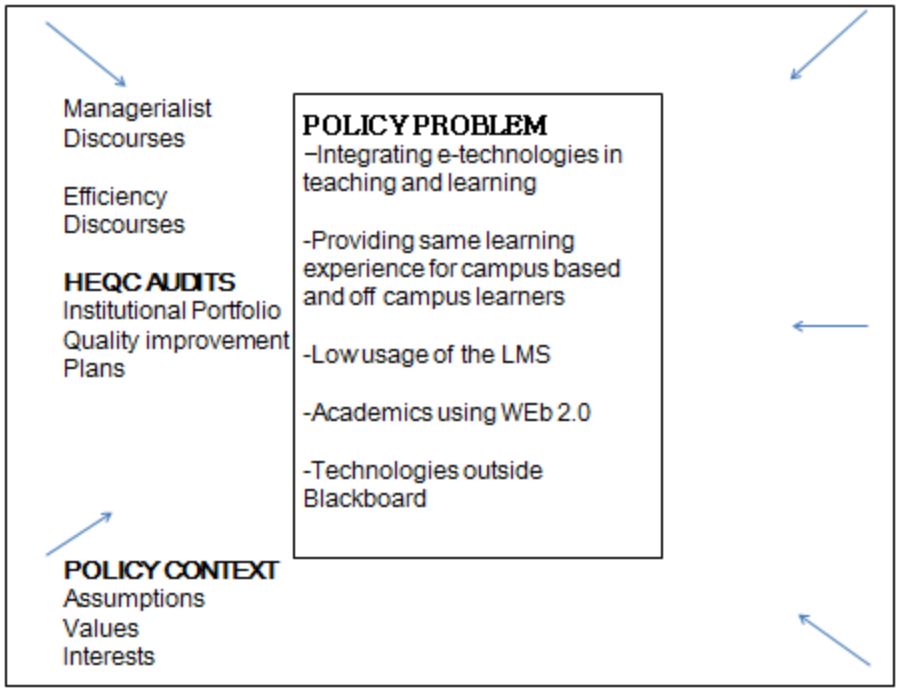


Figure 6.1 Policy problem in context

As illustrated in Figure 6.1, the policy was meant to address the problem of integrating technologies in teaching. The LMS was not being used by academics who preferred to use other technologies. The low usage of the LMS was identified by the institutional audits done by HEQC. As illustrated in Figure 6.1, the policy context often provides the 'lens' through which a policy network identifies the policy problem.

6.3.3 Policy actors

Table 6.2 describes the roles played by the different departments that were represented in the e-learning policy-making process.

Table 6.2. Brief description of departments represented in e-learning policy making

Stakeholder Group	Brief description
1. Centre for e-learning (CEL)	Responsible for managing the LMS, training staff and learners on LMS use, managing open labs.
2. Centre for Higher Education Development (CHED)	Deals with pedagogy in teaching and learning. CHED also has a multi-media production unit that became a little more academic but often finds itself in competition with the e-learning unit.
3. Faculty of Education	Training of in-service and pre-service teachers
4. Information Communication Technologies Services (ICTS)	Deals with IT infrastructure support, deals with all maintenance and services on the end user computing side, e.g., laptops and PCs and such types of accessories across all the campuses. Responsible also for the network infrastructure so all the technologies and support thereof.
5. Library	Provides learning resources
6. Marketing	Responsible for the overall marketing of the university
7. Quality Management Office (QMO)	Responsible for the quality assurance of programme offerings at the university

Table 6.3 describes the stakeholders who were involved in the process of formulating the e-learning policy and the places or stakeholder groups they represent in the university.

Table 6.3. Brief description of stakeholders involved in the formulation of an institutional policy on e-learning at University A

Stakeholder group	**Stakeholder position**	**Brief description**
1.Centre for E-learning (CEL)	Director, e-learning Instructional designer	Responsible for overseeing the use of the integrated learner management system. Duties involve technical support on the usage of the Blackboard platform, training staff and learners on how to use the LMS.
2. Centre for Higher Education Development (CHED)	Educational technologist Director, CHED Professor, CHED	Teaching, research and training of other staff members on the use of ICTs in pedagogy, particularly social media. Oversees the operations of CHED. Also serves in the Teaching and Learning Committee at Senate. His role includes staff development, teaching staff, planning workshops, and seminar series on the use of technologies in teaching and learning, running projects, departmental training and research on the use of technologies in teaching. All geared towards understanding how the use of technologies can enhance teaching and learning.
3. Faculty of Education	Teaching and Learning coordinator Teaching and Learning coordinator	Teaching of undergraduate students in the Department of Education. Teaching of undergraduate students in the Department of Education.

4. Informatics	Dean Informatics and Design	Serves in the Dean's Forum. A member of the ICT committee at Senate. Also a member of the teaching staff.
5.Information Communication Technology Services (ICTS)	Director, CTS	Responsible for areas of centralised policy on ICTs. Oversees and manages the operations of CTS.
6. Library	Deputy Librarian Information Literacy Librarian	Managerial roles of the library Involved in teaching information literacy to staff. A member of the university library consortium. Was interested in the policy issue because they have a course where they have partnered with a university in America to create an open-access online course and students are registering for that course which they would offer online.
7. Marketing and communication	Webmaster Web Editor	Responsible for managing the university website and 'newsflash', a virtual discussion list where policies are sent and circulated for discussion to all members of staff. Responsible for circulating the policy to the larger university stakeholders via an online list service.
8. Quality Management Office (QMO)	Director, QMO	Holds responsibility for policy making at the university.

6.3.4 Processes undertaken to formulate the policy

There is a systematic process followed at the university in formulating policies. There is a policy on policy making, which was developed by the QMO. This policy served as a guiding template for developing the e-learning policy. According to the policy, the university delegates policy making to a policy sponsor who could be a senior manager who has responsibility for developing university policy, who mandates a formal or informal group to develop and introduce the new policy. This group of stakeholders is identified as the Policy Development Group. The director of CEL was the policy delegate responsible for developing the policy in consultation with other stakeholders, identified in Table 6.3. The Deputy Vice Chancellor Academic, a member of executive management, acted as the policy sponsor, mandating the director of QMO to work with the director of CEL to develop the policy. This was because the QMO had been tasked with the responsibility of overseeing policy making at the university, following the institutional audits by HEQC. Figure 6.2 illustrates the process of formulating the e-learning policy.

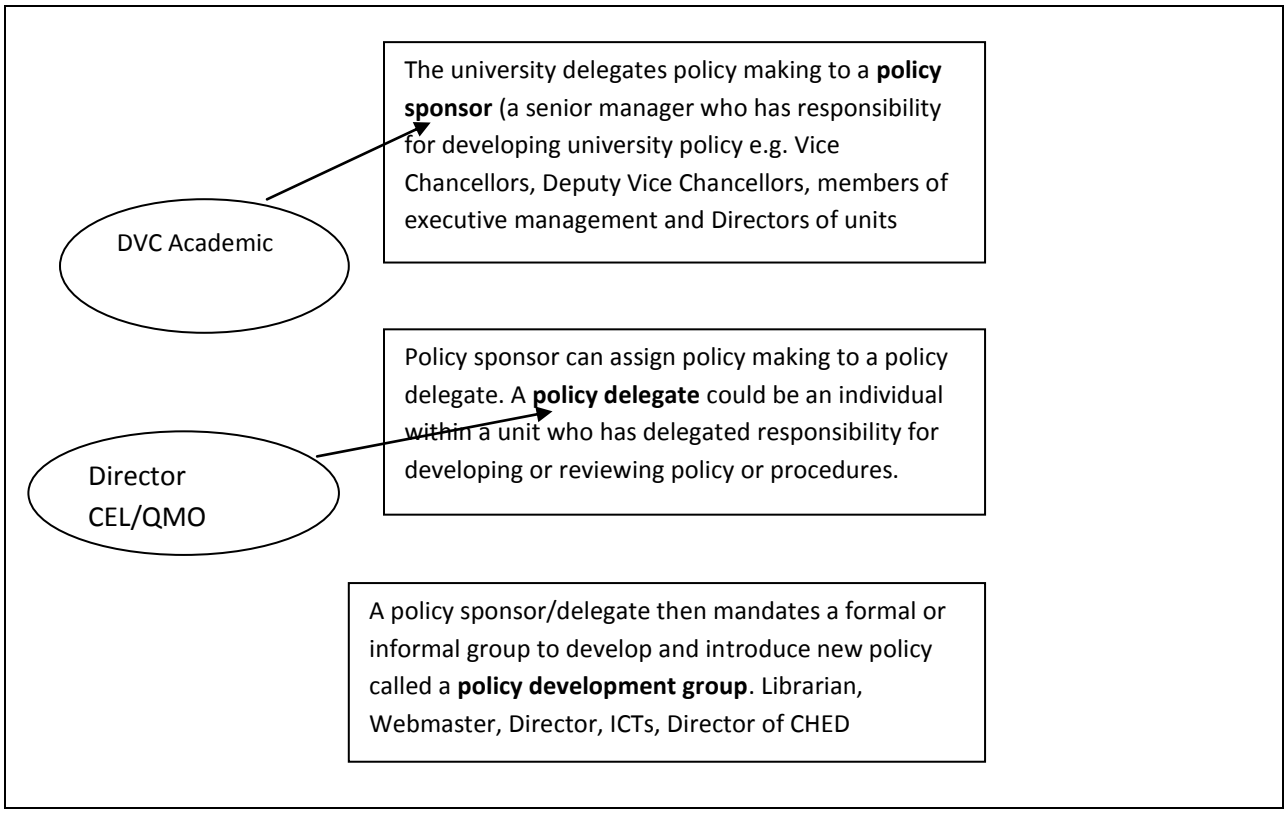


Figure 6.2 The e-learning policy-making process at University A

The Senate Committees are the focal points where discussions on policy are held. The e-learning policy passed through the ICT Committee and the Teaching and Learning Committee at Senate. The Director of QMO, who had instituted the process for policy making at the university, explained that she specifically made Senate the focal point for policy discussions because of the fragmentation that was evident in decision-making processes at University A as a result of the institutional mergers. The time lag that it took for policies to be approved was long. Senate was deliberately made to be at the centre of decision making by the QMO to allow stakeholders to decide on issues collectively, as it was observed that some people were not even talking to each other as a result of the institutional mergers.

> *the institutions and because people operate very differently here is that they weren't prepared to even talk to each other so all policies regardless of what policy, went to senate. . . . For me that When I developed the policy for policy formulation . . . what we found when we did the analysis of was where most of the gatekeeping happens because a lot of policy issues were being made*

which were not legal decisions. So that was my gateway through Senate (Director, Quality Management).

6.4 University B case description

University B is an HDI. The university arose out of a struggle for freedom and liberty against discrimination, oppression and disadvantage. Owing to its location, the university often finds it difficult to forge partnerships with industry and business communities.

6.4.1 The e-learning strategy

The e-learning strategy was aimed at laying the foundation for using technology to improve the quality of teaching and learning. The idea to formulate an institutional e-learning strategy came from Senate in 2003. The idea was triggered by the Director of Teaching and Learning Technologies Unit (TLTU) who requested the Senate Academic Planning Committee (SAPC) at the university to review all computer literacy interventions. The SAPC instead indicated that it did not want to see a review but rather a strategy that had to be developed within the confines of an e-learning strategy (University B e-learning strategy, 2004). The SAPC, according to University B e-learning strategy (2004:9), suggested that:

> . . . a narrow focus on computer literacy in isolation from other aspects of e-learning would lead to a loss of coherence in strategic thinking.

The SAPC suggested that a working group be formed to formulate the strategy. The development of the strategy was an incremental process. The university already had an Integrated Information Strategy, which was reviewed to come up with an e-learning strategy. One of the key results of having this strategy was that an e-learning division was created to drive the implementation of the strategy.

6.4.2 The policy problem in context

The problem to be addressed by an e-learning strategy at University B can be understood in the context of a number of e-learning projects championed by one Science professor who led the task group that developed the e-learning strategy. A respondent from the Information Systems department provided a background on the work done by this professor who championed e-learning and created the context in which a strategy was formulated:

. . . We had a strong internal movement to discuss e-learning and there was an e-learning round table established . . . I became aware of one Science professor and the intention to seek significant international research funding that allowed him to open up six projects [on integrating ICTs into teaching] . . . and the story I heard because this is the 'seed' in which most of the activities originated. He established a lab with 10 to 12 computers, gave his students a long lecture and told them to get into the lab and do all their coursework and research using the computers. He was personally drawn into how to build websites, to install material in the web server and he became proficient as an individual in coding and scripting website functionality and over the next two or three years he developed the LMS. . . . He then initiated a number of ideas one of which involved eight universities in Africa co-operating to move forward with the LMS as an open source project (Respondent, Information Systems).

One of the six projects initiated was on how to improve students' information literacy in the digital world. In this context, an information strategy was developed, which was later reviewed into an integrated information strategy and, later, an e-learning strategy. At the time that the e-learning strategy was developed, the Vice Chancellor established the notion of an 'engaged university'. He had the idea of creating a university that sought to use the dynamics of tensions arising from apartheid inequalities to drive intellectual work. Consonant with the views of an 'engaged university', the Science professor believed that digital engagement of both learners and staff should form an important aspect of the university's engagement, In line with these views, he believed that Free Open Educational Resources (FOER) could provide a means for the university to achieve its goals of social justice and freedom through digital engagement.

6.4.3 E-learning strategy task team

Table 6.3 gives a brief description of each of the individual actors who participated in the formulation of the e-learning strategy.

Table 6.3. Brief description of stakeholders involved in the formulation of an institutional strategy on e-learning at [University B]

Stakeholder Group	Stakeholder Position	Brief Description
1. Computer Science Department	Professor	Head of the Computer Science Department. Involved in teaching, research and community engagement.
2. Economic and Management Sciences Faculty (EMS)	Dean	Head of the Economic and Management Sciences Faculty. The Information Systems Department fell under this faculty.

3. Education Faculty	Professor	Involved in research teaching and community engagement.
4. Information and Communication Services (ICS)	Executive Director	Responsible for the IT portfolio of the university, including infrastructure, systems and services, e-learning and seeking new opportunities for academic IT.
5. ICS-e-learning unit	Director	ICS e-learning unit – implements digital academic literacy interventions to support both basic computer and information literacy across the institution.
6. Information Systems	Head of Department (HOD)	Head of the Information Systems Department. Reports to the Dean of EMS Faculty.
7. Lifelong Learning Division	Director	Is the founding director of the Division for Lifelong Learning. Previously the founding director of the Centre for Adult and Continuing Education (CACE).
8. Library	Librarian	Responsible for managing the library.

6.4.4 Policy process

The process was driven by ICS led by the Executive Director, who was the e-learning champion at the university. An e-learning task group was formed, as illustrated in Table 6.3. The strategy had to be approved at two levels of university governance, namely: the (i) Executive Committee at Senate and (ii) Council. Figure 6.3 illustrates the sub-committees of Senate.

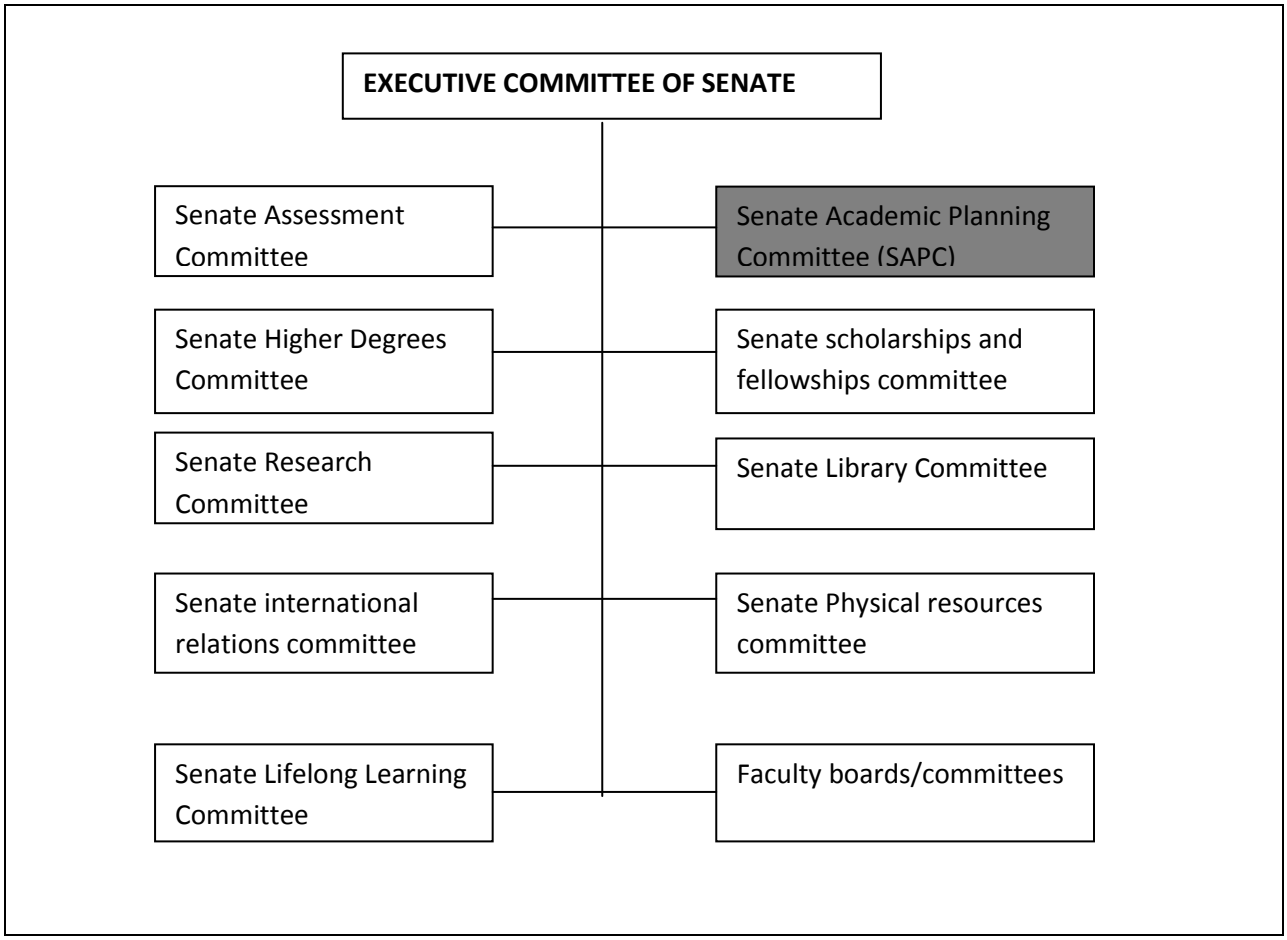


Fig 6.3 [University B] Senate Committees

Figure 6.4 shows the composition of the Council at University B.

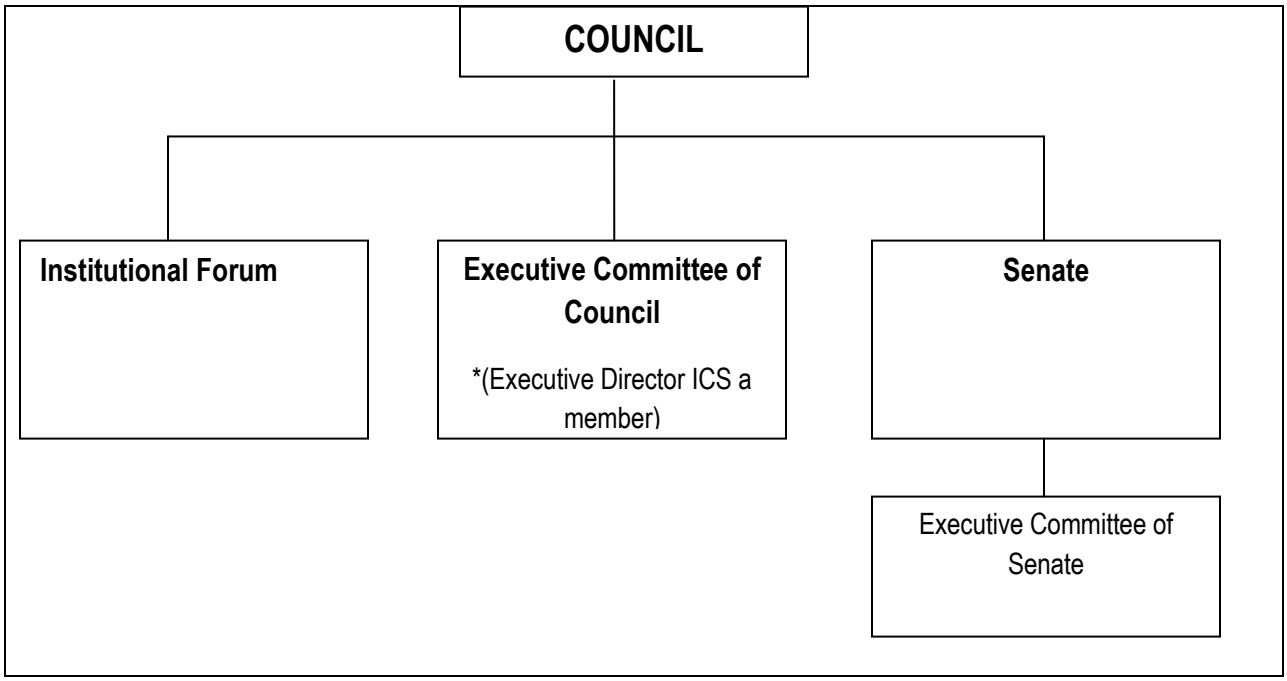


Figure 6.4 Composition of the council at University B

The Executive Director Information and Communication Services (ICS), who was the key figure in the formulation of the strategy and the introduction of an in-house LMS, was also a member of the Executive Committee of Council at the time, occupying a senior management position in the decision-making body. The Director ICS also had the full support and approval from the Vice Chancellor who was also a key member of the Executive Management Committee consisting of the Vice Chancellor, two deputy Vice Chancellors, executive directors of finance, human resources, ICS, institutional planner and the registrar. After the strategy had been approved by the Executive Management Committee, the document was placed on the university website for all stakeholders in the university community to comment on. Few comments were received from this platform.

6.5 University C case description

University C is a historically advantaged university.

6.5.1 The Educational Technologies (Ed-Tech) policy

The Ed-Tech policy at University C was developed by the Multimedia Educational Technologies Group (MEd-Tech Group) operating under the Centre for Higher Education Development (CHED). The MEd-Tech Group was established in 1997 as a multi-disciplinary research development group that would transform

the delivery of teaching and learning through educational technology. The MEd-Tech Group had been running under CHED for 5 or 6 years since 1997, following the funds received from an international grant. Towards the end of the duration of the grant, the MEd-Tech Group proposed a need to establish a Centre for Educational Technologies (CET) that could work independently from the external funders and be part of the institutional structure. In 2004 the absence of a policy was seen as a stumbling block in the establishment of CET. CET was aimed at harnessing the potential of interactive computer-based technologies and approaches to support effective learning and teaching (University C Report to Council, 2004). A report to council prepared for the transformation of [University C] (2004:37) reports that

> 2003 saw the university formally adopt an educational technology policy (developed by the MEd-Tech Group Director) in close consultation with major stakeholders at the university.

According to the report, the policy would, "create an enabling environment for the work of the new centre for educational technology", which would carry over the work of enabling the university to harness the potential of educational technologies in teaching and learning. One professor, who was part of the MEd-Tech Group, commented that "The policy was to precede the establishment of this new centre" (*P*rofessor, Education).

6.5.2 The policy problem in context

For a number of reasons, University C decided to take the use of educational technologies seriously. The Director, MEd-Tech Group stated in an internal report on educational technology that the university was taking educational technologies seriously at the time for the following reasons:

- Because we are promising our students a quality world-class educational experience
- Because graduates require technology-related competencies
- Because everyone else is doing it
- Because of the technology itself
- Because we aim to be residential (contact-based) and flexible
- Because ICTs are a central part of the debates about knowledge production, curriculum, teaching and learning in higher education

Looking at the institutional context at the time, exploring the possibilities of educational technologies was linked to ICTs and research policies and infrastructure, ICTs systems and policies for administration and management, institutional culture, institutional vision and mission.The Director, MEd-Tech Group stated that "an institutional educational technology framework is needed to support the use of technologies in teaching at the university". The policy was to pave the way for the establishment of a new centre for educational technologies which would carry out the work.

6.5.3 Policy actors

University C followed a multi-stakeholder consultative process in developing its institutional policy on educational technologies. The drafting of the policy was the work of three individuals, the main driver being the Director, MEd-Tech Group, working in close consultation with two other professors, one from the Health Sciences Department and another from the Centre for Occupational and Environmental Health (COEHR), as shown in Table 6.4.

Table 6.4 Brief description of stakeholders in the formulation of an educational technologies policy at University C

Stakeholder group	Stakeholder position	Brief description
1. Centre for Occupational and Environmental Health Research (COEHR)	Professor	-Teaching, research and service provision that integrates laboratory, clinical experiments. -Epidemiological and policy skills in relation to occupational and environmental health problems. - Community engagement in the field of Occupational and Environmental Health.
2. Health Sciences	Professor, also Transformation Officer	Responsible for devising the transformation programme in the Faculty.
3. MEd-Tech Group	Director	Founding director of the Med-Tech Group, a group on educational technologies that was established in 2004 to foster the use of technologies in teaching and learning at the university.

The analysis of primary documents used by the key stakeholders during the process shows that the process followed at University C involved stakeholder consultations on the role of ICTs in teaching and

learning. Twenty-one interviews were conducted by some members of the MEd-Tech Group with different stakeholders from the university (See Appendix 17), to explore their opinions about the role of technologies for teaching and learning at the university .These people were selected for interviewing because they were believed to have something useful, informed and/or interesting to contribute to a conversation about the role of the new Centre (Draft Report on MEd-Tech Group Consultations, 2003). According to the Draft Report on MEd-Tech Group Consultations (2003:1) these stakeholders were:

- People with whom MEd-Tech Group had a relationship with as they had worked on existing MEd-Tech Group projects
- Decision-makers with an interest in educational technology
- People involved in academic development programmes and
- People known to be doing interesting things with educational technology

Table 6.5 provides a list of these stakeholders, the disciplines they represented and why they were consulted.

Table 6.5 MEd-Tech Group consultations, adopted from ([University C] Draft Report on MEd-Tech Group Consultations (2003)

Position	**Discipline**	**Reason interviewed**
Lecturer	Information systems	Uses WebCT, involved in MEd-Tech Group project
Dean of Humanities	Sociology	Dean - a view of priorities in Humanities
Lecturer	Economics	Involved in MEd-Tech Group project
Technical staff	ICTS	Educational Technologies service provider
Lecturer	Business Science	Uses some interactive tutorials
Lecturer	Film and media studies	Involved in MEd-Tech Group project
Lecturer	Educational Psychology	Involved in MEd-Tech Group project

Lecturer	Epidemiology, Child Health	Uses WebCT with a dispersed student group
Acting Director	Engineering	Both into Academic Development Programme and Engineering Education
Technical staff	ICTS	ET service provider
Head: Centre for Film and Media Studies	English and Film and Media Studies	Interested in use of ET
Lecturer	Marine biology	Interested in use of ET
Lecturer	Architecture, African Studies	Involved in MEd-Tech Group project
Lecturer	Language development	Involved in MEd-Tech Group project
Lecturer	Biomedical engineering	Uses technology in Problem-based Learning in Health Sciences
Academic Programme Coordinator	Commerce	Convenes commerce educators' group
Lecturer	Economics	Involved in MEd-Tech Group project
Act. Dean of CHED	CHED	CHED perspective
Lecturer	English and Media Studies	Involved in MEd-Tech Group project
Language Development Group researcher, Academic Development Programme (ADP) and lecturer	Applied language studies	Language perspective
Lecturer	Oceanography	Uses Web CT

6.5.4 Policy process

The process of developing the Ed-Tech policy followed a series of conversations or meetings over a period of one year (University C Draft Discussion Document, 2003). The Ed-Tech policy was developed against the backdrop of heightened interest from academics across the institution to integrate technologies into teaching. The drafting of the policy was done by the Director, MED-Tech group and two other professors, as illustrated in Table 6.4. A stakeholder consultation process was conducted to gather opinions on the role of ICTs in teaching and learning at the university.

6.6 Summary

This chapter located the case studies within the broader SAHE context. The various institutions governing the sector were discussed. Exploring the socio-political context of the case studies led to a deeper understanding of the cases and the various statutory institutions that may directly or indirectly influence policy making in the institutions. This chapter also drew attention to the distinctions that have been used to identify different types of universities in South Africa. The aim was to engage with the complex tensions inherent in the institutional contexts of the three cases.

CHAPTER 7

E-LEARNING POLICY-MAKING PROCESSES FOLLOWED BY THE UNIVERSITIES

7.0 Introduction

This chapter presents findings on a multiple case analysis of e-learning policy-making processes at the three universities described in Chapter 6. The primary sources of data used in this chapter were interviews with policymakers and documents. Findings on the policy-making processes at the three universities were distilled into the Hardee et.al (2004:9) framework of the policy circle which captured key elements of the policy-making process following the 6Ps of policy making. However, in this analysis only 3 Ps were used: P1-Problem, P2-Processes and P3-People. By using this framework as a heuristic to organise the data, the researcher's aim was to unfold the story behind the processes followed to develop the e-learning policies at the three cases presented, whilst acknowledging the messiness of policy making and illuminating the role and influence of stakeholders involved in the process. Tables 6.3, 6.4 and 6.5 provided an overview of stakeholders involved in the policy-making processes at the three universities.

7.1 Problem identification

The first stage in the policy-making process is identifying the problem to be addressed (Recall Chapter 2). E-learning policy-making processes in HEIs in South Africa take place within greatly varied institutional settings, as observed in Chapter 6. In all the cases there was clarity on what the policy should do; however, different factors in the respective cases made the universities consider formulating institutional policies on e-learning. This section explores how the policy problem came to be recognised as an issue that required policy intervention at the three universities, paying particular attention to the discourses, values, ideological assumptions and views which framed the policy context in which the policy problem was located.

Table 7.1 shows the various internal and external factors that contributed to e-learning being considered on the institutional policy-making agendas and which allowed the ideas to grow at the three universities.

Table 7.1 ***Internal and external factors that brought e-learning onto the agenda of institutional policy making at the three universities***

Internal factors	**University A**	**University B**	**University C**
1. Existing initiatives on the ground to integrate technologies in teaching by some interested academics who had already started experimenting with using technologies to teach, in the absence of policies	✓	✓	✓
2.The presence of key actors who served as e-learning champions		✓	
3.A strong body of expertise in the area of e-learning			✓
External factors			
1.Recommendation by the national quality assurance body	✓		
2.International donor funding for e-learning projects		✓	✓
3.The desire by the institutions to be modern and to keep up with what other institutions were doing	✓	✓	✓

A thread that runs through the three universities is that, prior to formulating policies, there was already some groundwork being done at the institutions in terms of using technologies to teach. In all cases, e-learning policies would provide strategic direction and coordinate the diverse efforts already evident on the ground. The Director, MEd-Tech at University C commented in an internal report that what was needed to support the use of educational technologies at the university at the time was ". . . acknowledgement and support for existing work (in all categories on the ground)" (MEd-Tech, Director). Similarly, at University B, there were already some initiatives to use technology. The E-learning Strategy at University B (2004:45) revealed this:

> *It is clear that there are significant existing computer literacy initiatives at the university and that they are having substantial positive impact on our students. The interim measures must ensure that these initiatives are not placed into jeopardy*.

The policies at the three universities served as institutional frameworks to guide existing work and to encourage proposed new ways of teaching and learning with technologies. The two experts in e-learning observed that when they participated in formulating e-learning policies for two universities in South Africa, there was a desire by most universities to be modern and to keep up with what other institutions were doing. They insinuated that the desire to become modern was driven by competition among the universities to attract more learners, linking these observations to the massification of HEIs. The next section looks at

the factors which brought e-learning onto the agenda of institutional policy making at University A and allowed the ideas to develop.

7.1.1 Identification of the policy problem at University A

The identification of the policy problem in the e-learning policy at University A was shaped by two main factors:

i.) Preparations for an audit by HEQC and a

ii.) Recommendation made by the national quality assurance body after the audits

Firstly, the use of electronic technologies for teaching was identified as a problem that needed an institutional response, following preparations for an audit by HEQC. The e-learning policy was part of the policies which the institution had to develop as required by HEQC during the audit. In HEIs in South Africa, "the basis of all quality management . . . is always the policy processes and systems" (Director, Quality Management Office (QMO). Policy actors then met after the audits to map out an institutional quality improvement plan where the policy had been reviewed. The policy makers were largely influenced by HEQC in defining the policy problem. Prior to the audits, HEQC worked hand in hand with the Quality Management Office at the institution, a department mandated by the university to coordinate policy-making processes. The primary stakeholders who developed the e-learning policy relied on HEQC's audit reports for ideas and cognitive frameworks that informed the process.

Secondly, after the audit, policymakers reviewed the policy to consider the recommendations made by the national quality assurance body. Policymakers sought to address issues raised by HEQC, inter alia the low usage of the LMS:

> *When we did the institutional audit, it started emerging that a lot of the academics were very frustrated by the current IT environment. It wasn't supporting what they wanted. At the same time, academics didn't want to use the LMS and instead were doing their own thing. They were setting up blogs and Twitters and Google Docs and communicating directly with students outside the institutional environment* (Director, QMO).

It can be said, therefore, that the institutional audit by HEQC provided the context from which the policy problem was identified. It provided the lens from which the policy problem came to be viewed and the process of its resolution. As part of the institutional strategic improvement plan, the Deputy Vice Chancellor

Academic set out a strategic goal for academics that all their courses should have an online presence on the LMS:

> *Initiating all of this was the Dean's Forum and the strategic goals that the Dean of Academic set for the faculties. One of these goals was the presence of lectures on the LMS and that has continually increased and that also drives the policy and the policy formation. The Dean's Forum runs under the DVC Academic and the Directors of all strategic units* (Director, QMO).

At University A, policy actors were concerned that the policy problem was conflated with an LMS problem, resulting in the neglect of other technologies falling outside the scope of LMS. By comparison, University B and C cases formulated their policies in 2004 and 2003 respectively, eight years earlier than University A. During this time, institutions were still muddling through a new policy landscape, as fewer institutions had policies in this area. Following the publication of the White Paper on e-education (DoE, 2004), most institutions began to take stock of where they were in terms of integrating technologies in teaching.

7.1.2 Identification of the policy problem at University B

At university B, the identification of the problem was an incremental response to the need to take stock of computer literacy work that was being done at the university at the time. A notable number of key actors supported the idea of e-learning. The Director for the TLTU requested the Senate Academic Planning Committee to review all computer literacy programs at the university. The committee suggested that, instead, the institution needed to think in terms of an e-learning strategy (Recall section 6.4.1).The suggestion by the committee was supported by the Executive Director, ICS and the Vice Chancellor, "and it was his commitment to the ideal which probably was responsible for bringing e-learning into the mainstream of university teaching policy" (Dean, EMS Faculty).

> *The key proponent of e-learning at the time was the Executive Director, ICS, who was particularly interested in open-source approaches (even though that initiative did not ultimately amount to that much). The idea of e-learning was also endorsed by the then Vice Chancellor* (Dean, EMS Faculty).

At University B, the presence of key players who served as e-learning champions played a key role in highlighting that e-learning be considered as needing a strategic institutional policy response. One respondent commented about the role played by one actor who, when serving as a Science professor, had championed the idea of e-learning by developing an LMS that he promoted for use as a Free Open Source

Educational Resource (FOER). The e-learning champion was supported by the Vice Chancellor who saw the idea of engagement as a key issue that needed a policy response. "Digital engagement was seen as a means to achieve democracy, freedom and curb social exclusion" (Executive Director, ICS). The actors at University B were more supportive of the proposed new policy than at University A. Most actors who developed the strategy at University B had previously gathered several times to discuss e-learning at the e-learning roundtable meetings that were led by the champion.

7.1.3 Identification of the policy problem at University C

University C was largely influenced to develop an Ed-Tech policy by the presence of a strong body of expertise in the area of e-learning research and praxis. The university saw the use of technologies in teaching as deserving an institutional policy response, because the MEd-Tech Group had been doing a lot of work to promote the integration of technologies in teaching. However, because the MEd-Tech Group had been externally funded by an international grant, balancing the needs of the donors and the university's strategic direction was challenging. In support of this argument, a Draft discussion document for the proposed new centre for educational technologies (2003:5) argued that:

> *As an entirely externally funded project, MEd-Tech has had to prioritize the needs of its funders, and – while establishing a track record in applied research, and gaining important project experience – has been constrained in its ability to align its activities fully with the University's strategic direction.*

This expertise, coupled with some other work by various stakeholders at the university and the termination of external funding, led the institution to rethink the need to establish an internal institutional centre to drive the work. Comparatively, at University B the role played by international donor organisations in funding e-learning projects was also significant. It is recognised that most institutions were operating under financial strain and lacked the resources for e-learning. According to the Integrated Information Strategy (2002:17), "[University B's] strategy was to partner with the private sector, international bodies and other tertiary institutions and to seek donor funds at university, faculty and individual levels to support e-learning".

The findings also show that pressure to remain competitive and the desire to become modern amongst the institutions played a role in identifying e-learning as an area that deserved to be addressed through institutional policy. At University C there was a dominant line of thinking that an institutional policy was needed simply because everyone else was doing it. In its Draft Framing Document (2003:1), University C

argued that, “Pressure in the form of competition and growth in this area from other South African and overseas institutions” had led them to establish a centre for educational technologies.

7.2 The framing of e-learning policy issues

All actors at the three universities saw the need to have an e-learning policy; however, the different stakeholder groups saw the problem from their own perspective and values. Findings showed that e-learning policymakers at the three institutions thought differently about the policy problem. The data showed that e-learning policy discussions at the three cases were framed according to six policy frames, as illustrated in Table 7.2.

Table 7.2 Six e-learning policy frames used by the three universities

Policy Frames	A	B	C
1. Learning Management System (LMS)	✓		
2. Management	✓		
3. Part of pedagogical policy or teaching and learning policy	✓		
4. Free Open Source Educational Resources (FOER)		✓	
5. Comprehensive Learning Technologies	✓		✓
6. Transformation		✓	✓

Policy frames used to deliberate on e-learning policy problems were mostly ‘issues-’ and ‘values-’driven. At university A, the ideas that framed the interaction were mostly focused on solving particular issues in e-learning such as using the LMS or Social Media. At University B, policymakers spent a considerable amount of time discussing the feasibility of using FOER. In comparison, discussions on developing an e-learning policy at University C were mostly values-driven and informed by a comprehensive learning technologies lens. This framing was based on what actors valued most in e-learning. They agreed on the need to take a cross-faculty approach to integrating technologies in teaching, bearing in mind that the curriculum varied across the faculties and approaches to technology would differ. The ways in which e-learning policy issues were framed either promoted or hindered a discussion that created a common understanding of the policy problem. In turn, this promoted or hindered a collective effort by stakeholders to address a policy issue.

7.2.1 Framing e-learning policy issues at University A

Table 7.3 A description of e-learning policy frames used at University A

LEARNING MANAGEMENT SYSTEM (LMS)	MANAGEMENT	COMPREHENSIVE LEARNING TECHNOLOGIES	PART OF PEDAGOGICAL POLICY
1.E-learning is using the LMS or integrated platform to teach 2.There is need to manage learners in an integrated platform 3.Promote quality learning through LMS	1.An e-learning policy seen as a management tool 2.Used for control purposes 3.Policy will force academics to use ICTs in teaching and learning	1.Frame e-learning comprehensively 2.E-learning encompasses all electronic technologies 3.Promote creativity and autonomy 4.Promote quality learning irrespective of the technology used	1.Pedagogy should drive the technology 2.No need for e-learning policy 3.Incorporate e-learning policy into the teaching and learning policy 4.Why separate the technology from teaching

7.2.1.1 The LMS policy frame

The LMS policy frame was so that the policy would ensure the provision of a suitable technological infrastructure in the form of an LMS. Policymakers focused on the provision of the platform as a way of improving the quality of teaching at the university. There was a strong emphasis on feeding the LMS with content and a minimum requirements policy clause that stated the kind of documents and applications that needed to be present on the LMS for each course. The way the issue was framed raised conflict, as it failed to accommodate the emergence of other technological tools outside the jurisdiction of the LMS.

After circulating the draft policy to the broader university community and to members of the policy development group, a major concern that emerged was why the policy spoke primarily to the use of technology connected to the LMS, excluding other technologies. In responding to these concerns, the Frequently Asked Questions (FAQ) section of the policy had this to say:

> **Question:** The policy speaks primarily to the use of technology connected to the LMS. What about other technologies?
>
> **Answer:** The LMS is a centralised suite of technologies for teaching and learning and thus needs standard procedures and practices. Programme-or subject-specific technologies form part of the offering department management and control, including budgeting processes. Wherever there is need to apply this Institution widely, it will then be covered under this policy,

The implication of the answer given was that the policy would only cover those technologies falling under the jurisdiction of the LMS. This resulted in a prescriptive policy that failed to frame issues

comprehensively; it excluded other technologies that lecturers were using that fell outside the LMS. The key actors felt that academics needed to be persuaded to use the LMS to improve on the quality of their teaching and method of delivery of courses. An e-learning policy, as envisaged by the key actors, was a policy that would ensure that all courses taught were represented in the LMS. The strategic goal of an e-learning policy, as framed by the policy sponsor (Dean Academic), was to ensure that all staff members established a Minimum Online Presence (MOP) for all their courses in the LMS. As a residential university, the Director e-learning noted that the kind of philosophy he envisaged by using the LMS was that of the flipped classroom.

> *When we flip the Victorian system . . . the Victorian system is whereby students sit in rows in class where the facilitator sits in front and says shut up I am talking. Anything that basically flips that concept can be seen as a flipped classroom.*

7.2.1.2 Management policy frame

The management policy frame saw the e-learning policy as a management tool that would guide and support management decision making in the area of using technologies to teach and learn. One respondent commented that ". . . most big organisations need to be managed using policies", implying that this was the thinking behind having the policy. For management, it was important to push for the use of the LMS, probably because huge financial spending had been made to acquire the system. There were dominant views that the policy was necessary to demonstrate management support to acquire the necessary tools to support e-learning.

7.2.1.3 Comprehensive learning technology frame

The policymakers debated on the definition of e-learning and what the policy should include and exclude. There was the contestation on whether the policy should include the usage of social media platforms which were not part of the LMS such as 'WeChat', 'Mxit', 'WhatsApp'. The proponents of social media argued:

> *We can't turn a blind eye to things like social networks. What we need to do is ask, can education use these things? [cellphones] The answer is yes, it can. But the issue is they must not cloud the issue and make technology the demand and not the requirement. . . . My feeling on the matter is any HEI that . . . ignores the fact that cell-phones and social media are around [is] running into major problems.*

Another argument raised was that the policy should consider the use of electronic technologies in a comprehensive way. The proponents of social media were fighting for more inclusion.

> *The e-learning policy should talk about the use of technology as a whole, comprehensively, not just the LMS. But because of the messiness or the negativity around the use of social media at this university the policy only looks at the LMS (*Educational Technologist, CHED).

The policy actors from CHED took up the criticism on the narrow conceptualisation of e-learning in the policy. They felt that the policy had neglected their views. They formed a working group to draft a social media policy or guidelines for the institution. The guidelines were discussed at various university committees but were never approved. Members of the social media working group believed that the institution ". . . was not ready to engage in a discussion that considered the role of social media technologies in teaching", hence the social media guidelines had been blocked somewhere in the decision making:

> *We developed them [social media guidelines], developed a document and then it went into the usual consultation but somewhere it got stuck . . .. It's not the right approach to ignore them, I mean . . . people are using them. Ignoring them won't make them go away; they will keep on being used more and more. (*Educational Technologist, CHED)

On the one hand, the proponents of the social media policy frame argued for the inclusion of Web 2.0 technologies and other technologies for learning not supported by the LMS. In contrast, the institution took a cautious approach of excluding technologies outside the LMS platform which, from a quality management perspective, were perceived as high risk technologies, as observed:

> *From a quality perspective that becomes a high risk area for the institution. The principle we have adopted at [University A] is to encourage creativity but at the same time to minimise risk (*Director, QMO).

7.2.1.4 Part of pedagogical policy frame

Some stakeholders felt there was no need to have an e-learning policy, but that the current policy should be incorporated into the teaching and learning policy, as there was no need to separate the teaching and learning part from the technology. Such views came from stakeholders who argued that the educational objectives should guide the selection of technology by academics, regardless of whether the technology fell within the confines of a LMS or Social Media. This group believed that the framing of the policy problem was techno-centric and failed to regard the educational component of e-learning as observed:

> *I would have said it should have a strong educational component. The LMS is only one educational technology; there's all a range of them, so this policy deals with only the LMS* (Educational Technologist, CHED).

Those who used the pedagogical frame to understand e-learning policy believed that the policy would have little impact on the teaching activities:

> *The e-learning policy is very superficial in my opinion. It's really about what they call every course has a minimum presence or supporting minimum presence. A lot of people just dump things there, like learner guides, subject guides, or you know the sort of outline of the subject and assessment tasks* (Director, CHED).

Those adhering to the pedagogical frame were also concerned that the minimum online presence requirement set out in the policy had resulted in academics dumping content in the LMS. The policy actors who saw the policy issue from a pedagogical lens also believed that the policy should have fore-grounded enhancing the quality of learning provided by the university, regardless of what technologies were used, noting that "The focus should be on the learning. The quality of learning" (Director, CHED).

7.2.1.5 Institutional identity and the framing of e-learning policy problems

Documentary evidence produced during the audit review, including the report of the audit review process, challenged the university's approach to the use of ICTs in teaching, given its identity as a university of technology. Therefore, the introduction of technologies in teaching was seen as a natural process that would enable the university to fulfill its identity as a university of technology. The dominance of a technocratic discourse overshadowed the problems inherent in the very historical foundations of the university which had resulted from a merger between two former technikons. HEQC noted that the university was still struggling with a new academic identity and its concomitant institutional culture as a result of the mergers. According to the audit report HEQC (2011:8):

> *The development of a new identity and its concomitant institutional culture requires further reflection on issues such as student access and success and the necessary elements of an appropriate student experience at [University A]. The multi-campus and demographically diverse nature of the university pose challenges in areas of student accommodation, suitable educational facilities and teaching and learning approaches to support student success* HEQC (2011:8).

The idea of improving the students' learning experience through the provision of electronic technologies was introduced in line with discourses of equitable access, as ICTs were seen as a means of providing the same educational experience for both campus and off-campus students. Technologies were cast as a solution to correct a culture of unequal access to resources. However, the dominance of this discourse resulted in the neglect of other alternative discourses that take a critical approach to the role of

technologies in education, and problematise how technologies are applied in pedagogy. The provision of access to technology would not automatically result in changes in teaching style.

7.2.2 Framing the e-learning strategy at University B

Actors at University B used two main frames to deliberate on the e-learning strategy, namely:

1. Transformation frame

2. Free Open Educational Resources (FOER)

7.2.2.1 Transformation frame

Some actors at University B saw the issue of developing a strategy from the perspective of transforming historical legacies inherited prior to 1994. Being an HDI, the bulk of their learners came from disadvantaged backgrounds, lacking computer and digital information literacy skills. Actors who used this frame felt that the strategy needed to focus on how the university could train learners to develop relevant digital academic literacies that would enable them to perform at an academic level and also to apply themselves in the workplace. The e-learning strategy (2004:9) argued that "e-learning is something that could impact directly on the institutional mission through the graduation of students who are competent in the relevant digital academic literacies". The university ran a digital academic literacy programme which was taught across faculties, in some cases as part of the curriculum. In the hope of redressing computer illiteracy amongst learners from disadvantaged backgrounds a respondent from the Information Systems department described one of the e-learning projects they had embarked on:

> *In the second project we were giving students laptops, students living in the townships where there is no electricity and these computers were not insured. We ran into serious problems as laptops were getting stolen. That project did not amount to anything.*

7.2.2.2 FOER

The second frame noted at University B was the FOER frame. This frame was expressed in different ways, showing the opinions of policymakers as to why the university needed a strategy on e-learning. Actors expressed ideas on FOER in varied ways:

i) for collaboration with other universities

ii) for expansion of student enrollments

iii) for partnerships with the private sector

Some actors saw the idea of an e-learning strategy at University B as a means of ensuring the possibility of partnering with other universities through offering free open-source courseware and online programmes. In line with this thought, the following respondents observed that:

> *The whole idea was that there were people from FOSS, people from the United States of America, Australia, Afghanistan etc. We had a whole workshop on how we could create this programme to do courses online* (Respondent, Computer Science).

> *There was one professor who had a passion. He was involved in an e-learning initiative with eight universities in Africa to try and get the LMS that he developed to move forward as an open-source project* (Respondent, Information Systems).

The LMS that was developed was open-source and hence available to any institution wishing to use it. Other actors believed that FOER was a means to expand student enrollments. One professor commented that:

> *It [the e-learning platform operating as a FOER] was introduced to solve the problem of having too many students on campus. Many universities felt that they could grow their numbers without having many learners on campus. Most universities kind of grabbed them as . . . an extension of the university outside campus, like a massification strategy.*

Consonant with the idea of enrolling more students, some actors felt that strategy was necessary at the time because of the flexibility that it would provide, allowing more learners to engage in learning other than those housed in the classrooms. One professor commented that

> *The thinking was that e-learning represented an alternative and more flexible mode of learning which could assist students in a variety of ways including easier access to learning materials, the possibility of going over missed lectures (using Podcasts), more direct lecturer-student contact etc. Following this, the idea of e-learning has been incorporated into successive university operational plans (effectively IT strategic plans) from the mid-2000s onwards and faculties are encouraged to explore and implement new ways of advancing e-learning* (Professor, EMS).

The Director, ICS believed that the ". . . open content LMS would serve as an institutional resource that could be used to forge partnerships with the private sector" University B E-learning strategy (2004:17). Other similar partnerships had been formed as a result of the university being able to host its own courses on its own platform.

7.2.3 Framing the Ed-Tech policy at University C

The analysis of primary documents used during a series of conversations and meetings, over a year of developing an Ed-Tech policy at University C, provided findings on how policy issues were framed. The Ed-Tech policy sought to make explicit the position of the institution with regard to the issue of integrating technologies in teaching and to provide practical steps of putting those principles to practice.

Actors at the university relied on two frames to develop the Ed-Tech policy:

1. Comprehensive learning technology frame
2. Transformation frame

The comprehensive learning technologies frame informed the discussions to develop the Ed-Tech policy at the university. Actors viewed the integration of technologies in teaching as a cross-faculty problem where the issue had to be framed comprehensively to include the diverse needs of all faculties. Email conversations between the three key stakeholders who developed the policy and the responses from stakeholder consultations represented the worldviews and values of actors. Actors understood that the deployment of educational technologies would vary across faculties, given varied approaches in teaching. One respondent argued that

> *Faculty linkages need to be spelled out. There must be a link with the top-level faculty committees that deal with teaching programmes. This is the key linkage and faculties are key stakeholders* (Professor, Health Sciences).

Using the comprehensive technology frame, actors believed that one of the ways through which the institution could ensure the successful integration of technologies was to have faculty buy-in through establishing cross-faculty advisory groups on educational technologies.

> *Given the differences between faculties in educational approaches and priorities, working with faculties and departments is viewed as critical for the successful application of educational technology . . .* Draft Discussion Document (2003:3).

By adhering to this frame, University C avoided dealing with conflict as had emerged at University A. The comprehensive learning technologies frame was not focused on a specific tool such as the LMS, but rather aimed at involving mostly faculties who were involved with using technologies on the ground. The comprehensive learning technologies frame put more emphasis on achieving disciplinary-based activities. According to the Draft framing document (2003:3), it was necessary to:

- Develop discipline-based and faculty-based partnerships and structural relationships.
- Have an educational technology presence at discipline level course design and curriculum planning processes.
- Be aware of what software, tools, environments, multimedia etc. are available for use in different courses in the different disciplines.
- Make available to academics relevant information, workshops and courses concerning the pedagogically sound use of appropriate educational technologies

Similar to the findings at University B, another frame identified at University C was the transformation frame. Being previously advantaged, University C has throughout the years adopted some learners from disadvantaged backgrounds. Since, previously, the bulk of its student population came from elite backgrounds, one lens through which actors saw the need for an Ed-Tech policy was that educational technologies would solve the problem of how to accommodate learners with varying levels of literacy.

> *Educational technology offers a solution to the old problem of how to accommodate students with varying levels of competency, whether with computers or with the curriculum within a class situation or even to accommodate distance learning more productively* . . . ([University C] Internal Report, 2003).

7.3 Consequences of framing on e-learning policy making

Policymakers at the three universities used different frames to discuss contentious e-learning policy issues. Some frames tended to emphasise certain aspects of teaching and learning with technology more than others. The way issues were framed had consequences on the following facets of the policy making process:

1. The interaction or stakeholder dialogues
2. The resultant policies
3. The conceptualisation of policy issues
4. The reception of policies
5. E-learning initiatives proposed

Table 7.4 describes the consequences of framing on the policy-making processes at the three universities.

Table 7.4 The consequences of framing on policy-making processes at the three universities

	Consequences	**Remarks**
1.DIALOGUE *Limited interaction*	At University A the LMS frame limited the interaction to activities happening only on the LMS.	*The institution is not ready to engage . . . ignoring them [social media technologies] is a mistake . . . there is no educational value in how people are using the LMS. They are just dumping content* (Educational Technologist, CHED).
Emphasis on certain aspects of e-learning, narrowing of discussions	At University A the dialogue disregarded other Web 2.0 technologies. This resulted in a policy that is silent on pedagogy and the type of learning that must take place.	*The pedagogy is the point that we should be asking ourselves: What is it that we want our learners to do, what tasks do we want them to do and what technology can we assign to those tasks* (Dean, Deans' Forum).
Dominance of certain actors	At University B only one person was driving this vision and, somewhere, actor lethargy developed.	*There's one man with a passion who has this as an open-source project. They were really calling together to try and get the LMS to move forward as an open-source project. There is one man with a passion, no IT background and a whole crew of followers like myself and others, and he had a whole lot of projects and I think over the next six years he became very tired. He was just trying to do so much. A certain degree of unhappiness developed in the technical team. He had about 18 people working for him with the funding . . .* (Respondent, Information Systems).
Informative rather than discursive meetings	At University B the meetings were mostly informative and driven by the e-learning champion.	*I think the meetings were mainly informative* (Respondent, Computer Science).
Conflict in stakeholder dialogues	At University A, conflict was observed between CHED and CEL concerning what goes into the policy.	*It ends up being a battle between CEL and CHED who want to do emerging technologies . . .. It depends who shouts the loudest. I think CEL often wins that because the institution has invested a lot of money on the LMS.*
Principles and value-driven frames	At University B the transformation frame focused discussions on how learners from disadvantaged backgrounds can improve on computer and digital literacy. Discussions centred on the provision of information literacy programmes.	*There were six projects including mine that was to develop a Master's programme on Information Management. That programme is still running and can be traced back to the [international] funding to give learners skills on how to manage information in the modern world of digital technologies* (Respondent, Information Systems).

	At University C the transformation frame focused discussions on how educational technologies could be used to deal with problems arising from teaching learners with varying levels of literacy, explained as 'digital natives' and 'digital immigrants'.	*There is the challenge of responding to the diversity of the students. They are from disparate backgrounds and some have not been involved in formal education for several years. The students have different levels of computer and academic literacies. Three of the students in last year's course had not seen a computer before they started the course* (Respondent, Health Sciences) adopted from Report on MEd-Tech Group Consultations (2003:3).
Lack of common vision	At University A some actors went on to formulate a social media policy. The social media policy was not approved by the relevant university structures.	*We developed them, drafted them. They were through the usual consultation but somehow they got stuck. So I think the institution is not ready to engage them and that is very risky* (Educational Technologist, CHED).
2.POLICY *A prescriptive policy*	Academics feel that it is too prescriptive. Academics prefer to use other technologies rather than the LMS. It is a policy that disregards the autonomy of academics to choose whatever technologies to teach.	*What I would say to you through the policy at [University A] is that the policy is more a case of trying to win academics and what we are finding now is that we still do not have good embedding* (Director, QMO).
Low reception of policy	At University A, Academics ignore the policy.	*Up to now I find a lot of people in a sense ignoring the policy when it comes to finding systems and using them as stand-alone whereas the policy states that they need to keep the Centre for E-learning informed and so we can look at incorporating that into the broader learning management* (Director, E-learning).
A restrictive policy	At University A this resulted in a policy which is restrictive for the integration of ICTs in teaching and learning.	*Our quality management office tend to be so risk-averse that no mistakes take place . . . they tend to be so'draconic and restrictive' and it leads to very rigid policy and very low levels of creativity* (Dean).
3.CONCEPTUAL UNDERSTANDING	At University A, e-learning was conceptualised narrowly as the LMS.	*People should not confuse e-learning with the LMS. There is confusion between the two and the reason is an organisational one* (Respondent, Library).
4.E-LEARNING INITIATIVES	Some projects to give computers to learners from disadvantaged backgrounds did not yield positive outcomes.	*In the second project we were giving students laptops, students living in the townships where there is no electricity. We ran into serious problems as laptops were getting stolen. That project did not amount to anything* (Respondent, Information Systems).

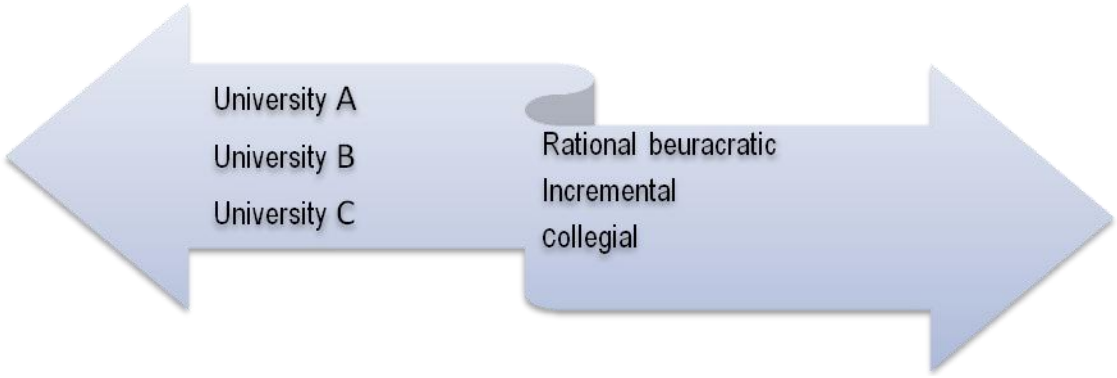
In summation, as illustrated in Table 7.4, the framing of issues had consequences on stakeholder dialogues. Some frames narrowed the discussions as they tended to emphasise certain aspects of e-

learning rather than others. At University B, the dialogue was largely dominated by one actor and the meetings were more informative than deliberative. At University A conflict was observed due to the emphasis on Learning Management Systems at the expense of other technologies falling outside the remit of the LMS. At University A, the LMS frame resulted in a restrictive policy that was poorly received. At University B the transformation frame resulted in poor e-learning initiatives geared towards redress and did not yield much.

7.4 The approaches taken to formulate e-learning policies at the three universities

Findings showed that different approaches were taken to formulate e-learning policies, largely revealing the diverse ways in which the institutions were governed. Figure 7.1 illustrates the different approaches taken to formulate e-learning policies at the three universities.

Figure 7.1 Approaches to e-learning policy making at the three universities



As illustrated in Fig 7.1, University A followed a bureaucratic rational process to formulate the e-learning policy, whilst University B took incremental steps to formulate the e-learning strategy. University C followed a collegial approach, based on interactions with other key players who were interested in e-learning.

7.4.1 The formulation of an e-learning policy at University A

The methodology taken to formulate the e-learning policy of University A is illustrated in Figure 7.2

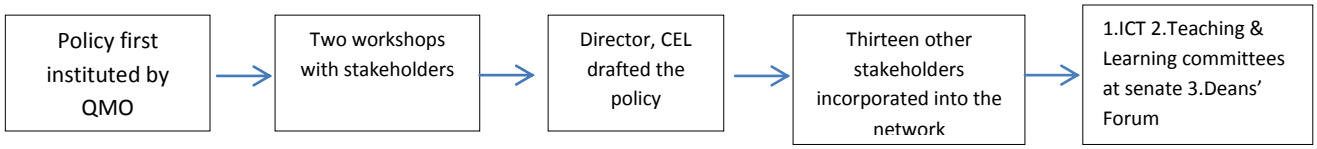


Figure 7.2 Methodology followed to formulate the e-learning policy at University A, adopted from the interview with the Director, QMO

The Director of QMO organised workshops and offered technical assistance in the development of the policy; this is the standard procedure for all policies at the university. QMO was involved in advocacy work to gather all the stakeholders together and the policy was circulated for comments to all stakeholders in the university. The policy went through three committees: the ICT committee at Senate, the Teaching and Learning committee and the Deans' Forum.

Even though there were various stakeholders in the policy formulation process, the drafting of the policy was a unitary exercise by the Director of CEL. The director conducted research to draft the policy. When drafting the policy, he researched policies at other Universities of Technology (UoTs) in South Africa and internationally for basic information used to formulate the policy. He also used the White Paper on e-Education.

> *At that stage when we did it, the White Paper on e-Education in South Africa did play a major role. It gave a basic framework on what the government of the day had in mind in terms of the use of technology for teaching and learning.*

One expert in e-learning observed that any policy formulation needs a driver to make a draft while other stakeholders are involved in the process of massaging the policy document. The expert noted that it would be complicated to have a hundred people writing a single document. He added that there must be someone piecing the document together.

In drafting the policy, the director stated that he took note of the perceptions and ideas of the university consortia:

> *The university consortium in the province was at the time trying to purchase cheaper software collectively but the idea fizzled out. They used to get together and sometimes make decisions collectively to buy cheaper software.*

The draft policy was circulated and comments were received from the policy development group and various stakeholders in the university. Members of the policy development group were contacted via email to comment on the draft policy and they engaged in the discussion further before the policy was submitted to the ICT committee and the Teaching and Learning Committee at Senate.

At University A, the macro-level of decision making on the policy was the responsibility of Senate. The ICT Committee dealt with policies or frameworks of using technology in general, whereas the teaching and learning committee dealt with policies pertaining to how teaching is done and how learning happens:

We have Senate committees that advise the Senate and Senate is the main academic decision-making body for the institution. So in that regard we have two committees that dealt with issues regarding e-learning. The first one was the Teaching and Learning Committee of senate and the second one was the ICT Committee of Senate (Director, CEL).

At the micro-level, decision making was limited to the directors of e-learning and quality management. It was noted that the two did not consider the views of other stakeholders. The belief systems, structures and values of other stakeholders played a minimal role in influencing the outcome of the process. The methodology followed was informed by the standard institutional procedure for the development of policies. Whilst the procedure seemed to be straightforward, the findings show that the process was ineffective:

The process is there but there is very little institutional appetite to participate. Policies get generated somehow with a workshop or two where it is poorly discussed and again, at Senate, it's the first time that people really read the policies, then they get 'shoe-holed' through so unfortunately there is very low levels of ownership (Dean, e-learning).

7.4.2 The formulation of an e-learning strategy at University B

Contrary to University A and C, University B followed an incremental process of developing its e-learning strategy. It started with a Teaching and Learning Strategic Plan in 1999, followed by an Integrated Information Strategy adopted in 2002 and an e-learning strategy formulated in 2004. Table 7.5 illustrates the trajectory of e-learning policy initiatives at University B.

Table 7.5 The trajectory of e-learning policy initiatives at University B

Year	Strategy	Focus
1999	Teaching and Learning Strategic Plan	Information and computer literacy was one area of concentration.
2002	Integrated Information Strategy	The goals of the strategy were focused on the application of ICTs in three areas of the university's core function, namely: teaching and learning, research and community engagement.
2004	E-learning Strategy	This was to comprehensively deal with the integration of ICTs in teaching, whilst synergising new efforts with existing work.

In 1999 Senate approved a Teaching and Learning Strategic Plan. In that plan the university made explicit its intentions on how to deal with teaching and learning, adopting computer and information literacy as an area of concentration. Some of the main objectives of the strategy were to:

i) Reorient students' attitudes towards learning

ii) Develop a resource-based mode of delivery

In 2002 the university adopted an Integrated Information Strategy. The focus of the university moved from information literacy to an integrated approach to teaching with technologies. According to the e-learning strategy (2004:44):

> *While there have been some successful efforts to embed follow-on computer literacy activities within the academic programme, this has not been done in the framework of a directed institutional strategy, nor has it been an even and coordinated effort. Most significantly, our infrastructure and support capacity are inadequate to support a large coordinated effort. This includes access to computers, availability of space that could be used for computer labs, numbers of support staff and academic competencies.*

The strategy became the starting point of any endeavour using ICTs at the university. When the director of TLTU asked the Senate for a review of all information literacy programmes at the university, the SAPC opted for an e-learning strategy (Recall Section 6.4.1). The e-learning strategy was developed in 2004. A sub-committee of SAPC was formed solely with the task of producing the e-learning strategy. Most of the items on teaching and learning goals were incorporated, with some minor changes from the Integrated Information Strategy to the e-learning strategy (See Appendix 16). Noting the changes that were added to the Integrated Information Strategy, the e-learning strategy at University B (2004:13) argued that:

> *Most of the efforts in 2002 were directed at the infrastructure and organisational aspects of the strategy, but it is now time to turn our attention to these educational objectives, to develop a separate e-learning strategy, based on these objectives in alignment with local, regional and global trends in the Higher Education sector.*

Drafting the e-learning strategy was a solitary exercise undertaken by the Director of ICS and then discussed and reviewed by members of the working group created to develop the policy. A respondent from the Computer Science Department who was part of the working group that had developed the strategy stated that:

There must be a champion to drive the process and obviously the Director of ICS drafted the policy. It was drafted and we revised it and I made some contributions to it but I don't know where that policy went. I don't know if it was finally approved by Senate (Head, Computer Science B).

7.4.3 The formulation of the Ed-Tech policy at University C

The process of formulating the Ed-Tech policy at University C ran parallel to a number of events and activities that were happening at the same time. These included:

- *The increasing levels of work that was being done across the institution using educational technologies*
- *Pressure in the form of competition and growth in this area from other South African and overseas institutions*
- *A process of discussions and consultations with [University C] academic staff on the role of ICTs for teaching and learning*
- *The opportunity to establish a new centre for educational technologies after the completion of work done by a group funded by an international grant*

Draft Framing Document University C (2003*).*

All these activities influenced how the policymakers thought about the issues that the policy would address. The drafting of the policy involved three individuals: the Director, MEd-Tech Group was the main driver who drafted the policy, along with two other professors. A separate consultation process described below provided some of the data that the three stakeholders used to inform their discussions and ultimately the Ed-Tech policy.

The consultation process

As the Multimedia Educational Technologies Group, MEd-Tech Group, was at its turning point and plans to create a new centre for educational technologies had matured, MEd-Tech felt that it was a good time to consult stakeholders across the university on the role of ICTs in teaching and learning. According to the Report on MEd-Tech Group Consultations (2003:1), ". . . this was not an extensive needs assessment of educational technology but rather the group consulted people who were believed to provide some useful views on the issue and were interested in the issue". A questionnaire was drawn up for this purpose (See Appendix 17). The questionnaire covered the following areas of interest:

- Teaching and learning
- Discipline-specific issues
- Resources
- The role of an educational technology unit at the university
- Imagining possibilities

Report on MEd-Tech Group Consultations (2003:1).

7.5 Challenges in e-learning policy-making processes in HEIs

Analysis of e-learning policy-making processes at the three universities identified five categories of challenges experienced in formulating e-learning policies at the three universities, as illustrated in Table 7.6.

Table 7.6 Challenges faced in formulating e-learning policies at the three universities

Challenges	University A	University B	University C
1.Conceptual	✓	✓	
2.Epistemological	✓	✓	
3.Ideological	✓		✓
4.Institutional	✓	✓	✓
5.Pedagogical	✓		

7.5.1 Challenges in formulating the e-learning policy at University A

The analysis identified five categories of challenges experienced in formulating the e-learning policy at University A, as described in Table 7.7.

Table 7.7 A description of challenges faced in formulating the e-learning policy at University A

Challenges	Description of the challenges
1.Conceptual	-No common understanding on what e-learning as a concept means -A scramble on what e-learning should include or not -Poor discussions on e-learning as a result of poor conceptual understanding of the concept
2. Epistemological	-Overlapping/ill-defined structural roles in e-learning which result in power struggles -The lack of a uniform institutional identity emanating from the history of the institution that was established after a merger of two institutions -Fragmentation in decision-making processes as stakeholders were still holding on to the fact that they were from two different institutions; stakeholders making a lot of policy decisions which were not legal decisions -Dealing with institutional turf arising from the historical foundations of the university
3.Ideological	-Variances in the ideological positioning of stakeholders in the debate between ICTs and teaching and learning
4. Institutional	-Low levels of e-learning readiness -Low levels of stakeholder engagement in e-learning policy discussions -A lack of political will and interest in policies at the institution -Low levels of participation in policy making -Stakeholders watching out for their own interests in policy-making processes -Management using policy for control purposes, resulting in policy stakeholder apathy
5. Pedagogical	-Variances on what is important in e-learning – the 'e' or the 'learning' -Differences in understanding the role of ICTs in teaching and learning

7.5.2 Challenges in formulating the e-learning strategy at University B

In formulating the e-learning strategy at University B, the challenges observed by actors in the policy-making process were largely conceptual, institutional and epistemological. One actor observed how a Science professor muddled through with e-learning from developing an in-house LMS to running the system and managing it throughout the institution, backed by people who themselves had no conceptual knowledge of e-learning but were largely driven by an ambition to see the institution moving forward. It was observed that the meetings, which were largely informative in nature, were mostly dominated by the champion who did not engage the other stakeholders fully.

The e-learning strategy at University B was formulated at a time when the institution had no funds to implement it. The idea behind having a strategy was to help use the open-source learner management

system (LMS) as a resource to generate some income by developing open courseware and partnering with the private sector and other universities that would help develop and fund the system. Other challenges faced were largely epistemological. The university had inherited an executive marked by racial inequalities and tensions.

> *The Director, ICS . . . became a senior manager but he ended up being a very white man in a very non-white executive, so I can't imagine what the meetings there were like* (Respondent, Information Systems).

7.5.3 The challenges in developing an Ed-Tech policy at University C

An analysis of documentary sources at University C revealed that policy actors had a challenge of balancing the interests and widely divergent viewpoints of stakeholders, consulted during the stakeholder consultations, who represented five different faculties in the university. Stakeholder values and principles were different. Some of the key values and principles that attracted opposing viewpoints were the following:

a)"The needs of student learning must be the primary driver (rather than teaching or technology)"
b) "Integration of staff development/support, curriculum development, technology and research (rather than conceptualising these as separate dimensions)" Draft Framing Document (2003:6).

a) "*I disagree with making teaching subservient to student learning needs and particularly strongly with Making skills (development) and training subservient to development. Perhaps I don't understand this, but there is a clear skills gap and the pressing needs for more and more teaching at postgraduate level necessitate making both key principles"* (Professor, Health Sciences).

Actors in the policy-making process revealed that some stakeholders had developed a certain institutional arrogance, perhaps due to the fact that it was an HAI. They felt that the university had a headstart over other universities, which one actor denounced as 'home institutional chauvinism'.

> *It is not clear to me in what way we have a headstart over most other South African universities. I worry that this might be home institution chauvinism – something that we are prone to at [University C]. This won't serve us well.*

7.6 The role and influence of stakeholders in e-learning policy-making processes in HEIs in South Africa

The e-learning experts noted that it is not practical for all the staff in a university to participate in e-learning policy-making. Only those who are mostly interested in e-learning or have the capacity in terms of knowledge and influence should participate. Table 7.8 presents a comparative analysis of stakeholder maps at the three universities, illuminating stakeholder interest and power to influence decision making.

Table 7.8 A comparative analysis of stakeholder maps at the three universities

	A	**B**	**C**
KEY PLAYERS	Centre for E-learning (CEL) Centre for Higher Education Development (CHED) Information and Communication Technology Services (ICTS) Quality Management Office (QMO)	Computer Science (CS) Information Communication Services (ICS) Information Systems (IS) Teaching and Learning Technologies Unit (TLTU)	Centre for Higher Education Development (CHED) Health Sciences Multimedia Educational Technologies Group (MEd-Tech Group) Occupational Health
CONTEXT SETTERS	Deans' Forum Higher Education Qualifications Committee (HEQC) Department of Higher Education and Training (DHET)	Vice Chancellor Donor Senate Academic Planning Committee (SAPC) Private Sector	Twenty-one stakeholders Donor
CROWD	Marketing and Information Services (MIS)		
SUBJECTS	Academics Students	Academics Students	Academics Students

Findings from University A revealed that four groups exerted an impact on the formulation of the e-learning policy at the institution. These groups were:

i) Quality Management Office (QMO)
ii) Centre for Higher Education Development (CHED)
iii) Centre for E-learning (CEL)
iv) Information and Communication Technologies (ICTs)

A stakeholder categorisation and a differentiation method of power-interest were used to classify the stakeholders at University A, as illustrated in Figure 7.3.

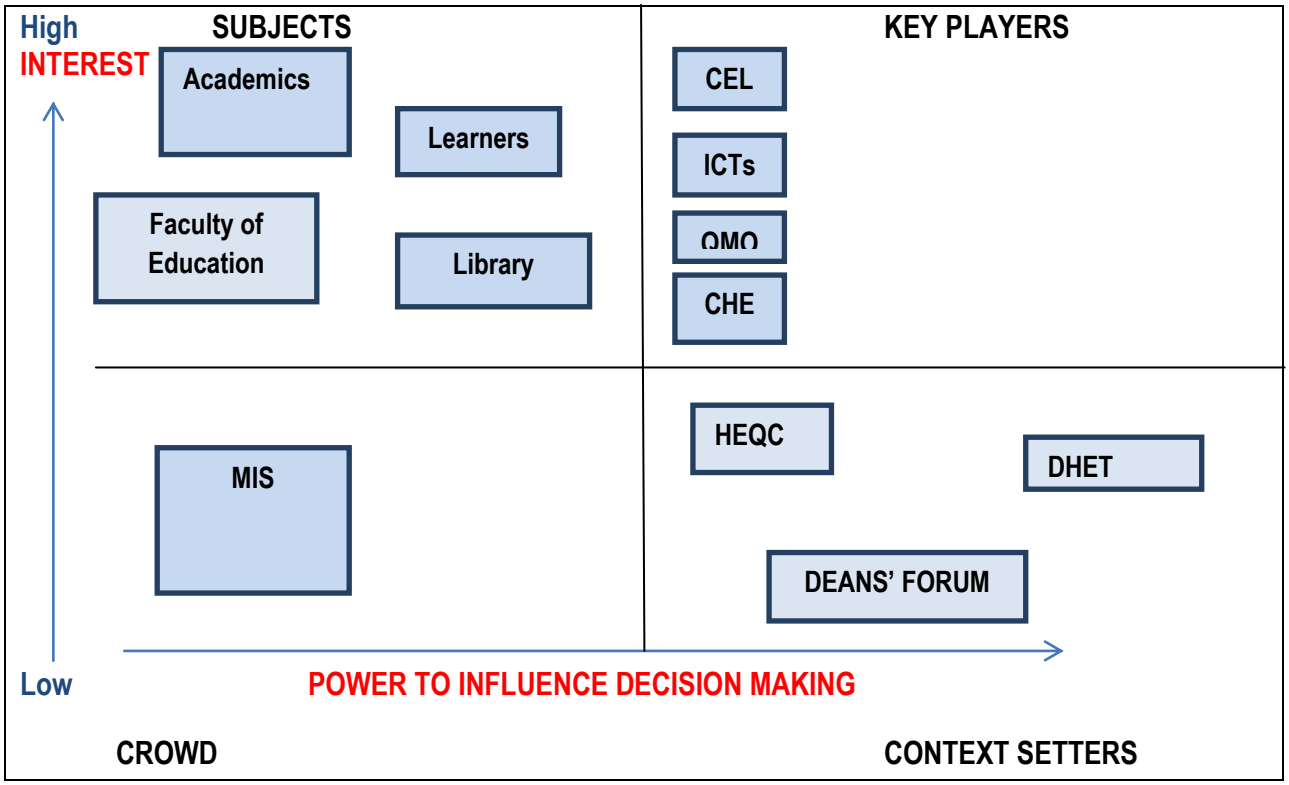


Figure 7.3 Analysing the stakeholder map at University A

The students and other academics were kept informed about the policy through Newsflash, an online discussion list hosted by the university network. Whilst University B and C had evidence in the policies of taking cognisance of ensuring quality in teaching and learning with technologies, University A was the only case where the institutional QMO played a key role in institutional policy-making processes. In the case of the e-learning policy at University A, QMO organised the workshops and offered technical assistance in the development of the e-learning policy and other institutional policies, developing a template and a policy for policy-making. Contrary to the findings at B and C, findings at University A showed that there was a policy on how institutional policies should be formulated.

It was notable from the findings that the actors who formulated the e-learning strategy at University B were all senior academics in managerial positions. The key players in the process were:

i) Information and Communication Services (ICS)

ii) Computer Science (CS)

iii) Teaching and Learning Technology Unit (TLTU)

iv) Information Systems (IS)

Figure 7.4 illustrates the categorisation of stakeholders at University B, according to power and interest.

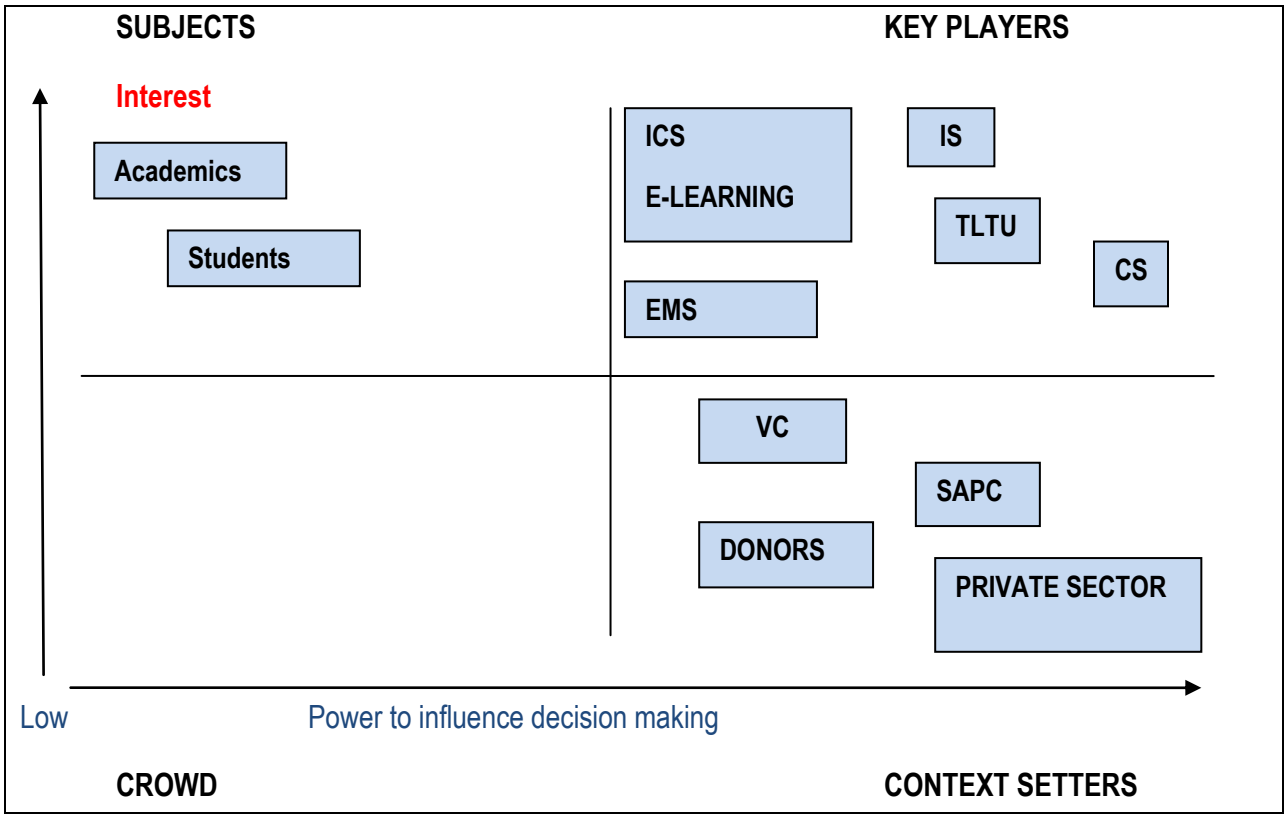


Figure 7.4 Power interest matrix, University B stakeholders

The e-learning strategy at University B had more institutional buy-in from various policy stakeholders because it was developed by a sub-committee of Senate led by the Director, ICS. ICS was created to drive a new vision of how ICT could help the university advance its academic mission. The Executive Director, ICS was a full member of the executive management team that reported directly to the Vice Chancellor. A number of actors who worked with him in the working group that created the strategy noted his interest and power to influence decision-making in the policy-making process:

> *The key proponent of e-learning was the Executive Director, ICS, who was particularly interested in open-source approaches (even if that initiative did not ultimately amount to that much). The idea of*

e-learning was also endorsed by the then Vice Chancellor, and it was his commitment to the ideal which probably was responsible for bringing it into the mainstream of university teaching policy (Professor, EMS).

At University C, Figure 7.5 illustrates the categorisation of stakeholders by interest and power to influence decision making. The key players in the process were:

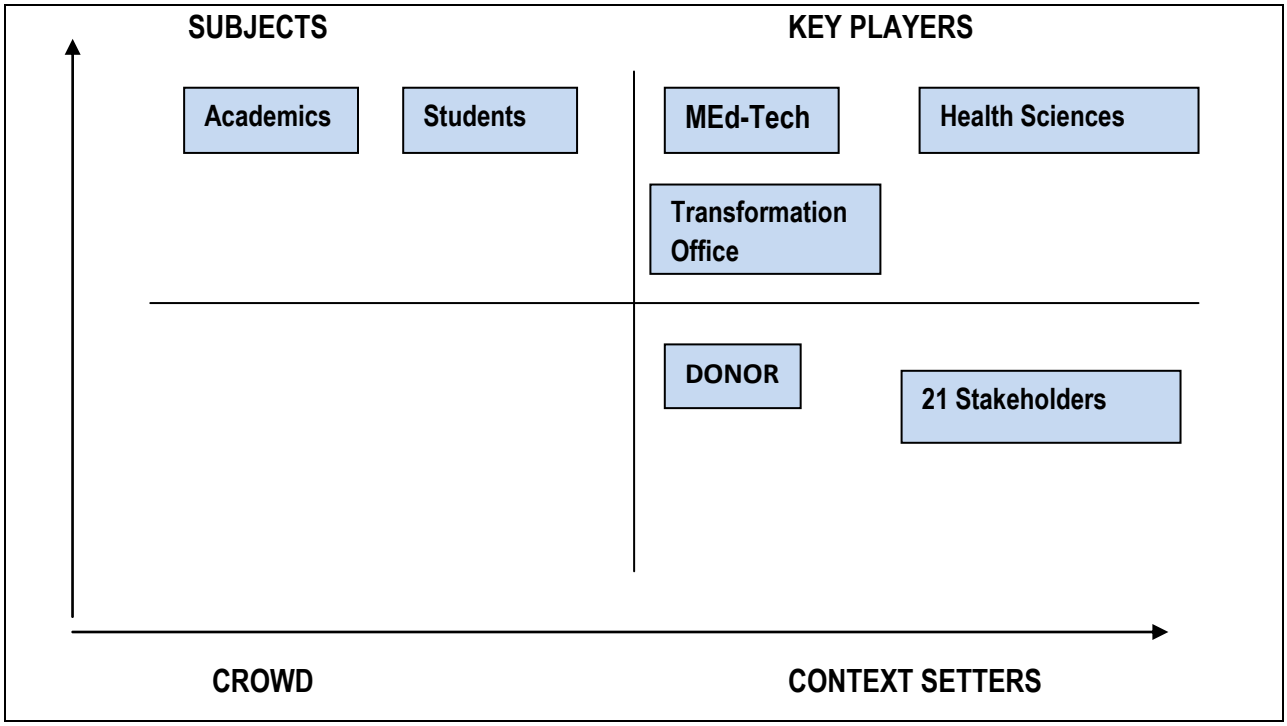
i) The Med-Tech Group

ii) Health Sciences

iii) Transformation Office

iv) Twenty-one stakeholders representing five faculties of Commerce, Science, Health Science, Humanities and CHED

Figure 7.5 Power interest matrix, University C stakeholders



An analysis of stakeholder maps showed that one feature that seemed to vary across the cases was the organisational structures and constituencies responsible for e-learning and e-learning policy development. At University B and C, the responsibility for e-learning policy development was taken up by the ICS and MEd-Tech Group respectively. However, in both cases, the responsibility for governing these centres was given to different units. At University B, the E-learning Unit was located within ICS, whilst at Case C the

MEd-Tech Group fell under CHED. Contrary to the findings in B and C cases, the responsibility for integrating technologies into teaching and learning at University A was shared between two centres, CEL and CHED. CEL managed the computer laboratories and had overall responsibility for the LMS whilst CHED researched and trained academics on the usage of social media technologies in teaching and learning.

7.6.1 Stakeholder interests in e-learning policy networks

Findings from the three cases showed that the use of ICTs in teaching challenges traditional values of teaching and is taken up with varying levels of interest, depending on the values and interests of different individuals. Various actors in the three universities showed different levels of interest in e-learning policy making. Some actors participated in the process in order to represent the various institutional constituencies that they served. At University A, findings showed that ICTs were involved in the process of formulating the policy, mostly because they authenticated entry or access into the LMS. They participated in the policy-making process because it had emerged that part of the reasons why academics were not using the LMS was because of poor protocols around logging onto the university network. One actor from ICTs explained their interest in participating in the e-learning policy making process as follows:

> *In terms of operation, the e-learning system has to integrate into an environment, so where we sit in, we have to ensure that when people authenticate into the e-learning system it's the same authentication used in other systems.*

The Director ICTs explained that his interest was to look out for broader policy issues relating to ICT integration in terms of the provision of infrastructure. Although he had the potential to influence the decisions taken, he did not have any objections to the policy.

> *The policy was circulated to us so it came to my desk for comments. I wasn't part of the initial workshops but it was discussed at various levels in other forums. I can't remember anything that was contentious but I was more interested in issues that were part of the information security policy. I didn't have any major objections to the e-learning policy as such.*

Interest and power are not static; as stakeholders change, positions and tensions can arise when key players have conflicting interests (Reed et al., 2009). One key stakeholder group whose interests needed to be managed at University A was CHED.

The data showed that some actors take an interest in e-learning policy making out of personal ambitions. One respondent at University B observed that:

The Director (ICS) before 1994 was a science professor and he was also very early into establishing an IT lab for his Masters students . . . and the story I heard because this is the seed in which most of the activities started. He established a lab with 10 to 12 PCs, gave his students a long lecture and told them to get into the lab and do all their master's research using the computers. He personally learnt how to build websites, to install material in the web server and he became proficient as an individual in coding and scripting website functionality and he developed the LMS and so I'm sitting there and I'm watching this one man doing what I know would be quite a complicated system, all by himself (Respondent, Information Systems).

At University B, findings showed that personal ambitions by e-learning actors rather than institutional hierarchy drove the strategic processes on e-learning:

If you want to be a university of technology whereby you have to change and be of strategic importance in the modern world, it must not come from the top but the heart of the organisation. [University B] has always had a simple ambition to move the university forward and of course they move forward.

At University C, the MEd-Tech Group consultations revealed that stakeholders who participated in the process were mostly interested in e-learning because they believed that educational technology could impart some skills, perceived to be of particular importance within their discipline, that could be imparted to students by means of educational technology. Examples mentioned are illustrated in Table 7.8.

Table 7.8 Discipline- specific skills imparted by the use of technologies in teaching and learning, adopted from Report on MEd-Tech Group Consultations at [University C] (2003:3)

Discipline	Skills
1. Commerce and Natural Sciences	Analysing data sets and other quantitative numeracy skills
2. Health Sciences and Commerce	Academics place a premium on the possibility of presenting students with simulations and case studies, as well as reaching mature, off-campus students.
3. Natural Sciences	Within Geographical Information Systems, statistical manipulation programmes and animation programmes linked to colour plotters

7.6.2 Stakeholder engagement and dialogue processes

One objective of this thesis was to understand how actors in e-learning policy-making processes were constituted. By this, the researcher sought to understand the composition of actors and their level of engagement in the policy-making process. Besides understanding who participated in the process, the objective was to gauge how the participation or involvement of certain actors ultimately contributed to the dominant ideas which run through the e-learning policy. The analysis revealed some variances in the levels

of participation by different actors in the policy-making process. At University A, the policy-making process suffered from low levels of stakeholder engagement, although an effort was made to include all relevant stakeholder groups, as evidenced by the workshop and the circulation of the policy on Newsflash. Only the CEL and the QMO were involved in the initial dialogue that resulted in the drafting of the policy. Other actors were asked to comment on the draft. Inclusion in the dialogue process was low. It was also noted that the dialogue lacked openness as it was structured around fixed issues and problems that had been raised by HEQC. The level of tolerance in the dialogue process was also low as the group held meetings where some members suggested some changes to the policy but only one position prevailed over the others, ". . . the institution is not yet ready to engage", lamented one actor.

The newsflash dialogue created a false sense of transparency in a policy-making environment riddled with inequality in considering stakeholder' opinions. One respondent mentioned this concern:

> *I think because we are a university, decision making processes are not very transparent, not democratic. It's just in the hands of a few people who are like bottlenecks everywhere, everything goes to them, two or three people and they are just not open.*

At University B, the presence of an e-learning round table, as early as 1998, created a discourse about e-learning. Most stakeholders who formulated the strategy had been part of the round table; however, most stakeholders confessed to a lack of knowledge of e-learning at the time. They revealed that engagement in the process was mostly informative as the process was driven by a champion. The strategy was, however, discussed openly by the task group appointed by Senate to formulate the strategy. Findings showed that, in some way at the earlier stages of adopting e-learning and formulating a strategy, stakeholder engagement in the process was low; the champion became overwhelmed by working alone. However, this improved later on when the university changed the initial LMS. At that point, the Director of e-learning took over the responsibility:

> *She drove a proposal to go over to a new LMS. She was very clever because, rather than taking this as a personal mission, she approached Council, she lobbied Senate, she made her arguments, she documented the ideas, she linked it into professional development of staff because she engaged. Instead of telling academics this is what they should do they were being asked how they .would like to develop professionally at the time that the university was becoming very digital . . . (*Respondent, Information Systems*).*

University C conducted some stakeholder consultations on the role of ICTs in teaching and learning, with 21 stakeholders representing five faculties. Engagement in dialogue processes was, however, low. The consultations merely ensured that the needs and concerns of stakeholders were understood and considered, but involvement of stakeholders was low. Through the consultations, actors who had drafted the policy obtained feedback on alternatives.

7.7 The exercise of power in e-learning policy making processes

Findings from the analysis of power in e-learning policy making processes at the three universities can be summarised as follows:

i) Power resides in :

- Individuals
- Institutional structures and portfolios
- Donors or funding for e-learning projects
- External governing bodies e.g. DHET, HEQC

ii) Power is :

- action or inaction
- knowledge or expertise

iii) E-learning policy as an institutional management tool to exercise authority and power over subjects

7.7.1 Individuals as sources of power

The analysis of policy making at the three universities showed that e-learning champions led the processes of formulating institutional e-learning policies. At University A, the Director, CEL was the e-learning champion. At University B, the Director, ICS was the champion and at University C, the Director MEd-Tech Group led the process. The champion at University B, however, was in a unique case where he could exercise power because of his immense involvement with e-learning at the university. He:

i) Introduced the idea of e-learning by establishing a computer lab where learners could use technologies,

ii) Initiated e-learning round table discussions as early as 1998,

iii) Sourced for significant funding for six major e-learning projects at the university,

iv) Led the group tasked by SAPC to formulate a strategy,

v) Developed the LMS at the university,

vi) Was a member of the Executive Committee at Senate.

However, findings showed that not all individuals with power exercise their power. At University A, the Registrar had power to veto policy decisions. However, he did not exercise his power in the process of formulating the e-learning policy. Weighing the authority assigned to different offices during the policy-making process, the Director, Quality Management averred that much of policy making is:

> *. . . collegial, with one exception, that is the Registrar, who has as part of his mandate to inform the people involved in any policies of potential governance issues and conflicts that could prevent policy being adopted . . ., the Registrar has very much strong power regarding governance issues in policy* (Director, Quality Management).

7.7.2 Institutional structures and portfolios as sources of power

At University A, findings showed that e-learning, by virtue of its location at the intersection of electronic technologies and learning, attracts two centres of power whose roles are either overlapping or not clearly defined – CEL and CHED. So big was the issue of diffusion of power amongst the actors who formulated the policy, that one academic serving in the Dean's Forum remarked that he stayed clear of the policy-making process due to power dynamics.

> *In terms of e-learning we have these two centres of power, we have the CEL and the CHED, and I was just not going to go there. I feel that this policy will never work until such a time that the institution fixes the schism between CEL and CHED. You can't have two centres of power and in fact there are three centres of power. There's CHED with teaching and learning, there is CEL and there's ICTs and the IT infrastructure. It's not a happy situation. There's often quite a lot of conflict and competition.*

This tension emerged as part of the university's institutional quality improvement plan. In this plan, the university was trying to bring the academic development component from CEL and the e-learning component from CHED into one functional unit. That restructuring did not actually happen but it is important to note that the discussion started from that and then moved to the e-learning policy.

> *As soon as we started talking e-learning and someone like the Director for CEL was at the forefront, we got a lot of problems from the social media groupings. They were insisting that they needed to be a place for creativity and to this day there is continued fighting* (Director, QMO).

As a result, there was continued tension between the two centres. CHED pushed for academic autonomy through the use of Web 2.0 technologies, while the e-learning unit wanted to control the activities of academics using the LMS. The Director, Quality Management, noted that:

> *To a large extent CHED actually undermines the policy because they continually go round to academics and push the creative side and not the control side of it and that created a lot of dynamics because that changed the way the e-learning policy was developed.*

7.7.3 Donors or funding as sources of power

The involvement of major international donors in e-learning projects was noted at Universities B and C. University C data showed that donors had a direct influence on the work of the MEd-Tech Group. For this reason, the group saw a need to establish an institutional centre for educational technologies to carry out the work of the group which could not align itself fully with the institution's strategic direction, as MEd-Tech also had to satisfy the interests of the donor (Draft Discussion Document, 2003). At University B, funding was received from an international donor to commence six projects on e-learning.

7.7.4 External governing bodies as sources of power

At University A, external governing bodies such as HEQC were involved in the policy making. Further, it was noted that the QMO worked closely with HEQC as they had been given an institutional mandate to oversee the development of policies.

7.7.5 Power as action or inaction

The findings at University A revealed that power is exercised by both action and inaction. Lecturers as subjects of e-learning policies had a high interest in the policy but little power to influence decision making as far as formulating the policy was concerned. However, lecturers exercised their power through resistance. They chose to use Web 2.0 technologies such as Facebook, although administratively it had been decided that they should use the LMS. The power on what is eventually used lies with them since they are the policy implementers. Brey (2007:7) argues that power can be exercised through action or through failure to act. It can cause somebody to perform an act or refrain from performing an act.

The exercise of power by some key stakeholders of the policy contributed to a lack of ownership of policy by the actors who formulated the policy. This lack of ownership arose from a position of powerlessness where it was felt that the policy was being forced on academics by management when academics were not ready to follow the policy because their preferences had not been considered. Policy stakeholders who were opposed to the policy felt that academics could not be forced to use what they did not want to use; consultations should rather be made with academics to ascertain why they were not using the LMS and preferred other technologies. This view was captured by one actor:

> *I can't force anybody to use anything if they don't want to. If I do not ask them if it's useful for them. To me there's a huge communication gap between management and the users and as long as they don't change that it will be hard to develop anything that is helpful.*

7.7.6 Power as knowledge or area of expertise

The findings also indicate that some stakeholders have power and influence in decision-making processes, because of the sophisticated knowledge that they bring to the process. The Deputy Librarian at University A observed that:

> *The stakeholders bring into the process their particular fields of expertise . . . it is an expertise-based thing . . . there is some personal expertise that the units expect. You wear two hats when you go into policy making.*

7.7.7 E-learning policy as control tool

Findings show that the e-learning policy is a tool which management thought that they could use to exercise power over academics to ensure that they integrate the use of technologies to improve the quality of their delivery. The e-learning policy at University A is used to achieve strategic goals and outcomes in the area of e-learning. Academics are only propelled to act through policy. One professor in CHED stated that,*"*. . . human nature says if it's not policy, why should we do it?" The policy at A gave management the power to produce outcomes and to control the activities of academics. Whilst management may exercise power through policy, it was noted that the power also resides in the academics who use the technologies on the ground. The absence of a social media policy has not stopped academics from using them. The Professor, CHED argued that "People in middle management are really not into social media but we just keep on pushing and pushing for the use of Web 2.0 tools. If there is no policy it is even harder".

7.8 Philosophical positioning of actors in e-learning policy-making processes

Philosophy is not something that policymakers are conscious of when they engage in discussions on any subject, including e-learning. The philosophical positioning of actors in the debates were of particular interest for this study in that, as university policymakers tasked with formulating a policy, their philosophies on teaching and technology determine how the policy would perceive and deal with preferred teaching methods including how (or if) educators use e-learning technologies in teaching. The interview transcripts and documentary sources provided empirical evidence of the kind of deliberations that policy actors were engaged in during the policy formulation process. The analysis also considered policymakers' conceptual understanding of e-learning and the discourses informing their understanding of the role of electronic technologies in teaching.

Findings from the analysis of interviews revealed that e-learning policy stakeholders were invariably opposed in their understanding of e-learning as a concept. Some fundamentally different conceptualisations of e-learning associated with various philosophies of teaching and learning with technologies were exposed. Rather than seek to offer a definitive meaning to the term 'e-learning', the researcher engaged with the differences and similarities of meanings present in the various uses of the term 'e-learning'. By doing so, the researcher aimed to contest a pervasive mode of speaking and writing used by policymakers to frame e-learning policy problems, resulting in discourses that treat the role of ICTs in teaching and learning as an inevitable and organic process. This effectively naturalises a complex and contested discursive terrain, providing no other alternative thinking to the role of ICTs in teaching.

Feenberg's (1999) framework was used to understand the way policymakers conceptualise the role of ICTs in teaching and learning. Stakeholders were grouped into technocrats, Instrumentalists, Substantive theorists and Critical theorists, depending on the dominant discourses found in the interview transcripts and documentary sources. Appendix 3 presents a summative analysis of the philosophical position of actors and the dominant views associated with the philosophies.

7.8.1 Technocrats

Findings from the interviews at University A and B were juxtaposed and the data revealed the dominance of technocratic philosophies. Two similarities were drawn from the findings at the two universities:

1. Philosophies of actors working in technologically strong units and administrators were technocratic. The discussions centred on :

- numbers of system users
- funding for e-learning projects
- provision of infrastructure
- access to technology
- functionalities of systems

2. Policy actors at both universities showed evidence of media determinism, an over-emphasis on certain e-learning media forms.

First, respondents working in technologically strong units such as e-learning and ICTs at both universities relied on technocratic philosophies on the role of ICTs in teaching. At University A, the Director, ICTs discussed at length the number of learners using the LMS. He spoke about the role of ICTs numerically, looking at the numbers of system users. This narrative seemed to be based on the assumption that the number of learners logging onto the LMS translates to learning. He understood the role of ICTs in teaching and learning through the use of indicators.

> *There are certain elements you can use, like how much are people using the system? When we started to get into the wireless environment, we had about 3 000 new users in the system between 6 to 7 months. That tells me that some people are using this. How they use it doesn't matter.*

> *We deal with open labs so this IT Centre is the biggest in Africa. We have about a thousand students that sit, there's lots of activities at that level so we have an indicator as to how much activities are happening.*

His discussion did not consider how learners were using ICTs. The discussion tends to assume that the numbers are saying that students are learning.

Actors from technologically strong units also spoke more about the resources or funding for e-learning. At University B, the respondent from Information Systems noted how he became acquainted with one professor and the opportunity to seek research funding from an international donor, "That was a big deal, that was one million dollars." The funding allowed the university to start six projects on e-learning. Similarly, at University A, actors from technologically strong units spoke more about the infrastructure provided and the amount of resources that have been invested in this regard.

At University B, the respondent from Information Systems discussed at greater depth the provision of laptops to learners in the project to provide access to the technology. The project was not successful. Perhaps owing to the failure of this project, a second project was geared towards contributing to the literature of critical thinking:

> *. . . that to me became one of these awful discourses and narratives which was pitched so high to the real world . . .* (Respondent, Information Systems).

At University B there were views that were based on a 'means-ends' rationalisation which tended to focus more on the functionalities of systems, where functionalities of an e-learning system is linked to teaching values of the lecturer. Such philosophies focused on the functionalities that lecturers perceive as useful in an e-learning system that helps them to do their work. There was a tendency of such philosophies to let functionality dominate the conversation rather than the learning, pedagogy and learning goals, where functionalities of systems were linked to activities such as testing:

> *In trying to set up the e-learning environment I spent a lot of time setting up these tests, setting up statistics, sums and randomising the problems considering that different people would be doing the sums. It's a lot of time that you spend to create the e-learning environment* (Respondent, Computer Science).

> *My personal view is that systems need you to have a clear view of how you will manage your data and design your database. If you think about this is what I want to do, the functionality becomes predominant and the data goes into bits and pieces until it's a complete mess . . .* (Respondent, Information Systems).

Consonant with this, interviews with e-learning policymakers at University A revealed that much of the criticism that has been laid against the institutional e-learning policy is that it is technocratic, focused only on the LMS and its functionalities. When asked if the e-learning policy is an ideal representation of what is envisioned by academics and other stakeholders as ideal, the following responses were gathered:

> *It's a technicist view and it doesn't come near to explaining the role that technologies play in the teaching context. It doesn't talk to teaching and learning; it talks to populating e-learning.*

> *No, it doesn't. If you speak to the Director of e-learning, all he says is the LMS. When he comes even near you all he says is LMS. The pedagogy is the point that we should be asking ourselves. What is it that we want our learners to do? And what is it that we want our learners to know and be able to do? What tasks do we want them to do and what technology do we need to assign those tasks? So the technology is third in line but the policy is written with technology as first in line.*

At both universities, the data showed that the issue of user uptake was mentioned more in interviews with university administrators and those working in technological units such as the Director, e-learning, Director, ICTs and the Director, Quality Assurance.

Second, from the analysis we found that the kind of determinism that is apparent in most interview transcripts could be characterised as 'media determinism', whereby stakeholders from technologically strong units such as e-learning and ICTs rely mostly on discourses that favour the use of the integrated LMS system, whilst those from the pedagogically strong units such as CHED favour discussing such technological infrastructure as cellphones, laptops, clickers and tablets. Whilst the adherence to the provision of infrastructure is often a topic that is dominant in deterministic discourses, it was noted that most actors from CHED at University A spoke about the provision of infrastructure such as tablets as a way of allowing students and staff autonomy to use any platform available to aid learning, other than relying on the blackboard platform alone.

> *My dream would be for every student here to have their own device. We don't need the computer labs except for specific engineering types of applications that require special software . . . you need something like a smart phone or a tablet to access. Students who do have those kinds of devices are so much more advantaged from a teaching and learning with technology view than those who are reliant on having to book a computer and do not have it everywhere. If all our students had their own devices, that would make a big positive impact on teaching.*

In addition, at University A, some respondents noted a kind of media determinism in the institutional policy on e-learning. Their understanding was that the policy should not presuppose that educators would only be inclined towards using the LMS. They felt that academics should use whatever technology is available so long as it aids learning.

> *. . . depending on which education theory you subscribe to, you use the technology in a different way or different technologies would support different kinds of learning, e.g., MOOCs support the idea of 'connectivism' or general computer-based testing would support the practice kinds of teaching and learning approaches, so there's space for everything; you just need to find the right approach and the relevant tool.*

Findings from the data revealed conceptual imprecision in terms of defining e-learning and the scope of the institutional policy on e-learning. Findings from the data revealed that, amongst the contenders of the e-learning policy, there was a strong recognition that e-learning technologies are diverse and can be used to achieve different ends. Technologies need to be appropriated in the right context to solve the right problem; they cannot be universally applied to meet all teaching and learning needs.

7.8.2 Instrumentalist discourses

Instrumentalist discourses are based on views which see e-learning technologies as neutral tools that are human controlled (Recall section 3.2.1). This understanding has been seen to be common in most stakeholders in universities. Stakeholders from CHED at University B relied mostly on instrumentalist discourses to negotiate their understanding of the role of ICTs in education. Their emphasis was that there are many electronic tools available for use in the teaching and learning context; the LMS is just one tool and the value and use of these tools in this context depend on who is using them and how, as noted from the following responses:

> *For me the issue is that if you are using ICTs you should understand the pedagogy behind the use of that tool; as I said the LMS is being used as a dumping ground and I take the LMS as one of the ICT tools available for us.*

> *We should not focus on the tool, the tool itself is a computer, a blog and LMS has nothing to offer.*

> *Teaching is teaching but technologies are tools to enhance it.*

Instrumentalists see e-learning technologies as tools that need to be integrated into the teaching and learning environment to aid learning. At University A, the use of e-learning is often compared to the usage of pens and pencils in the teaching and learning context.

> *I think there's still a bit of misconception that e-learning is something different from normal teaching and learning . . . it's the same way as using a pencil and paper you do not learn how to use a pencil and paper separate from learning how to write an essay. There are all these incredible tools to assist students and academic staff.*

There were also beliefs based on Instrumentalism amongst the stakeholders at University A and B where some actors saw e-learning technologies as neutral tools that can be used with much success in the teaching and learning environment, depending on who uses them and how. Most transcripts that carried

instrumental views on the role of technologies in teaching assumed that e-learning technologies are neutral but human controlled. Such views emphasised the role of the teacher and also the technological uses of these artifacts by both lecturers and learners. One respondent at University A observed:

> *Blackboard has made a great difference though it still lies with the lecturer, because the system on its own without the lecturer making use of it doesn't do anything, it's just an instrument. So it must start with the lecturer to do something, you know, like uploading course materials, creating those assessment, creating those collaboration areas where students interact, and the lecturer being able to liaise with those students beyond the classroom, after hours, when the lecturer does take an initiative; it does add value and play a big role in teaching and students learning.*

Similarly, the respondent from Computer Science at University B spoke about how lecturers spent a lot of hours setting up learning space. "*The LMS as a tool allows lecturers to set up tests and gather statistics."* These views emphasised that the success of the tool is dependent on the lecturer who sets up the learning environment.

7.8.3 Substantive theorists

Substantive theorists were found at both Universities A and B. Substantive theorists believe that technology has a substantive power to change our societies. Their views saw the integration of ICTs in teaching as a natural development in society. At University A, the Director, CEL noted that "It's been a sort of natural development into using technologies for teaching and learning" (Director, e-learning). Substantive theorists also believe that academics need to adjust the educational system to the new culture. At University B, there were substantive views that emphasised the unremitting power of technology to change both humans and society. The adoption of technologies was conflated with progress.

> *ICTs are very important for learning. I mean our whole life is ICTs, they have become a part of us, we can't run away from them. Having to be able to engage with your ATM, your cell phone so if you can't then you are lost, everything is now ICTs* (Respondent, Computer Science).

7.8.4 Critical theorists

Critical views were largely evident at University C and some groups of stakeholders at University A. Findings at University A showed a relationship between the philosophies inherent in the interviews of stakeholders and the focus of the institutional units they represented. Pedagogically strong units like CHED

displayed mostly philosophies that were critical. Findings showed that actors who relied on critical philosophies raised the following arguments:

- Technology is human controlled and value-laden.
- Technology's effectiveness is directly related to sound pedagogic practice.
- The LMS is a teacher-centric pedagogy.
- There is need to problematise the context in which technology-mediated learning takes place.
- Africa will be colonised again by overseas universities that have competitive advantage.
- There are different drivers shaping the landscape of technology and education that need to be critically considered for the benefit of education.

Most actors from CHED at University A emphasised views based on the non-neutrality of technology. CHED policy actors believed that technologies are humanly controlled and value-laden. The discourse from which they interpreted the role of ICTs in education was that its value is dependent on the agency of the users. They believed that the value of using technologies in teaching lies with the lecturers who have the agency to use, decide the teaching style and spend hours and hours researching and developing materials for learners. One respondent noted that:

> *It just depends on how you use them. Some people use them in very good ways, very innovative ways, if there can be good teachers without computers. I believe it's always the lecturers' agency.*

Some critical views on teaching and learning with technologies focused more on the pedagogy used to teach and explored the benefits of a variety of pedagogies applicable in different contexts. At university C, there were some dominant views also that technology's effectiveness is directly related to sound pedagogic practice. One respondent cited in the Draft Report on MEd-Tech Group Consultations University C (2003:3) averred that "The machines will be used with good pedagogy to the extent that technology-based pedagogy is integrated directly into courses." Other actors at University C talked mostly about the benefits of technology in pedagogy. Appendix 13 illustrates some of the views on the benefits of technology in pedagogy that emerged from the stakeholder consultations.

Similarly, at University A, discourses with a strong pedagogical orientation were also found in interviews with actors from CHED, talking about how technologies facilitate the flipped classroom concept.

> *Flipped classrooms are the inverted classrooms which were inspired by Professor Eric Mansur from Harvard University who is Physics lecturer but uses the flipped classroom to teach students who do not want to do Physics. The lecturing happens on your device and homework happens in the classroom.*

Critical philosophies at University A were also based on concerns about the LMS being a teacher-centric technology. The actors from CHED drew many of their views from learning community discourses of engagement, learner autonomy and control instead of instructional learning, which is typical of classroom-based teaching.

> *There's very little control from the students. I like things like Google Drive . . ., that keep the learners as much part of that learning community, they are at the same level as lecturers, and they can add other students and have a lot more autonomy.*

One respondent from the Library noted that many teachers photocopy textbooks, retype the same notes and put them on the LMS. Evidence of critical discourses was also found in the interview with the instructional designer at the e-learning unit. She believed that lecturers should not merely provide content but should consider:

> *. . . the seven good teaching principles by Arthur Chickering and Zelda Gamson (1987) where we say there must be contact between the lecturer and student and lecturers must respect diverse talents and forms of learning because students have different forms of learning*.

The main issue behind her recommendation was that:

> *Online learning should not compromise standards in the teaching. One should not get the impression that when you use technology you receive inferior learning* (See Appendix 15).

There were some critical views also that argued for the problematisation of the context in which technology mediation in teaching takes place, citing that "Technology should be considered third in line after asking oneself what the learning goals are and what it is that one intends to teach" (Dean, Dean's Forum).There were strong sentiments that the e-learning policy should be developed by the centres of teaching and learning. The Dean argued that in all cases where he had seen the e-learning policy work, it had been developed as a subset of teaching and learning.

Arguing for the contextualisation of technology use, stakeholders from CHED at University A believed that technologies such as the LMS had been purchased, but without enough support for academics on how to use it.

> *It's all about needs analysis, and contextual analysis. I think why most educational technologies projects fail is because they have just bought the technologies and they haven't really thought about how to support people.*

Similarly, at University C, other dominant views focused mostly on the nature of activities given to learners and explored the choices or possibilities of using technology in different teaching contexts. Such views acknowledged that the choices made regarding the activity and media form are informed by various pedagogical frameworks. One actor acknowledged that "Educational technology supports many teaching approaches and learning paradigms and that the use of technology is not limited to one pedagogical theory" (Respondent, MEd Tech, cited in an Internal Report).

At University C, responses from the 21 consulted e-learning stakeholders, who shared their views on the role of technologies in teaching across the five faculties of Commerce, Science, Health Sciences, Humanities and CHED, took a critical approach. Most views from stakeholders portrayed the relationship between technology and education as complex, citing the need for educational technologies to be problematised in their contexts. Some respondents cited in the Report on MEd-Tech Group consultations (2003:3) argued that connections between learning and using technology are made too easily in the hope of solving problems. They cited that educators make choices such as "more teaching materials are needed urgently for certain courses that have low pass rates". Making such choices when it comes to technology is unrealistic. They argue that institutions should make more "strategic choices rather than the seemingly opportunistic choices" of the past.

Another critical concern raised by actors at University A was that local universities do not stand a chance in competing with overseas universities such as those in the United States that have a lot of money. Some stakeholders from CHED held a strong critical view that Africa would be colonised again through online universities offered in the developed countries. The argument was that African universities do not offer the same competitive advantage, and the local market of learners could easily be consumed by universities in America offering online programmes.

Some critical thinkers at University A drew attention to problematising the individuals' drivers for technology uses in teaching. Their transcripts were based on a strong realisation that there are different viewpoints shaping the landscape of technology and education that need to be critically considered for the benefit of education. The Deputy Librarian noted that there are different drivers for different lecturers to use technologies in teaching. He described some technology enthusiasts who would jump on to whatever technology is new, without critically thinking about its relevance in teaching. For such lecturers,

> *. . . whatever is new I will be using. It does not matter what it is. If the latest technology is to stand on the roof and teach from there then that lecturer will be there on Monday, standing on the roof to teach the students"* (Deputy Librarian).

The Deputy Librarian noted that those who are technologically deterministic can be perceived of in two ways. There are those who are enthusiastic because they love technology and others who are insecure about their teaching. *"*They are trying to hide behind the technology" to mask their bad teaching habits. He critically observes that *"*Just because you are using technology doesn't mean that you are using it effectively.*"* He noted that the impact of using technologies in teaching will not bring positive results on the part of lecturers who use technology because they are driven by the idea of transcending with the times and remaining relevant, citing that " *. . .* a bad teacher is a bad teacher, you can give them the best technology in the world, but they will still be a bad teacher"*.* He argued for the need for teachers to acquire good teaching methods and to not merely expect technology to provide those skills for them.

7.9 Summary

This chapter traced the policymaking processes of e-learning policies at the three universities from the identification of the policy problem to the development of policies, focusing more on the discursive construction of policies through discourse, frames and the views of actors in the process. Particular attention was paid to understanding the role and influence of various stakeholders in the process, the exercise of power and understanding stakeholder interests.

Contrary to expectation, at University A the analysis showed that the motivations to have an e-learning policy were shaped not by internal institutional priorities of actors in the policy network, but largely by

national processes of HEQC. It was noted from the analysis that HEQC had a great influence in the identification of the policy problem. HEQC's influence came through the institutional audit processes that the university was undergoing as they felt the need to formulate an e-learning policy to meet the institutional portfolio necessary for audit purposes. As a result, it was noted from the findings that the QMD operated from a more dominant position than other key actors in the process, together with the CEL which served as the policy delegate. At University A, the findings revealed that the discursive space for the policy-making process was largely dominated by technocratic discourses of media determinism. Stakeholders were divided on their preferences of which technologies to use, with the e-learning unit supporting the use of the LMS and CHED supporting the use of other technologies not supported by the LMS. The findings noted a lot of conceptual imprecision in understanding e-learning as a concept.

Findings at University B showed that the need to develop an e-learning strategy was framed in the context of transforming an HDI which had a bulk of learners coming from disadvantaged backgrounds, some of whom were interacting with computers for the first time. The idea of e-learning was discussed in the context of providing relevant digital academic literacy skills for learners to cope in a modern world. The strategy was formulated at a time of huge financial strain and the idea that framed the discussions was that of promoting the LMS as an open-source educational resource that could be used to offer online courses to learners in other universities, forging partnerships and generating an income to implement the strategy. The stakeholders who formulated the strategy were discussed and a stakeholder map of power interest analysed. One glaring finding at University B was the immense involvement of one e-learning champion in all the activities that had to do with e-learning. Most stakeholders confessed to their lack of knowledge on e-learning, revealing that the meetings they had were mostly informative. The interview transcripts at University B pointed to means-ends-driven philosophies that tended to focus more on matching the functionalities of systems with educator needs.

At University C, stakeholder engagement at the level of consultation was noted. However, this presented a problem of balancing different viewpoints across five different faculties. There was much focus in the discussions on framing educational technology issues comprehensively to cater for the diverse needs of different faculties. Similar to University B, the involvement of international donors in e-learning projects was observed. University C also used the transformation frame in framing the Ed-tech policy. It was believed that technology could help solve the problem of dealing with learners who are widely opposed in their understanding of ICTs. Being an HAI, the university had a challenge of dealing with two categories of

learners, ‘digital natives’ and ‘digital immigrants’. The formulation of the Ed-tech policy was also facilitated by the fact that the institution had garnered a lot of expertise in the area through its six-year involvement with e-learning under the funding of an international donor.

Conclusively therefore, University A followed a bureaucratic process of policy making based on the institutional policy on policy making. The process followed to develop the e-learning strategy at University B was incremental, derived from making small changes to existing strategies, initially the teaching and learning strategy, the integrated information strategy and, finally, the e-learning strategy. University C’s process was mostly collegial, involving only those stakeholders that MEd-Tech Group had forged collegial relations with, in its commitment to integrating educational technologies in teaching.

CHAPTER 8

A CRITICAL DISCOURSE ANALYSIS OF E-LEARNING POLICIES IN HIGHER EDUCATION INSTITUTIONS (HEIS) IN SOUTH AFRICA

8.0 Introduction

This chapter is a response to one of the secondary questions:

1. What are the discourses informing e-learning policies in HEIs in South Africa?

In order to address this question, this chapter presents the findings of a Critical Discourse Analysis (CDA) of e-learning policy texts in three public universities in South Africa. CDA was used to identify discourses that represent commonly held assumptions about what policymakers perceive as the role of ICTs in teaching and learning, as evidenced in the text. The chapter goes beyond a simple linguistic analysis of the policy text to understanding the discursive practice (processes of production of the policy) and the social context in which these policies were developed. By looking at the interaction between texts, discourses and practices, the analysis exposes the discursive power relations that are promoted through various text genres and discursive types found in the policy texts. The analysis demonstrates the potential of using CDA as a tool for critical policy analysis.

8.1 A CDA of the e-learning policy at University A

As seen in Chapter 7, the process of developing an e-learning policy at University A started with the need to satisfy the requirements of the national quality assurance body during the audits and following the recommendations made after the audit. Given the ad hoc process followed to come up with this policy and the lack of engagement of key players in the process, the policy led to a drift between two centres of power, CEL and CHED. It became apparent that policy stakeholders did not have a shared conceptual view of e-learning, raising concerns that the assumptions inherent in the policy on the role of ICTs in teaching and learning could have been based on the ideological views of policymakers. In view of this complexity, the next section explores the discourses on the role of ICTs in teaching that are embedded in the policy.

8.1.1 Discursive analysis

Findings from the analysis showed that the e-learning policy at University A can be considered a 'technocratic policy' (Aviram & Tami, 2004). The policy is largely imbued with a technologically deterministic discourse. To qualify the presence of a deterministic discourse, a search for common themes and assumptions that are associated with technological determinism was performed. The analysis revealed that

the e-learning policy puts forward seven ideological assumptions on the role of e-learning technologies that support a deterministic discourse:

1. *Means vs ends rationalisation*
2. *Promoting teacher-centric pedagogies*
3. *Managerial or enterprise discourses*
4. *Provision of technological infrastructure*
5. *The Internet as a value-neutral tool for learning*
6. *Globalisation discourses*
7. *A belief in the neutrality of technology*

The next section explores the dominance of a technologically deterministic discourse found in the policy under the seven discursive themes. It also ponders on their implications for e-learning policy making as discursive practice.

a) *Means vs ends rationalisation*

The policy is written in such a way that the technology or Learning Management System (LMS) gains precedence over the learning objectives. Technology is treated as an 'end' rather than a 'means to an end'. The policy falls short of defining the institutional views of learning. The policy statement of the e-learning policy makes it clear that the goal of the policy is to ensure that all courses show some kind of online presence on the LMS (See Extract 1, Appendix 5).The policy statement provides a few limited uses of the LMS, encouraging lecturers to create a course site on the LMS consisting of a grade-book, calendar and a communication tool. The dominant idea that is foregrounded in the policy statement is online web presence. The goal of the policy foregrounds technology and the learning objectives are not mentioned, neither is the suitability of the LMS to meet certain tasks. The silent discourse is what kind of learning will take place and how this will be achieved. The LMS gains precedence over the learning intention, giving the impression that technology is the end rather than a 'means to various ends'. The policy reduces the concept of e-learning to narrowly refer to the usage of the LMS.

It was observed that policymakers were drawing on a deterministic discourse of technical rationality to promote the use of the LMS at the institution. It is important for policymakers to realise that there can be various potential uses of a technology. The technology should not be treated as an 'end' but rather as a 'means' to various ends. The ends to which a certain technological artifact can be applied, for example, an

LMS, are based on how society (the institution), interests, power structures and struggles shape the uses of the artifact in multiple ways that are potentially divergent (Fuchs, 2009). In view of these findings, one could infer that the policy was written with the sole purpose of promoting the LMS, narrowing the concept of e-learning to activities that are supported only by the LMS. The failure to first define organisational views of learning has resulted in an unanchored and misplaced model of LMS selection in universities (Siemens, 2006).The act and process of teaching and learning are largely ignored in the pursuit of functions, features, integration and a myriad of other organisational concerns (Siemens, 2006).

b) A focus on teacher-centric pedagogies

The policy is critiqued for its narrow focus on feeding the LMS with content-encouraging teacher-centric pedagogies, whilst marginalising other discourses of collaborative learning. The focus of LMS on 'content' and the management of learners has negative implications for teaching and learning, as it places pedagogy and the engagement of learners in the background (Hannon & Bretag, 2010).There is a narrow conceptualisation of e-learning, as the LMS promotes the marginalisation of other discourses such as discourses of collaborative and networked pedagogies offered by other social media platforms and tools that are not supported by the LMS. The overarching concern with perceiving e-learning as the LMS in the policy is that the LMS tends to promote pedagogies that are based on fixed content.

LMSs are being challenged by the growth in social media networking applications, rendering them a hindrance to effective online learning (Hotrum, 2005). The transformative potential of 'social software' marks a clear shift away from pedagogies based on managed 'content' and repositories of learning objects towards student-centred learning focused on knowledge production (Gibbs & Gosper, 2006; McLoughlin & Lee, 2008).The institution takes a cautious approach to the use of other electronic learning technologies other than the LMS, revealing that they pose a threat to the institution (Extract 1, Appendix 5). The reality, however, is that students still access other electronic learning platforms and an e-learning policy should take cognisance of that.

The e-learning unit does not recognise other technologies which could be outside the LMS and neither does it support them financially (Extract 2, Appendix 5). This essentially means that when policy-makers engage in discussions on the use of electronic technologies in teaching and learning, there is a risk that they could exclude deliberations about social media technologies that are offered on commercial platforms, which learners have access to through mobile technologies. To ignore the impact of free online platforms and systems by commercial service providers such as Google, Facebook for social networking, Google

Docs for submitting written assignments, Drop Box or file-sharing services for media files and so on, would be a serious oversight on the part of the institution as, in practice, instructors and learners continue to experiment with them in teaching and learning.

c) Managerial or enterprise discourses

There is a dominant line of argument in the policy that identifies the LMS as a managerial tool, overly emphasising its managerial functions such as ". . . allowing for the management of tracking student progress". (See Extract 3, Appendix 5). Whilst it is essential that the LMS should track students' progress, viewing the LMS as a management tool results in a policy that concentrates on the management functions of the LMS, whilst ignoring the learning that should be facilitated by technology. These are discourses that are conveyed by an over-emphasis on 'efficiency', 'effectiveness' and 'quality'.

Initial versions of an LMS focused on organising and managing course content and learners. This mindset is reflected in the features typically promoted by vendors, such as the ability to track student progress, manage content, roster students and so on (Siemens, 2006). By foregrounding managerial discourses in e-learning policies, policymakers pay less attention to the learners, as the learning experience takes a back seat whilst foregrounding management functions. Pedagogy becomes a secondary consideration to student management.

Policymakers tend to write from a managerial perspective (Morley, 2003). In this study, this makes managerial discourses of quality a ubiquitous feature in e-learning policy documents in HEIs in South Africa, including the policy at University A. Morley (2003:70) contends that academics and managers attempt to represent themselves in a language that quality assessors will understand and value; this will irritate staff members who are suspicious of 'quality' processes. Feenberg (2001:90) avers that HEIs are faced with a lot of temptation to think in managerial terms that view technology in a university environment as a managerial tool that is meant to centralise the university. By doing so, bad decisions become technically locked in and are difficult to reverse. Feenberg (2001:90) appeals to educators in HEIs to shun managerial discourses of efficiency and sustain dialogue that has always been at the heart of educational experience, suggesting a discourse informed by pedagogy.

d) Provision of technological infrastructure

The policy also covers a number of issues on the provision of infrastructure (See Extract 4, Appendix 5). There is a dominant assumption which uncritically views the presence of technological infrastructure as

progress in the use of ICTs in teaching and learning. Such technocratic discourses are evident in the concerns about 'efficiency' and 'effective use' of technology. Brown, Anderson and Murray (2007:81) provided an overview of the findings of e-learning policy analysis in seven areas of the world in which there have been varied approaches to the development and implementation of e-learning policy within the tertiary sector. They observed that while there has been a shift away from 'infrastructure' to a stronger focus on 'learning' in a number of e-learning policy texts, infrastructure keeps changing and technological developments continue to shape the nature of e-learning. There is a problem when the nature of e-learning is being shaped by technological developments. Consequently, institutions will fail to deliberate on the educational goals that are supposed to be served by the technologies.

In line with the provision of technological infrastructure, the policy is also laden with a discourse of access to technology, which furthers a technologically deterministic bias (See Extract 4, Appendix 5). One of the benefits of e-learning is seen as providing access to the university services for part-time and distance-education students. The belief that educational problems can be solved only when people have access to technology has been criticised for being technocratic (Marx, 1987); the provision of technology alone will not guarantee learning.

e) A belief in the neutrality of technology

The policy views the LMS as inevitable for teaching and learning with technology by stipulating that all academic programmes offered should create a course site in the LMS (Extract 1, Appendix 5). The LMS is the main tool for e-learning, whilst other tools are identified as 'additional' tools and staff is cautioned on the threats and dangers of using tools (as seen from Extract 2, Appendix 5). The view of technology as a neutral tool supports an instrumental discourse which is largely associated with reformist policies (Aviram & Tami, 2004). In the policy, e-learning technologies are viewed as value-neutral tools which have certain determined results for teaching and learning. There is a dominant assumption that e-learning technologies are efficient in any context. When technology is viewed as a neutral tool, e-learning policymakers may fail to account for other contextual differences that could impede e-learning technologies in their context. The policy treats it as commonsense that e-learning will enable disadvantaged learners to partake in the learning experiences that conventional students in the physical classroom also enjoy. When a course is moved from face-to-face to online, this significantly changes how the course is taught and how instructors and learners think about teaching and learning.

The Internet, which hosts the LMS, is viewed as a value-neutral tool that would break all distance and time zones (See Extract 5, Appendix 5).There is a dominant view that the Internet simply connects students with teachers and mediates learning goals and objectives. Whilst it is possible for the Internet to enable learners outside campus to access course materials on the LMS and also to learn from a distance, viewing the Internet as a value-neutral tool has its own negative implications. The literature notes that an enquiry into the pedagogical and ideological rationale behind e-learning should start from the view that new media, such as computers and the Internet, are never simply 'neutral tools' that transparently connect students with teachers or mediate learning objectives and outcomes (Hoofd, 2011). Coates and Baldwin (2005:27) aver that LMSs are not pedagogically neutral technologies but, rather, through their very design, they influence and design teaching. The mediated tools instructors use to teach their classes are not value-free – the very structure of these systems constrains instructional possibilities and decision making (Rose, 2004).

Another concern with some researchers is that there is a potential for e-learning technologies to promote a form of cultural imperialism that spreads European and western ideals of learning (Hoofd, 2011). It is possible that e-learning is implicated in the production of hierarchies between students on campus and off campus, inside as well as outside the university classroom, even though its explicit rhetoric is often about the elimination of these very divisions and disconnections (Hoofd, 2011).

f) Globalisation discourses of economic rationality

In this technological narrative, institutions see e-learning as their task to prepare learners for life in the information society (Postman, 1995). This view is observed in the policy:

> E-learning must first be seen as part of the transition process of students from secondary education where some or all have been exposed to the use of technology as part of the Department of Education e-learning policies, to the efficient use of technology in the workplace (University A, 2011:3).

This narrative fails to question the values of education (Postman, 1995). It is technologically determinist and avoids the serious question of what technology does to our lives and hence also avoids criticising it in the light of our basic values. Whilst computers may indeed be practical in the teaching of curricular subjects, they undermine the learning of social values (such as patience towards slower learners) (Postman, 1995). Another assumption raised by the policy is that the use of e-learning technologies by learners at the university will lead to efficient technology use in the workplace. It is assumed that using e-learning technologies at university will lead to the efficient use of any technology in the workplace. The

relationship is not problematised, neither is there any discussion on the suitability of e-learning to the classroom learning intentions.

8.1.2 Text analysis

Text analysis focuses on how the linguistic characteristics of the texts, such as the vocabulary and words chosen, enunciate certain discourses or particular ideologies on the role of ICTs in teaching and learning. Text genres and discursive types were identified (Roode et a.l, 2004; Thompson, 2005), considering issues of power and domination (Recall Section 4.4.1, Table 4.5). Although it may not be possible to deduce the ideology behind every sentence, in this thesis sentences were read in context to understand the ideologies behind them.

Text analysis in this section is presented in three parts. First is Extract 6, raw text taken from the policy**.** Second is a graphical presentation of the analysis of Extract 6 and third is a discussion on the text analysis. The analysis is presented in Table 8.1. Thompson (2004:23) argues that undertaking such an analysis using tables shows the links posited between discursive forms at the micro-level and the replication or alteration of discursive power relations at the macro-level.

Table 8.1 Text Analysis: Extract 6

Ref	***Positioning e-learning in terms of its purpose and benefits***	*Micro* **Description** **(Text analysis)**	*Link* **Interpretation** **(Discursive practice)**	*Macro* **Explanation** **(Social practice)**
1	*Transfer of students*: E-learning must first be seen as part of the transition process of students from secondary education where some or all have been exposed to the use of technology as part of the Department of Education e-learning policies, to the efficient use of technology in the workplace. Existing staff must be able to *develop* and *enhance* their teaching methodologies through the use of e-learning.	ICT seen as an inevitable extension of DoE's technocratic e-learning policy agenda. The relationship between what the university does and the DoE is portrayed in words such as 'transfer of students', 'transition process' Modal auxiliary 'must' is used to coerce the reader's interpretation. The reader must see e-learning from the context of DoE. *Confidence* **(TG1)** *Persuasion* **(TG4)**	**Corporatism (DT4)** Collaborating with DoE's technocratic agenda. Technocratic discourses of efficiency **Technocracy (DT1)** **Techno-optimism (DT5)** **Pragmatism (DT6)**	The influence of Dept of Education (DoE) policy on institutional policies is acknowledged. Power issues as the DoE also funds HEIs.

2	*Access to [University A] educational services*: Providing all students, including part-time and distance-education students, convenient access to the educational resources of the university	*Confidence* **(TG1)** The tendency of a dominant discourse (access) to conform and normalise silent discourses (learning) through downplaying major differences found in face-to-face learning and the proposed e-learning. Normalisation is achieved through the use of common-sensical words such as 'convenient'	***Technocracy (DT1)*** *Dominant discourses of **access**, subjugation of **pedagogy** and **learning** discourses in discourses of providing access. The experience of learning reduced to the acquisition of information., access foregrounded, pedagogy discourses silenced.* **Techno-optimism (DT5)**	Association of ICTs with an increased ability to control learning from any place and providing convenience leads to a neglect in questioning whether accessing course materials deposited on an LMS is equivalent to learning in a physical classroom space with an instructor present. Confusion on what is learning, and what is provision of content.
3	*Capacity building*: Existing staff must be able to develop and *enhance* their teaching methodologies through the use of e-learning. Students must be encouraged to *grow* to become lifelong learners.	Repetition of statement in Ref 1 The word 'must' is a modal auxiliary which expresses the institution's authority over staff and students as subjects. *Persuasion* **(TG4)** Words such as develop, enhance, grow are persuasive words that require action.	**Pragmatism (DT6)**	
4	*Outreach***:** The application of these methodologies is appropriate to create an enlightened and liberally educated citizenship, provide professional *development* opportunities.	E- learning technologies presented as if they will benefit a larger society	*Legitimacy **(DT2)*** Discourses that seek to legitimise something by drawing on the larger society	
6	*Enhance* the *effectiveness* of public institutions, *foster* economic *development*, provide convenient *access* to educational programmes	Expressing confidence in the potential of e-learning to enhance effectiveness of public institutions Confidence **(TG1)**	Economic rationalisation, access discourse Technocracy (DT1) Technological optimism **(DT5)**	Managerialist discourses of efficiency and effectiveness

8.1.2.1 Discussion on the analysis of Extract 6

The policy text is imbued with words that are used repeatedly to show the potential of e-learning to 'bring about progress', as underlined in Extract 6. Such discourses are conveyed in words that stress the importance of progress and its many synonyms such as 'development', 'growth', 'improvement' and 'enhancement'. Technological determinism is enforced in discourses that position e-learning in terms of its

purpose and benefits, as seen from Extract 6. Most of these benefits are taken to be commonsensical and not questioned. There is no explanation as to how e-learning, for example, will foster economic development. A cause and effect relationship is assumed.

The extract uses mostly TG1, expressing confidence, and TG4, persuasion, which are consistent with technocracy and technological optimism. E-learning is positioned as part of a process that has been going on in the Department of Education (DoE). ICTs are seen as an inevitable extension of the DoE's technocratic agenda. The DoE has more influence and power over the activities of HEIs since it funds them. There is the danger of policymakers regurgitating macro-discourses found in national policies, without consideration of their institutional needs. There is evidence of collaborative and coercive relations of power that operate at the broader societal level of Higher Education as seen in Extract 6, Ref 1, Table 8.1.

As shown in Table 8.1, Ref 2, normalisation is used to underscore silent discourses. There is a tendency of a dominant discourse on access to conform to and normalise silent discourses (learning and pedagogy), by downplaying the major differences found in face-to-face-learning and the proposed e-learning. Normalisation is achieved through the use of commonsensical words such as 'convenient'. There is an increased association of ICTs with an ability to control learning at any place and at any time. The policy over-emphasises the idea of 'convenience' and neglects questioning whether the provision of content is equivalent to physical classroom teaching. There is confusion over what is defined as learning and provision of content.

8.2 A CDA of the e-learning strategy at University B

Section 6.4.1 provided the details of formulating an e-learning strategy at University B. Table 6.3 identified the stakeholders who developed the strategy. The task group developed a 46-page document which examined the internal and external environment of the university that impact on teaching and learning with technologies, locating the approach within the framework of digital academic literacies. In the next section the researcher analyses how certain *discourses*, conceptualised as institutionalised ways of thinking and speaking about ICTs in teaching, shaped policy debates on e-learning at University B, as evidenced from the strategy.

8.2.1 Discursive analysis

The analysis revealed that the e-learning strategy at University B draws largely upon deterministic and instrumental discourses of technological innovations to ascertain the role of ICTs for teaching and learning at the university. In a study conducted by Brown (2009:1), she identified some common themes that are associated with a deterministic discourse among university students in South Africa, namely: 'a strong, dominant (almost uncritical) view of technology as being essential', highly valuing ICT skills as compared to other work skills.

Dominant discourses informing the e-learning strategy at University B fall under common discursive themes associated with technological determinism namely, *a neo-liberalist discourse of globalisation*, an emphasis on the *equitable access* to education, the digital divide and poverty, backed by a strong recognition in the policy that the university was disadvantaged during the apartheid era. Also evident in the policy is a dominant theme of graduate skills and competencies and a view of e-learning technologies as neutral tools. Constructivism is hailed as the dominant teaching method and e-learning is presented as the means to achieve this teaching and learning method. The next section traces the dominant discursive themes around technological determinism, as evidenced in the strategy, and how these themes conform to a determinist view of the role of ICTs in teaching and learning at the university.

8.2.1.1 Globalisation

(Extract 1, Appendix 6) describes the mission statement of the e-learning strategy at University B. Globalisation is a central discursive theme informing the policy discussion. The policy is laden with the rhetoric of globalisation, which assumes that the irresistible power of globalisation makes it inevitable to adopt e-learning technologies in teaching. Fairclough (2003:100) avers that neoliberal discourses of efficiency and adaptability present globalisation as an inevitable fact; as a result, institutions need to introduce reforms to their practices to enhance 'efficiency' and 'adaptability', as underlined in Extract 1, Appendix 6. Clegg, Hudson and Steel (2003: 42) argue that, within education, the passive acceptance of globalisation paradigms engenders a deterministic view about the role and function of technology as a phenomenon with its own independent trajectory.

Whilst the dominance of globalisation debates have the tendency to enunciate technological determinism in e-learning policy interactions, it is important to note that policymakers at University B specifically problematise the impact of globalisation discourses on e-learning. The policy at University B avoids an over-reliance on the economic rationale of globalisation, taking caution in dealing with this subject.

Policymakers at University B hope to turn globalisation, which they regard as a potential disadvantage, to Higher Education teaching with technologies, into an advantage. They despise the view of Higher Education as a commodity criticising the Global Agreement of Trade in services. Their strategy is to partner with African countries and to ensure that the relationship is mutually beneficial.

The policy identifies with a community discourse (Clear, 2001), a clear shift from neoliberal globalisation discourses which are largely based on the economic rational view of education. The policy at University B states that the core objective of partnership with other institutions would be to assist them to build capacity by sharing courses with other institutions and learning from them. Their emphasis on Africa could be based on the context in which they are operating, as well as on the awareness that globalisation tends to promote a monolithic culture that is largely based on a western view of learning. Such a belief aligns with a community discourse which has a moral dimension which requires us to make our choices, constrained by values such as fairness and justice (Clear, 2001).

8.2.1.2 Equitable access

Another dominant discourse that informed the e-learning strategy at University B, which was also observed at University A, was that of providing access to technologies that facilitate teaching and learning (See Extract 2, Appendix 6). Whilst it is expected that policymakers would discuss the provision of resources for e-learning in their contexts, hence promoting access, it is important that their views consider other variables in their contexts that could impede access and use of technologies for teaching and learning purposes. Ravjee (2007:29) notes that most of the literature on e-learning in HEIs in South Africa can be viewed in terms of two theorisations on access: 1. an optimistic view and 2. a more cautious view. The first view, which is deterministic, concentrates only on providing the physical resources for ICTs to be used in teaching and learning, without taking cognisance of the existing power relations in a South African context that have promoted unequal access to resources such as: colonial histories, the division of universities by race, the inherited inequalities and academic cultures, the ideologies of the administrative elites, student and staff protests, and so on (Ravjee, 2007). The overly optimistic view unproblematically sees a straightforward causal relationship between the use of ICTs and the enhancement of teaching and learning. Second, the more cautious approach insists on taking into account, in addition to technology, other variables in the context. The e-learning strategy at University B attempts to problematise its theorisation about access by considering some of the important components that act as filters to this access.

8.2.1.3 Learning society

The learning society is a dominant discursive theme in the policy**.** Learning society discourses are linked with economic globalisation (Edwards & Nicoll, 2001). These learning society discourses are mostly associated with common themes such as flexibility (Edwards et al., 1999) and lifelong learning, as noted from Extract 3 in the policy. The policy takes an uncritical view of technological skills as being more essential than other work skills. This assumption is reflected in the over-emphasis on certain digital and computer literacy skills. As the strategy was being created, some interim measures had to be put in place to ensure that the existing computer literacy programs would not be placed in jeopardy. In expressing these interim measures, there is a strong belief evident in the policy that technical and computer skills are essential for staff to qualify into the working group that would drive the implementation of the strategy.

> This implementation working group should be established chaired by someone with sound experience in basic computer literacy and other aspects of digital academic literacy and include the relevant staff of ICS and those academic departments currently involved in computer literacy.
>
> (University B, 2004:5)

8.2.1.4 Graduate skills and competencies

There is a presence of neoliberal discourses of skills for the knowledge economy, education for national-economic development and creating citizens who can participate in a global economy. There is vast literature on the various concepts of literacy associated with information technology, but no general agreement on terms or set of skills and competencies that they imply (Bawden, 2001).

> To ensure that students have the required competencies to perform their academic work while they are students at the university;
>
> To ensure that they have the competencies reasonably expected of them in the workplace in relation to information technology.
>
> (University B, 2004)

Neo-liberal discourses of skills for the knowledge economy are also articulated in the policy through the dominance of views on the acquisition of digital academic literacies (Extract 4, Appendix 6). The digital literacy discourse has been criticised as a deficit model of student learning and teacher competencies (Lea, 2011). Although its vision is to transform teaching and learning, the change is not suggested in view of the knowledge and skills that teachers already have, but it is a rather top-down prescriptive change in practice

that is being advocated (Lea, 2011).This promotes a hierarchical discourse where academics as the prime users of e-learning discourses are marginalised. The policy becomes prescriptive.

8.2.1.5 ICTs as neutral tools that serve the curriculum

There is a dominant discourse of instrumentalism in the policy, which views ICTs as neutral tools that are meant for serving curriculum subjects, as noted in the policy in Extract 5. The attitude that is mostly prevalent in the policy is didactic, stemming from the idea that the use of technology in teaching necessitates the introduction of new, didactic, teaching methods. Aviram and Tami (2005:183) suppose that this attitude usually manifests itself among those who adhere to the constructivist methods of teaching and learning. This view is based on the assumption that changes in teaching and learning in HEIs are inevitable and needed.

8.2.2 Text analysis

This section examines the linguistic choices policymakers draw upon to reflect certain ideological views on the role of ICTs in education. The section discusses the vocabulary, text genres and discursive types used to enunciate certain views on the role of ICTs in education. Unedited text taken from two extracts of the policy is analysed.

Text 1- The internal environment impacting on teaching and learning with ICTs at University B

Text 2- The goals and objectives of the e-learning strategy

An analysis of Text 1 and 2 follows after the extracts and a discussion on the textual analysis of both texts.

Text 2: Goals and objectives of the e-learning strategy

Table 8.2 Analysis of Text 1, University B

Ref.	**Text: Internal environment**	*Micro* **Description** **(Text Analysis)**	*Link* **Explanation** **(Discursive Practice)**	*Macro* **Explanation** **(Social Practice)**
1	The university is a national university, alert to its African and international context as it strives to be a place of quality, a place to grow.	Establishment of the university's position in the African and international context *factual information* **(SG2)** This will impact on the discourses that follow	*legitimisng* **(DT2)**	Legitimising the university's position National university aware of its local and international context
2	It is committed to excellence in teaching, learning and research, to nurturing the	Society in transition is not explained.	*awareness of cultural complexities*	Positioned amongst diverse cultures, notes

	cultural diversity of South Africa, and to responding in critical and creative ways to the needs of a society in transition.	Transition suggests change. The change is mystified and not explained. The change from the text it seems is greatly substantive *factual information.* **(SG2)**	*legitimising* **(DT2)** *substantive discourses*	the complexity of cultural differences in teaching and learning Substantive role of ICTs in teaching - serving a society in transition, as if technology is here and it is changing society
3	Drawing on its proud experience in the liberation struggle, the university is aware of a distinctive academic role in helping build an equitable and dynamic society.	Before the cause of transition is introduced, other discourses are introduced on equality.	***Determinism*** *Discourse on equitable access* *Acknowledging digital divide* *Corporatism **(DT4)***	
4	E-learning can impact on this mission directly, particularly through the graduation of students who are competent in the relevant **digital academic literacies**.	**Substantivism**	***Determinism*** *evident in learning society discourses* *Persuasion **(SG4)***	
5	Excellence in 'teaching, learning and research' will *only* be possible in the 21st century through the effective use of technology within the academic programme.		*factual information* **(SG2)** *Technological optimism* **(DT5)**	
6	In helping to build 'an equitable and dynamic society', the university will need to draw on ICT to enable us to jump beyond the disadvantages of apartheid education, because correctly applied according to socially and educationally sound principles, technology can transform teaching and learning for the better and have an impact on the broader society.		*Persuasion **(SG4)*** *Technological optimism **(DT5)***	

Table 8.3 Analysis of text 2 University B

Ref.	**Text: Goal and objectives of the e-learning strategy**	*Micro* **Description (Text Analysis)**	*Link* **Explanation (Discursive Practice)**	*Macro* **Explanation (Social Practice)**
1	Provide and promote the technology to enable University B to produce graduates who are able to use technology to find, understand, apply, analyse, synthesise, evaluate and report on information from a wide variety of sources and who are competitive for 21st century careers.	Buzz words 21st century careers	*Determinist* goal, provision of technology, promotion of technology *Learning society discourses* of graduate competencies *Globalisation* to use	

			technologies to win competition, global, economic, rational *Technocracy* **(DT1)**	
2	Technology will be used to facilitate the transformation of teaching and learning according to a constructivist paradigm, leading to active and independent learning (digital academic literacy).	Words like 'transformation' 'leading to' Such words provide a momentum which appears to describe a process that is desirable and unstoppable, inevitable.	*Determinism* Constructivism *Essentialist* discourse of academic literacies *Educational change* discourse present *technological optimism* **(DT5)**	
3	Learners will have access to information from a wide variety of sources, including print and digital media.		*Access discourse* *Pragmatism* ***(DT6)***	
4	Learners will be encouraged through technology to become independent learners.	Buzzwords 'independent learners'	*Technological optimism* ***(DT5)***	
5	Academic staff will have the skills and technology needed to develop and manage constructivist courses that include access to and use of ICTs.			
6	The learning management system will be used for the tracking and mentoring of undergraduate and post-graduate students.		*Managerialist discourses,* LMS as management tool *Pragmatism* ***(DT6)***	
7	Academic staff will produce high quality learning content that, wherever possible, will follow the open-content philosophy			
8	Management information systems and online learning systems will be linked so that the right information is available when it is needed in the format in which it is required.		*Managerialist discourses,* LMS as management tool *Pragmatism* ***(DT6)***	
9	Each student who graduates from University B will demonstrate a digital academic literacy appropriate to their field and level of study	Digital academic literacies	*Essentialist discourse* *Technological optimism* ***(DT5)***	
10	The university will use technology effectively to help grow the enrolment of learners, freed from geographic and timetabling restraints, and to deliver life-long learning opportunities to students and alumni.	Words such as 'lifelong learning'	*Pragmatism* ***(DT6)***	

11	Student access to computing labs will be extended to 24/7 for those labs where demand exists and it is feasible.		*Access discourse*	
12	The university will develop a forward-looking approach to the provision of audiovisual services in support of teaching and learning.		*Deterministic* Provision of technology **Technocracy (DT1)**	
13	Technology will be used to facilitate the recognition of prior learning.			
14	Digital library services will be integrated with learning management systems.		*Corporatism* **(DT4)**	
15	The university will maintain its investment in the LMS and will continue to build a community of practitioners and researchers around this tool, which will be kept free (open source).		*Instrumentalism,* View of the LMS as a tool. *Corporatism* **(DT4)**	

Discussion on the analysis of Text 1

The vocabulary used in Text 1 draws from a number of emergent terms such as 'digital academic literacies', 'the global information highway', 'equitable and dynamic societies'. These words are indicative of the globalisation discourse. Certain words are used to emphasise the need for educational change. Change is captured in words like 'jump', 'transform', 'impact', 'dynamic'. The policy also draws upon emphatic words and statements such as 'will only', 'it is difficult to imagine', 'nothing can', 'must possess', 'have the required'.

Looking at the text genre in the analysis of Text 1, one notes the presence of a legitimising text genre. The language of political text genres such as that found in political speeches is a language that seeks to legitimise a certain practice (Thompson, 2005). Such language is also evident in other political text genres such as policies and policy statements. Policy texts tend to stress the benefits of the issue discussed as being beneficial to society at large. E-learning at the university is presented as being beneficial to a larger society, as evidenced in Ref. 2 and 3.

> **Ref. 2** It is committed to excellence in teaching, learning and research, to nurturing the cultural diversity of South Africa, and to responding in critical and creative ways to the needs of a society in transition.
>
> **Ref. 3** Drawing on its proud experience in the liberation struggle, the university is aware of a distinctive academic role in helping build an equitable and dynamic society.

Rojo and Van Dijk (1997:528), in their analysis of a speech by a Spanish Secretary of the Interior, legitimating the expulsion of African illegal migrants, averred that:

> The most crucial element in most social and political legitimation is that a powerful group or institution . . . seeks normative approval for its policies or actions. In such legitimating discourse, institutional actions and policies are typically described as beneficial for the group or society as a whole.

The policymakers' intentions are not known, but words are carefully chosen to explicate their intent. The introductory part of the policy (Table 8.2, Text 1, Ref. 1) establishes the legitimacy of the position of the university as a national university in an African context that strives for quality and growth. This position is important for the discussion that will follow. It appears that in addressing the environment-impacting e-learning at University B, the policymakers knowingly or unknowingly have legitimated certain macro-level power relations in practice. The university first positions itself as a national university in an African context with an apartheid past and a diverse culture in the macro-column, reaffirming its role in serving an equitable and dynamic society.

University B positions itself in the African context as a university which is aware of the need to serve various cultures and which has a history of struggle against apartheid. This position is important in constructing a determinist view on the role of ICTs in teaching. E-learning is seen as a way to achieve the mission of building an equitable and dynamic society. Persuasive language is used to encourage the university to draw on ICT to enable the university to 'jump' beyond the disadvantages of apartheid education and 'transform' teaching and learning. The value of technology in teaching is implied to the broader society. Looking at Text 2 and its preceding analysis**,** the goal and objectives of the e-learning strategy at University B were adopted from the goal and objectives of the Integrated Information Strategy (IIS) that had been developed in 2002. Most of the efforts at the time were directed towards infrastructure and organisational issues.

8.3 A CDA of the Ed-Tech policy at University C

The educational technologies policy at University C was developed between 2003 and 2004 and is a publicly available policy on the university website. The purpose of the policy is to make explicit the position that the university takes with regards to the application of technologies in teaching and learning. The

document also suggests how the principles expressed in the policy may be put into practice by policy stakeholders.

The development of the educational technologies policy at the university in 2003 ran parallel to a number of activities that led to the establishment of a new centre for educational technology. The policy was developed at a time when there was evident growth of work being done across the institution, using educational technologies to support teaching and learning on an unprecedented scale (Draft framing document, 2003).The university was also responding to pressure in the form of competition and growth in the area of educational technologies from other South African and overseas institutions (Draft framing document, 2003). The culmination of a grant supporting work over five to six years by the Multimedia Technology Group [MEd-Tech Group] provided an opportunity to rethink the location of a rich institutional resource within the university teaching, learning and research missions that would support educational technologies.

At this point, the university saw the need to take educational technologies seriously for a number of reasons:

> -Because the institution was promising students a quality world-class educational experience
>
> -Because graduates require technology-related competencies
>
> -Because everyone else was doing it
>
> -Because of the technology itself
>
> -Because the university aimed to be residential and flexible
>
> -Because ICTs were a central part of the debates about knowledge production, curriculum, teaching and learning in higher education
>
> (MEd-Tech Group Report, 2003)

A report on some consultations that were done in 2003 at the university revealed that all the academics felt that there was need for an educational technology unit, but there was no consensus on where such a unit would be located. The possibilities mentioned were:

- maintaining its current position within CHED
- locating it in the faculties
- a collaboration between ICTs and CHED, or between ICTs, CHED and the Education Department

The key values and principles behind establishing the unit were to consider the needs of students' learning as the primary driver (rather than teaching or technology). Key stakeholders of the policy critiqued this point, with others disagreeing to making teaching subservient to students' needs. Policymakers agreed on the integration (rather than add-on) of technology into the curriculum, also on integration of staff development or support, curriculum development, technology and research (rather than conceptualising these as separate dimensions.)

8.3.1 Discursive analysis

The dominance of technologically deterministic discourses was noted in the previous policies analysed. The analysis showed how ideological ideas on the role of ICTs in teaching were presented in various ways as objective truths that could not be questioned. The dominance of technologically deterministic discourses undermined alternative critical views of thinking about the relationship between ICTs and education. In the following analysis of the Ed-Tech policy at University C, the researcher argues that the policy was largely informed by a discourse that offers a more critical theorisation on the role of ICTs in education. Such a discourse challenges technologically deterministic discourses.

8.3.1.1 Critical discourses on the role of ICTs in education

To be critical basically means to be more discerning in recognising faulty arguments, hasty generalisations, assertions lacking evidence, truth claims based on unreliable authority, ambiguous or obscure concepts and so forth (Burbles & Berk, 1999). Critical thinking is based on the belief that people do not sufficiently analyse the reasons by which they live, they do not examine the assumptions, commitment and logic of daily life. In university, contexts meetings are held every day and committees are formed, major decisions are made concerning technologies, but the views of policymakers are hardly brought under critical scrutiny to understand their implications for teaching and learning. Critical theorists provide a platform for examining a people's beliefs with the view that, when we do not examine the ideas behind our actions, we are not free, we act without thinking about why we act and thus do not exercise control over our own destinies (Burbles & Berk, 1999).

Critical discourses respond to ideological discourses of 'mythical inevitabilities' of technology by offering an ideological critique of what has been taken for granted or presented as a matter of fact (Friesen, 2008). A critical discourse compares those ideas that have been offered as commonsensical in the policies with the social and cultural conditions to which they pertain. In a critical discourse, ideas are placed in their historical

context and situated in the complexity of a larger social background. In the field of e-learning, there are statements and ideas that are used to legitimate or promote particular priorities and perspectives in the field (Friesen, 2008), as observed in the preceding analysis. A critical perspective subjects these claims to critique, highlighting their contested or ideological nature.

In the discussion that follows, this thesis reflects on three dominant ideas of critical thinking that are characteristic of the dominant discourse that shaped the educational technologies policy at University C, as summarised in Table 8.4.

Table 8.4 Dominant ideas of a critical discourse on the role of ICTs in education

Dominant ideas of critical theory	Explanation
1. Educational innovations confront us with choices, not with a single destiny (Feenberg, 2001).	In critical theory, the means (technology) affects the ends (human purposes), but human purposes (ends) also influence what technologies (means) are developed.
2. Technology is human controlled and value-laden (Feenberg, 2001).	Technology is shaped by society. HEIs have agency in devising the kind of solutions they implement in their contexts.
3. Reflecting on a larger context of technology	The debates for and against technology should focus on the deeper social issues underlying our technological choices, they should be framed in a broader context because the issues which HEIs should contend with are not merely technical (Feenberg, 2001).

a) Educational innovations confront us with choices, not with a single destiny

The Ed-Tech policy at University C takes a critical view of ICTs in education. In critical theory, the means (technology) affects the ends (human purposes), but human purposes (ends) also influence what technologies (means) are developed (Friesen, 2008). This relationship between technology and humans is enunciated in a number of instances in the policy, for example, the policy recognises that specific courses require different types of flexibility. It does not advocate for a one-size-fits-all approach (Extract 1, Appendix 7).

Drawing comparisons from the previous policies, it was noted that the e-learning strategy at University A promoted the LMS as the main instructional approach for e-learning. University B policy, likewise, was also explicit in its support for the constructivist approach to learning. In the two previous policies, there is no consideration of the specific teaching and learning needs; discourses on pedagogy are silenced. The instructional approaches favoured were more prescriptive, narrowing the discursive space for e-learning. It

was observed, from the analysis of the Ed-Tech policy at University C, that the policy opens up space for constructive deliberation on what technology solutions to apply to different teaching and learning problems, taking cognisance of various contextual and situational differences. The policy states that the requirements of specific learning and teaching situations should drive the selection of appropriate technology (University C, 2004). Feenberg (2001:86) avers that "decision making about paths of technological developments in education is often a process full of conflict," He notes that each situation in education is confronted by actors who believe that their solution will be the best, hence implicating themselves in rational deterministic approaches to decision making. However, technological innovations in education confront educators with choices to teach in certain ways, not with a single destiny.

b) Technology is human controlled and value laden

Views that are influenced by critical thinking conceive of technology as human controlled and value laden (Feenberg, 2003). To further explain the two concepts, Rambe (2011:275) avers that being human controlled implies that humans can appropriate technology to advance certain purposes (e.g., the exercise of power and influence). Humans can also appropriate technology to activate new unanticipated uses. HEIs have agency in devising the kind of e-learning solutions they implement in their contexts. Critical theorists believe that rational, scientific and technological rationalisation about the relationship between technology and society runs the danger of taking social life for granted and reflecting only on the technical issues that affect teaching and learning. The Ed-Tech policy warns against HEIs implementing e-learning approaches that are driven by technological 'bells and whistles' (Extract 2, Appendix 7).The policy shows that the use of ICTs for teaching and learning must be driven by sound pedagogical principles and the needs of the institution's students and staff, facilitated by technological advances (University C, 2004).

c) Reflection on the larger context of technology

A critical rationality is able to reflect on the larger context of technology (Feenberg, 1991). The problem with discourses that inform e-learning policy debates in HEIs in South Africa is not on whether the technologies will be used, but on how they will be used. The debates for and against technology should focus on the deeper social issues underlying our technological choices, it should be framed in a broader context, because the issues which HEIs should contend with are not merely technical (Feenberg, 2001).The critical theory of technology argues that the issue is not the technology or progress per se, but the variety of possible technologies and paths of progress from which we must choose (Feenberg, 1991). The Ed-Tech

policy problematises the relationship between ICTs and the university's courses and programmes, unlike in the other two universities. Instead of prescribing a single path to follow, the policy offers three different paths from which University C will choose to focus its educational technologies interventions, based on the problem that the policy was addressing (Extract 3, Appendix 7).

The Ed-Tech policy at University C avoids an attitude that assumes that technology should be analysed only or in relation to itself, as seen in previous deterministic accounts. The Ed-Tech policy is mostly attentive to the ways in which social structures shape opportunities and constraints for the use of technologies in teaching and learning. The Ed-Tech policy recognises that there are a range of educational approaches, technologies and learning environments (Extract 4, Appendix 7).

8.3.2 Text analysis

Two extracts were drawn upon to analyse the text genres used in the policy and how they enunciate certain discourses and particular discursive types, namely:

Text 1: The rationale for an Ed-Tech policy

Text 2: Categories of courses

Table 8.5 Text 1 Rationale for an Ed-Tech policy

Ref.	**Rationale for an educational technologies policy**	*Micro* **Description (Text Analysis)**	*Link* **Explanation (Discursive Practice)**	*Macro* **Explanation (Social Practice)**
1	The reasons that the university needs an educational technology policy with associated strategies, and needs to make explicit its support for the use of ICTs in teaching and learning in the institution, relate directly to the institutional mission, and to current strategies for achieving that mission. The main reasons are summarised here.	*Factual information (TG2)*	*Legitimacy* **(TD2)**	Positioning e-learning in line with the institutions mission promotes a managerial focus (Le Grange, 2004).
2	The university promises students a rich, world-class learning experience. Educational technologies are an essential part of that experience, enriching and supporting the curriculum.	Words like 'world class', 'rich', 'enriching' Persuasive (TG4)	*Technological optimism* ***(DT5)*** Affordances of technology in academic engagement	
3	The university has an expressed commitment to a diverse student body, including students from academically disadvantaged backgrounds and students with different learning styles	Variety of learning styles	Proposes learner-centred pedagogies *Discourses of the digital divide*	ICTs seen as providing equitable access to education. Elision of contextual differences that have previously

	and needs. ICTs provide extra resources and strategies for addressing that diversity.		*Technological optimism **(DT5)***	resulted in some learners being disadvantaged, historically entrenched and socio-economic differences in the South African society
4	The university recognises that it has an obligation to respond to student needs and expectations, and simultaneously to narrow the digital divide. This means being able to respond to both the expectations of those students who have grown up digitally as well as those who may be digitally illiterate.	The digital divide is expressed in words like 'grown up digital', 'digitally illiterate'.	*Digital divide discourse, access* Legitimacy **(DT2)** The policy maker assumes an authoritative role by deconstructing and constructing concepts 'grown up digital' 'digitally illiterate'	Being a competitive HEI in Africa, University C serves a diverse student body consisting of students from academically disadvantaged backgrounds, those from good economic backgrounds and international students. Issues of race etc. Socio-economic divide still exists
5	In order to maintain its position as a leading national higher education institution, the university has not only to keep up with the competing institutions (most of which are actively pursuing the possibilities of educational technologies), but should also aim to lead the way in terms of innovation and effectiveness.	'leading' 'keep up' 'lead the way' 'effectiveness'	Neo-liberal discourse of competitiveness and effectiveness	
6	While the university remains committed to being a residential institution providing a high-contact experience, it recognises that specific course objectives require flexibility and that educational technologies can support flexible delivery.		Critical discourse **(New DT)** a recognition that course objectives should drive the choice of technology (technology is human controlled)	Acknowledgement of face-to-face instruction
7	It also recognises pressures on existing space as well as uneven use of space, and acknowledges that ICTs can ease these pressures.		*Pragmatism* **(DT6)**	The massification of HEIs has resulted in space problems.

Discussion on the analysis of Text 1, Table 8.5

The rationale for having an Ed-Tech policy is seen as part of achieving the institution's mission. Promoting e-learning in line with the institution's mission promotes a managerial focus (Le Grange, 2004). A hierarchical discourse is promoted where the institution becomes the authoritative voice, legitimising its

position. The policy was created also to respond to the pressure from other HEIs in South Africa which were already using ICTs in teaching. The policy expresses optimism over the affordances of technology, captured in words like 'world class', 'rich', 'enriching' (Ref 2). These words are associated with a persuasive text genre. However, the policy switches from a technologically optimistic discourse to a discourse that is mindful of learner needs, focusing on learner centred pedagogies (Ref 3). This discourse is critical in that it acknowledges the variations in the learning styles of learners.

In Ref 4, the policy discusses the digital divide, a common theme in deterministic discourses. A legitimacy (DT2) discursive type is adopted in this instance. The policymakers assume an authoritative role over policy stakeholders by constructing and deconstructing concepts to legitimise the position expressed. The policy avoids relying on overly deterministic accounts of the digital divide which see a straightforward cause-effect relationship between the provision of electronic technologies and learning. The policy is cognisant of the diversity of learners served by the university. These learners consist of learners from academically disadvantaged backgrounds, students who have been 'born digital' and from a good socio-economic standing, and international students from Europe and America whose experiences with technologies could have been different from South African learners. In addressing students' needs, the policy also addresses that diversity.

Another critical thought raised by the policy is the recognition of the diversity in the learning styles of learners. The policy does not adhere to 'anytime, anywhere' discourses that have pervaded e-learning literature. Instead, the discourse of flexible access is problematised. Specific course objectives should drive the choice of technology used (Ref 6) instead of relying on technological 'bells and whistles'.

Table 8.6 Text 2 Categories of courses

Ref.	**Categories of courses**	*Micro* **Description (Text Analysis)**	*Link* **Interpretation (Discursive Practice)**	*Macro* **Explanation (Social Practice)**
1	[University C] encourages and is committed to enabling the innovative and effective use of ICTs for teaching and learning in University C courses and programmes. Three categories describe the possible relationship of ICTs and University courses or programmes.	Persuasion **(TG4)**	*Pragmatism (DT6)*	The relationship between ICTs and university courses is problematised. three practical solutions are offered. Technology confronts us with choices.

2	ICT-supplemented (The focus here is on supporting overall course management, and would generally involve course management, administration, information sharing and other organising activities.)		*Instrumental discourse uses determinism*, a focus on the uses of ICTs for managerial functions. *Techno-optimism (DT5)*	Initial level of ICT integration where the LMS is used for course management and information sharing
3	ICT-curriculum integration (The focus here is on the curriculum. ICT activities directly relate to and support curricular objectives and teaching/learning activities.)			
4	ICT-based courses (These would be online courses which range to the extreme of little/no face-to-face contact. They are likely to support flexible learning.)	Humour (TG3) The extreme of little or no face-to-face contact is pointed in a light almost comic way. Subjugation of local experience to western discourses of entirely online courses. *Use of normalisation* A supposedly extreme position that could result in policy recipients questioning the position taken (no face-to-face contact) is normalised by quickly pointing the policy recipients to the likelihood of such an approach supporting flexible learning	*Legitimacy* The policymakers assume an authoritative voice over policy recipients by constructing and deconstructing concepts and suggesting possible outcomes. The concept of ICT-based courses is defined.	
5	The decision regarding the kind of course and the category into which it falls should be made on the basis of the course objectives.	Factual (TG2)	Critical discourse Technology confronts us with choices	
6	That said, the university encourages all courses to be ICT-supplemented at the minimum, which means that the course should have at least: A course website Course outline available online Links to appropriate websites This is already happening to a significant extent. The development process should be scaled up to include all courses.	Persuasion (TG4) University C as active voice portrays dominance over alternative viewpoints.	Pragmatism (DT6) Legitimacy (DT2) Legitimately advising/encouraging all lecturers to ensure that their courses are ICT-supplemented at least	

Discussion on the analysis of Text 2, Table 8.6

Text 2 explores three possible options available for academics to use educational technologies in teaching the university's programmes. The policy suggests three approaches namely; 'web-supplemented', 'curriculum integration' and 'web-based' (Ref. 1). These varied approaches all tell a story of how the role of ICTs in teaching and learning was conceptualised by policy actors. Unlike the previous two policies, the Ed-Tech policy specifically problematises the relationship between technology and the university courses. The dominant policy discourse is marked by an acknowledgement that humans shape technology and that technology confronts us with choices. The three choices identified point to a certain level of optimism and caution with regard to the integration of ICTs into the university's courses.

A persuasive text genre is used in Ref. 1 – 'The university encourages' 'is committed'. Policymakers who propose a web-supplemented approach take a cautious approach where teaching and learning take place in traditional lecture halls and are supplemented with face-to-face tutorials. The technology's use in this context is mostly supportive. This approach allows the learner to choose to learn, using technology on a voluntary basis, or to rely on what is provided by the lecturer in a physical classroom space. This approach includes the use of email, course outline, calendar, announcements, marks and readings posted online. Such an approach promotes teacher-centric pedagogies where content is dumped in the course site. This view compares with the view adopted by policymakers at University A, who focused more on online web presence and feeding the LMS with content. Such instrumental uses of the LMS result in the promotion of pedagogies that are based on fixed content. However, at University C, this marks the initial approach that University C academics can take in ensuring that they use ICTs in teaching their courses.

Pertinent issues raised by this approach include appropriate levels of standardisation, centralisation and devolution. The second approach adds value to the curriculum by ensuring that technology supports specific teaching and learning activities. Students are likely to suffer if they do not have access to the added value provided by the technology. In this instance, a critical discourse emerges where technology is seen to also promote exclusion. This approach includes the use of such technologies as digital videos, chats, discussion forums, simulations, etc. It would be impossible to do the course without access to ICTs, as students are expected to publish, present and create. A student may not be able to engage in discussion forums without access to the technology. Also, in this instance, access is not only hindered by physical

access but by a number of socio-economic, cultural issues, such as literacy levels, ability to use the technology, affordance of technology and availability of the technology for student access.

The web-based courses approach is a western idea that has infiltrated the African context. Access to technology is compulsory if students are to engage in these courses; there are general concerns about exclusion in the African context where some learners from economically-challenged backgrounds may not have access. This view treats the Internet as a neutral medium that can deliver learning from any place and time. The Ed-Tech policy of University C also touches on co-existing social media platforms with LMS to support educational needs. This view contrasts with the attitude shown by University A policy which regards social media technologies as a security threat.

8.4 Summary

Through the analysis, the researcher observed how macro-level power structures in South African society, driving the use of technologies in teaching, are replicated at the micro-level of institutional practice, threatening to narrow constructive debates on how institutions can use ICTs in this context. It was noted that policy actors draw upon macro-discourses of ICTs in education to inform institutional e-learning policy-making processes. It is not easy, however, for a CDA analysis to reveal the level to which the actors are conscious of their actions and views that seem to be replicating discourses that operate at the macro-level structures of higher education transformation using ICTs in South Africa. As a result, the researcher cannot claim through these findings that the discourses which informed the policies analysed were a set of conscious, deliberate, calculated formulations or choices on the part of policymakers. Much of policy making happens without actors putting much thought to the theories informing their thought processes.

The dominance of deterministic discourses in e-learning policies in South Africa needs further investigation. By providing a case for situated practice, the relationship between e-learning policy discourses and policy formulation processes in HEIs can be explored further. The next chapter investigates the relationship between policy formulation processes at the three universities and their resultant e-learning policies, to understand how the composition of actors and their views on the role of ICTs in teaching and learning shaped the views expressed in the policies.

CHAPTER 9

THE RELATIONSHIP BETWEEN POLICY-MAKING PROCESSES AND E-LEARNING POLICY DISCOURSES: A DISCUSSION

9.0 Introduction

Having explored the policy-making processes and e-learning policy discourses in Chapters 7 and 8 respectively, Chapter 9 accounts for the discourses embedded in e-learning policies and discusses how they are mediated by internal and external factors, stakeholder ideological frames and values, power and institutional processes in a given context. In doing so, the discussion offers an explanatory critique of the relationship between policy-making processes and e-learning policy discourses.

The analysis showed that the e-learning policy at University A and the E-learning Strategy at University B had a dominance of technologically deterministic and instrumental discourses. Ideological ideas on the role of ICTs in teaching were presented in various ways as objective truths that could not be questioned. The dominance of technologically deterministic discourses at University A and B undermined alternative critical views of thinking about the relationship between ICTs and education. Contrary to the first two universities, the Ed-Tech policy at University C had the dominance of a critical discourse which questions the role of ICTs in pedagogy by framing issues under a comprehensive learning technologies frame.

A CDA study should not simply describe realities, but seek to explain them as effects of structures or forces which the researcher seeks to understand (Fairclough, 2013).This discussion centres more attention on understanding how various facets of policy making at the universities shaped the discourses found in the policies. By deconstructing the discourse, it is hoped that a new alternative discourse that informs e-learning policy discussions may be introduced. Hajer (2003:191) averred that discourse analysis:

> . . . can allow for detailed analyses of particular problem solving practices that could promote an understanding of the intricacies of successful policy deliberation in a discursive polity and a new understanding of what features constitute a good policy deliberation.

One way to understand the relationship between policy-making processes and e-learning policy discourses is to explore the discursive construction of e-learning as a policy problem brought to the agenda of institutional policy making at the three universities.

9.1 Factors impacting the discursive construction of e-learning as a policy problem in HEIs

This section discusses the relation between policy problem construction and e-learning policy discourses. E-learning policy making starts with the identification of the policy problem and it is at this stage that discourses, values, ideological assumptions and views which frame the policy problem are located. At the initial stages of policy-making processes (such as drafting), it is essential to note who has the power to define the agenda in a policy, as dominant discourses work by setting up the terms of reference in policy issues and marginalising alternative discourses (Shore & Wright, 1997). Dominant discourses have the power to define the issue about which policy is made, provide the framework in which alternatives are considered and influence the options which are chosen (Sutton, 1999).

At the initial stage of identifying e-learning policy problems, findings showed that various internal and external factors influenced the identification of e-learning as a policy problem and brought the idea of teaching with technologies to the mainstream of university teaching policy. Findings showed that there were various antecedents and pressures that led to the development of e-learning policies at the three universities. First, e-learning policies were meant to coordinate the diverse efforts on the ground to integrate technologies into teaching. To understand the relationship between policy-making processes and e-learning policy discourses, it is essential to examine the practices within which discourse is produced.

9.1.1 Existing practices to integrate technologies in teaching

At all institutions, e-learning policies were not formulated in a vacuum, but rather they developed in environments that already had some practices on the ground to integrate technologies in teaching in various forms. Conole (2007:288) argues that "policy and practice in e-learning are interwoven". E-learning policy problems do not result by themselves but, rather, they are constructed by individuals or the institution that decides that the integration of technologies into teaching and learning processes is problematic and proposes ways to address these problems. The majority of policy issues are an interrelated set of problems defined by different groups or coalitions that adopt knowledge to satisfy personal, institutional and structural imperatives (Aragon-Durand, 2009).

As a consequence, addressing e-learning policy problems is not a case of solving static problems or conditions but, rather, it is a case of addressing a sequence of events in an institution, entrenched practices, values and beliefs. According to Dremel and Matic (2014:155),

> "Seeing discourse as social practice enables us to combine the perspectives of structure and action, because practice is at the same time determined by its position in the structured network of practices . . ., a domain of social action and interaction that both reproduces structures and has the potential to transform them."

9.1.2. E-learning policies as a response to practices on the ground

The findings showed that e-learning policies developed at Universities A and B were 'reactionary', prompted by practices on the ground. Although the findings at University C showed that the institution was concerned about acknowledging existing work to integrate technologies in teaching, interviews at University C showed that the Ed-Tech policy was formulated in hindsight to pave the way for the work of a new centre on educational technologies, taking a 'proactive' stance. A discussion behind e-learning policies being either 'proactive' or 'reactionary' is not to argue for a better evolution of a policy but, rather, to understand how the context surrounding its development relates to the discourses embedded in the policy.

The literature notes that 'reactionary' policies are developed as a response to a concern or problem, whilst 'proactive' policies are developed to prevent any concerns from arising (Lambrechts, Demeulemeester & Herroelen, 2008). At University B, the policy was formulated as a response to a request lodged at senate to review all computer literacy programmes that were being offered to learners. Similarly, at University A, following the findings made by the national quality assurance body that the LMS was not being used, the policy was framed to promote the use of the LMS and to curtail the usage of other technologies falling outside the jurisdiction of the LMS. As observed from the findings, this kind of framing resulted in conflict and resistance, as academics continued to use social media technologies that were not supported by the LMS. The major concern with reactionary policies is that they address a particular issue and are meant to resolve conflict; hence reactionary measures are often suggested to remedy the problem.

Proactive policies allow policymakers to frame issues comprehensively and to lead the argument (Jerit, 2008). Similarly, as seen from the findings at University C, a comprehensive learning technology frame was adopted to discuss the formulation of an Ed-Tech policy. A proactive approach avoids an issue-framing approach where the policy problem is reduced to particular issues, but rather it is left open. University C took a cross-faculty approach. Policy actors at the university gave a strong case for faculty involvement in e-learning to ensure that, through the e-learning policy, the new Centre for Educational Technologies would provide ongoing support. Esterhuizen and Blignaut (2012) caution institutions in South Africa against following reactionary interventions on e-learning as opposed to ". . . pre-emptive un-obstrusive seamless

support, based on requirements identified through bottom-up feedback, listening to latent requests by participants."

9.1.3 E-learning champions as a driving force in e-learning policy discourses

Findings at University B showed that e-learning champions play an important role in motivating for the adoption of e-learning at institutional level and having a policy to that effect. However, as seen from University A and C, e-learning policies can still be developed, even in the absence of champions, but that does not downplay the critical role played by champions. Measuring the impact of a champion alone in e-learning policy making is difficult as there are other variables in the context that influence their work. The champions play a facilitative role, they achieve cascading or flow-on effects from their activities over time, which are not all explicit or measurable (Jolly et al., 2009). An e-learning champion can help to build conversations and discourses around e-learning which could ultimately lead to e-learning being considered on the institutional policy-making agenda. Keats (2009:49) described his involvement with e-learning at the University of Western Cape at a time when there were no financial resources to accomplish the work:

> Amidst the turmoil there was hope . . . a number of us established a round table that put academic computing, the Internet and World Wide Web firmly on the institutional agenda and created a portfolio for an executive to lead e-learning.

Similarly, Czerniewicz, et al. (2007:57) pointed out that "a supportive champion is an important element in the power play of interests, legitimacy and growth . . . where e-learning is being driven by champions they often drive the discourse". The e-learning strategy should be driven at the highest level of the university, getting buy-in from departmental leaders, referred to as e-learning champions (Stoltenkamp et al., 2007). According to Stoltenkamp et al. (2007:145), the involvement of champions in driving the e-learning strategy models behaviour make e-learning an initiative that many more would want to pursue. However, when a champion is involved, some literature warns that in order to guard against the dominance of certain discourses and the marginalisation of others, there is need for institutions to engage in evidence-based e-learning policy-making approaches that rely more on scientific evidence rather than individual opinions (Gatimu, 2008).

Findings from University B showed that, for a champion to be effective, they should be senior enough to be involved in major committees at the highest level of decision-making in the university. The champion at

University B was a member of the Executive Committee of Council. Given the complexity and intensity of the work, writing about the qualities of e-learning champions in Small and Medium Scale Enterprises (SMEs) in Canada, Roy (2015:448) argues that some of the qualities of a champion include high credibility and knowledge of e-learning. The involvement of e-learning champions in strategic decision-making processes in the university helps the ideas to be considered at the highest level of decision making (Keats, 2009).

Findings at University B also confirmed a previous finding in the literature that champions thrive in environments where there is strong management allowing their ideas to grow (Jolly et al., 2009). At University B, the e-learning champion enjoyed the support of management as his ideas were backed by the Vice Chancellor. Similarly, national consultations on the role of e-learning champions in embedding e-learning, conducted in Australia, showed that the nature of management support required includes policy support, budget support and a responsive IT department (Jolly et al., 2009). In the case studies conducted in Australia, the need for 'management buy-in' was mentioned by all e-learning champions interviewed (Jolly et al., 2009).

9.1.4 The role of strong institutional leadership in e-learning policy making in HEIs

One of the internal factors affecting the development of e-learning policies in HEIs is the presence of strong institutional leadership that supports and creates a common vision for e-learning. E-learning policy should be legitimised through visible commitment from the university as institution (Esterhuizen & Blignaut, 2012). In all three cases a number of individuals displayed strong leadership in e-learning policy development through various contributions and initiatives. The Vice Chancellor at University B introduced the idea of digital engagement. The literature argues that gaining the support of top management is important in driving an e-learning strategy (Stoltenkamp et al., 2007). A strong vision for learning enabled by digital technologies can be co-constructed by management through conversations with staff. Altunisik (2012:539) argues that university leadership is faced with a challenge because traditional teaching mentality predominantly prefers face-to-face teaching. In-order to implement e-learning programmes successfully in universities, a clear and insistent leadership style plays a critical role (Altunisik, 2012).

9.1.5 The implications of donor funding on e-learning policy making in HEIs in Africa

As early as 2007, most countries in Africa had moved from a phase of experimentation with e-learning in education in the form of donor-supported, small-scale, pilot projects towards a more systemic engagement informed by national government policies on how to integrate technologies in education (Glen & Isaacs,

2007). Most governments in Africa prioritised developing national ICT policies in education, despite the process being complicated (Glen & Isaacs, 2007:7). In countries with no national policies, institutions were urged to develop their own policies (Glenn & Isaacs, 2007). Donors played an important role in facilitating the development of national policies in education. Their impact was seen in many plans in terms of the detail in purposes, outcomes, performance indicators, monitoring and evaluation strategies, and implementation strategies. The plans developed by South Africa, Kenya, Mauritius and Rwanda are exemplary in that respect (Glenn & Isaacs, 2007).

At University C, donors built the capacity and expertise to develop a group that conducted research and acquired expertise in e-learning. Likewise, at University B, there was evidence of donor support in six e-learning projects led by the champion. Donors play a critical role in e-learning policy making because the funding helps to action the policies. As noted from the findings at University C, donor support posed a challenge in implementing institutional policy reforms in e-learning, as it was difficult to please both the donor and the institution at the same time.

Glen & Isaacs (2007:14) observed that institutional policy development in HEIs in Africa is being supported by the association of African universities, regional bodies such as the Inter University Council for East Africa, and through a growing number of partnerships with foreign universities in North America, Europe, Australia and, more recently, India. The literature argues that African countries are often under additional pressure to be accountable to the developing countries that fund these policy-making processes (Duncan-Howell & Lee, 2008).

9.1.6 Contribution of the national quality assurance body to discourses on e-learning in HEIs

The increasing requirement for quality assurance has led to the need for HEIs globally to provide evidence of the quality of their educational provision and to establish a mechanism for monitoring and evaluating the creation and delivery of courses (Conole, 2007). The discourses of quality and equity in education have permeated the international debates about education (Braathe & Otterstad, 2014).With the growing demand for e-learning, along with striving for excellence associated with globalisation, there are worldwide calls for enhancing and assuring quality in e-learning, specifically in the context of developing countries (Masoumi & Lindstrom, 2012).

At University A, the involvement of HEQC in the process promoted the dominance of hegemonic discourses entrenched in ideologies of managerialism, quality and efficiency, associated with its agenda of

transforming HEIs in South Africa. The pervasive influence of these discourses was significant in shaping the discursive space for the e-learning policy (Sutton, 1999), as the university considered the recommendations of the national quality assurance body as part of its institutional strategic improvement plan. As the QMO had been mandated by the institution to guide policy making, the office worked in close consultation with HEQC. Having the national quality assurance body recommending something from a position of power leaves the institution with little room for negotiation. It is inevitable that hegemonic discourses from such institutions infiltrate the e-learning policy discursive space. Discourses that become hegemonic in policy-making processes have the potential to relegate the viewpoints of other groups who may represent a different view. The interests of such groups should be monitored as they may end up resisting the policy (Winch & Bonke, 2002). Such resistance was noted at University A when other stakeholders regrouped to formulate a social media policy.

The presence of technocratic discourses in the e-learning policy at University A is, to an extent, explained by the views underpinning the work of the national quality assurance governing body in South Africa. Mostert and Quinn (2012:104) argue that most official documentation pertaining to teaching and learning in HEIs in South Africa deals with ICTs in isolation from teaching and learning. This division is reflected in HEQC's policy on Improving Teaching and Learning (ITL) resources (Mostert & Quinn, 2012). ITL resources were a collaborative project between HEQC and academics in private and public HEIs in South Africa and other countries, aimed at quality promotion and capacity development. These resources contained suggested good practice descriptors that were subsequently used as the basis for the institutional audits conducted at various SAHEIs.

9.2 The framing of policy issues and e-learning policy discourses in HEIs

The study shows that there is a relationship between the framing of policy issues and the discourses embedded in the policies; however, the relationship is complex as some frames are subjugated via the dominance of others. The LMS frame dominated the policy discussions and influenced the resultant discourses on the role of ICTs in teaching found in the policy at the university, despite the presence of other frames being used by policy actors at University A. At University B, the FOER and transformation frames were used. Despite the frames being significantly different from those used at University A, the resultant e-learning strategy at University B was found to have mostly technologically-deterministic and instrumental views of ICTs in teaching, evident in the policy text. Comparatively, despite the transformation frame being

used at University C, the comprehensive learning technologies frame dominated the discussions and resulted in a policy imbued with critical discourses.

University A experienced more conflict in the policy-making process and there were more different frames used by actors compared to University B and C. This could be attributed to a number of possible reasons:

- the number of people who participated
- the diversity of their views on the policy issue
- opposing ideals or poor structural organisation regurgitation of roles, etc., resulting in power dynamics

At University B, fewer frames were used, perhaps owing to the nature of the discussions. One stakeholder commented that there were informative rather than deliberative meetings. The process was dominated by the leadership at University B, led by the champion. Other policy actors at University B confessed to a lack of understanding of policy issues. The challenge in framing policy issues is how to come up with e-learning policy frames that take into account diverse and sometimes opposing worldviews (Jerit, 2008). The study showed that compelling frames are built into institutions that know what their target audience wants. The MEd-Tech Group stakeholder consultations conducted at University C helped policymakers to understand the thinking of e-learning stakeholders at the university and to frame issues in a way that resonated with all stakeholders. At University B, stakeholder views were sought through an online discussion platform where policy actors noted that very few comments were received. Literature on policy analysis indicates that, to engender a sense of ownership, actors should frame the issue strategically, that is, selectively highlight considerations that mobilise public opinion behind the proposed policy position (Jerit, 2008). Whilst some frames invoke shared values amongst actors in a policy-making group, others promote disintegrated values and solutions.

9.2.1 Limited conceptual understanding of the policy problem

The different frames used at the three universities point to certain attributes of the policy problem. The LMS policy frame showed a limited conceptual understanding of the policy problem and e-learning. At University A, policy actors struggled defining e-learning, resulting in a narrow definition of e-learning as the LMS, a definition that promoted a technologically-oriented discourse. Sangra, Vlachopoulos and Cabrera (2012:online) argued that the weakness of some e-learning definitions is that they draw attention to technology. The lack of a comprehensive definition for e-learning results in some practitioners relying on

technologically-centric definitions of e-learning (Sangra et al., 2012). In formulating e-learning policies, institutions that have limited conceptual understanding of the concept, diagnose the wrong problems and offer the wrong solutions. In an international workshop on improving e-learning policies and programs, participants argued that a lack of awareness of problems and solutions in e-learning policy making is a matter of concern in e-learning policy making in many countries (Asian Development Bank, 2004).

The LMS frame at University A was derived from the suggestion by the policy sponsor (Dean, Academic) who proposed that each course should have a Minimum Online Presence (MOP) in the LMS. A MOP requirement is not unique to University A (Hoppe, 2014). Hoppe (2014:online) argues that MOPs are put in place to ensure that students receive a rich and robust educational experience through the use of the appropriate technology, while offering engagement and interaction between them and their instructors. These minimum expectations differ, depending on the type of online experience offered, i.e., fully online or blended courses. The MOP requirements at University A resulted in some lecturers uploading only learner guides and study notes.

9.2.2 The tension between institution-provided LMS and Web 2.0 technologies

One point of discussion that can be drawn from the findings on comprehensive technologies frames is the tension experienced in HEIs, following the emergence of Web 2.0 technologies in environments that had become complacent in using institutionally provided LMS. The literature notes that there is tension in HEIs between institutionally provided LMS and freely available Web 2.0 services (Conole, 2010). Globally, universities spent considerable time, effort and resources when LMSs were introduced into universities. In South Africa, most institutions revisited their institutional structures to include new units to focus on e-learning (Madiba, 2009). However, as institutions were getting comfortable with this arrangement, along came Web 2.0 tools which raised fundamental policy issues about the balance of institutionally supported systems versus loosely coupled systems (Conole, 2010). For University A, this manifested in the struggle between two centres, CEL and CHED. CHED at University A fought for inclusion in the e-learning policy.

The use of Web 2.0 tools attract a number of potential risks related to the security of data, data protection, copyright, reliability and availability. However, most lecturers who are focused on teaching do not think about the implications of these services. UCISA (2009) questions whether those who want to use Web 2.0 tools are aware of and understand the risks, noting that pioneers typically do not focus on security, audit and legal issues. The same was observed at University A; those in the social media units such as CHED were keen to improve learning and did not focus on taking caution.

At University A, those in management, such as the Director QMO, were apprehensive about the use of Web 2.0 technologies, preferring the LMS. Decision-makers in universities are mindful that for every policy decision, there must be a consideration of mitigating against risk (Leacock, 2008). At University A, those in senior management positions, the librarian, Director, e-learning and Director, Quality Management, emphasised the need to manage the risk posed to learners by open e-learning platforms. This finding is consistent with a study on the challenges of Web 2.0 in HEIs in the United Kingdom, which established that Web 2.0 technologies have not made a strong business case in HEIs and they have not won the support of management (Jadu, 2010). In South Africa, HEIs struggle with social media, taking a cautious approach for fear of loss of control, privacy concerns, attachment to the perceived safety of a closed classroom, fear of cyerbullying and fear of the disruptive nature of these tools (Gachago & Ivala, 2015). Web 2.0 technologies present a number of challenges to the institution because they are external to the institution. Institutional concerns at a legal or policy level include data protection, copyright, liability issues, accessibility law, usability and reliability of service (JISC, 2010).

Whilst it was justifiable not to entertain the use of other technologies falling outside the LMS, this decision impacted negatively on the policy at University A. Some stakeholders ignored the policy, others lamented that it resulted in little change in practice and that academics did not use the LMS creatively. Gachago and Ivala (2015:20) recommend that institutions should 'engage' rather than 'avoid' the use of Web 2.0 technologies.

9.2.3 Determining the degree of tightness of e-learning policies

HEIs in South Africa are caught in a situation where they must be clear on the very purpose of institutional policies. Academics at University A felt that the policy was prescriptive. They raised arguments based on academic freedom and autonomy, with views that there must be free will to choose whatever technologies they want to use. In view of this complexity, determining the degree of tightness of e-learning policies is a challenge. The degree of tightness should be determined in consultation with all policy stakeholders. A tight policy tends to be prescriptive and likely to face resistance, whilst, on the other hand, loose policy may have little impact on the activities of stakeholders.

Academics saw prescriptive policies as infringing against their freedom to choose whatever technologies are available for teaching. Management faces a huge challenge of balancing between the security of learners on e-learning spaces and also considering the interests of academics.

This is similar to the arguments raised by academics at University A about the need for academics to exercise individual choice in choosing technologies to teach, as opposed to being controlled or regulated. A study in New Zealand on formulating e-learning support strategies in universities made a similar finding – that in New Zealand all universities represented in the case study left the decisions about the use of e-learning to individual teachers (Zellweger Moser, 2006). However, some institutions in the New Zealand study argued for the need for decisions about mode of delivery to be made on a 'whole of programme' basis rather than a course-by-course basis. This they argued would be beneficial to learners enrolled into the programmes who would have a reasonable certainty of what to expect in a programme rather than ". . . being subject to the vagaries of choice from a sequence of teachers" (Zellweger Moser, 2006:8). Some literature also argues against the free choice by academics, noting that "a programme that has been developed for a particular student demographic may be seriously compromised if some teachers opt not to employ the delivery mode suited to that target market" (Zellweger Moser, 2006:8). In such institutions, it is better for such decisions to be made at programme or faculty level.

9.2.4 A focus on the learning rather than the technology

One of the key findings of the study was that some actors used a pedagogy frame, i.e., they were saying that the e-learning policy should be part of the teaching and learning policy. Their argument was that whilst technologies such as the LMS provide lots of learning potential, they do not guarantee learning. Arenas and Lynch (2013:35) argue that "new technologies are alluring, but their affordances and constraints need to be established through a reading of the learning aims of courses and the needs of students and paramount amongst these being the need for meaning, flexibility and relevance." The provision of university learning spaces that are experienced as places of learning by contemporary university students and their teachers is not an easy task, as seen from the foregoing discussion on LMS. Institutions should not stop at providing these platforms, but must engage with the difficult questions of how learners engage with the technology.

Some studies have shown that learners who are technologically skilled digital natives know how to navigate the new technologies, but do not possess the skills to decipher good information from graffiti (Strawbridge, 2010). E-learning policies that neglect the pedagogical aspect of e-learning are likely not to have a positive impact on the activities of teaching and learning. The focus must be on the learning, not the e-. This finding is the same as that made by Mostert and Quinn (2009). At university B, the e-learning strategy (2004:9) notes that most of the initial efforts to integrate technologies were directed at the infrastructure and

organisational aspects of the strategy but, as institutions fully embed e-learning, they turn their attention to the educational objectives.

9.2.5 Institutional identity, discourse and the framing of policy issues

Institutional policy-making environments are not neutral grounds. The foundational structures of HEIs in South Africa place universities into categories of advantage and disadvantage. The categorisation articulates the kind of problems these universities continue to face in embedding technologies, owing to their various historic trajectories. Institutions foster normative ways of teaching and present contextual constraints that alter individual and organisational perspectives on particular issues. In institutions, social reality is collectively constructed via language and meanings embodied by the institution. For this reason, institutions are central in the framing of policy issues which shape the discourses in e-learning policies.

The frames used by policy actors at the three universities were related to the problems faced by the universities, largely owing to institutional identity and historic trajectories that left some institutions being identified as 'advantaged' and others 'disadvantaged'. Odhav (2009:33) argues that "Today 22 years after the demise of the apartheid system, market mechanisms remain strong in HEIs." Despite the government's effort to come up with a unified HE system, universities continue to be distinguished by economic inequalities, mostly informed by their historic trajectories. The transformation frame used at Universities B and C is a reflection of some of these inherited problems. HDIs in South Africa faced challenges of assimilating learners from disadvantaged backgrounds who, in most cases, had no background computer literacy skills. For this reason the policy problem at University B was seen from the perspective of improving digital and computer literacy. Likewise, University C struggled with the problem of dealing with learners who have variable levels of literacy, with some being digital immigrants and others digital natives.

The challenge faced at University C is consistent with another finding in the literature that most South African HEIs are challenged to deal with increasingly diverse student profiles, not only in terms of race or gender, but in educational backgrounds, levels of preparedness, language, ethinicity, religion, etc. (Luckett, 2006).The challenge of dealing with learners with varying levels of literacy is partly due to historic legacies left by the apartheid past and is also a problem that has been caused by the massification of HEIs. SAHEIs receive a diversity of learners from different backgrounds in Africa, and also absorb a good number of international students from developed countries and affluent backgrounds. This problem is often manifest in HAIs, as was evidenced at University C. The effect of institutional identity on the framing of policy issues

was also noted at University A. However, the problems at University A were unique in that the university resulted from a merger of a HAI and a HDI. The findings showed that the idea of the university being identified as a university of technology enforced a technocratic rationale in the identification of the policy problem. The HEQC introduced a discourse that made it seem commonsensical that, as a UoT, the university would need to focus its attention on the provision of a reliable technological infrastructure; hence the dominance of a technocratic discourse, which foregrounded the LMS as a policy frame. Given that University A is a contact university, the e-learning platform was perceived more to supplement physical classroom teaching. The platform would be able to reach learners out of the classroom.

The findings also showed that critical discourses shaped the policy at University C. The development of the policy was to establish a centre for educational technologies. This unit is located at the intersection of technologies, teaching and learning. The development of the policy was not an ad hoc task, as seen from the University A case. The Ed-Tech policy at University C took place when a number of educators had been seen to be attempting to use ICTs in teaching and learning. The university saw the policy as a chance to compete with international institutions by providing a good learning experience for learners. Perhaps because this university is a former historically advantaged university, its main focus is not on attracting an indigenous market, but rather to compete internationally. The infrastructure is already there, hence technologies are problematised in the context of teaching and learning to achieve goals, rather than focusing on the acquisition of technological tools. It is evident that political contexts and interests shape policy discourses (Keeley & Scoones, 2000). Looking at the three policies analysed, context played an important role in shaping the discourses of the policies, resulting in variations between the three institutions.

9.3 Approaches of formulating e-learning policies in HEIs

The three universities approached the policy-making process differently. At University A, there was an institutional procedure to be followed in the formation of all policies. The process was largely rational and bureaucratic. The literature notes that, to qualify a process as rationalist, it should be conducted according to an accepted set of methodological rules (Aragon-Durand, 2009). Bureaucratic organisations tend to follow standard operating procedures that leave decision making in the hands of a few actors in management positions (Damerow, 2010). Consonant with this view, the policy on policy making at University A was developed by the QMO who occupied a management position and participated in formulating the e-learning policy. At University B the e-learning strategy was developed from making small

changes to existing strategies. Problems were identified and addressed incrementally. University C used a collegial approach where 21 stakeholders from all the five faculties who shared collegial relations with MEd-Tech group were consulted. The collegial approach yielded a critical policy on e-learning, whilst the rational bureaucratic and incremental approaches yielded deterministic and instrumental policies. As seen in Chapter 2, no single model is superior to the other. However, an investigation into how institutional e-learning policy-making processes shaped e-learning policy discourses at the three universities paved the way for concrete and substantive deductions to be made about the relationship between policy making and e-learning policy discourses.

9.3.1 Institutional bureaucracy

One finding made in this study was that institutional bureaucracy results in institutions following rational linear processes to formulate policies which, in some cases are inadequate to support policies in emergent fields such as e-learning. Bureaucratic policy-making models in South African universities have been criticised for their inflexibility and ineptitude (Smit, 2008). Consistent with this observation, the rational bureaucratic model followed to develop an e-learning policy at University A was ineffective, as it led to a technocratic policy that has been rejected by e-learning stakeholders.

In the 1980s, most universities in South Africa depended on the traditional contact-based modes of delivery which made them formulate policies that were largely produced by using simple linear processes. Nyoni (2012:294) argues that, from 2000 onwards, with the emergence of e-learning, this has changed, as universities become more focused on achieving targets and outcomes. New methods of delivery using technologies in teaching and learning require e-learning policy implementers in HEIs to be conversant with what they are expected to do, how to do it and when to do it. In this new policy space, universities need to adopt a multi-stakeholder approach to e-learning policy conceptualisation and policy making which promotes the vertical involvement of all stakeholders affected and interested in e-learning (Nyoni, 2012).

Bureaucratic models tend to promote top-down change, which is not always well received. At University A, the rigorous involvement of management in policy making led to the alienation of other key policy stakeholders such as the CHED group, leading to resistance. MacKeogh and Fox (2009:147), in a study of e-learning strategy development in a small traditional university in Ireland which was attempting to transform its teaching with the use of electronic technologies, found that, while the support of senior management for change is essential, purely top-down implementation strategies do not work in the

traditional academic environment. Similarly, Nyoni (2012:303) argues that traditional top-down policy-making models may not necessarily be appropriate for the development of online distance learning policies. He argues that the bureaucratic policy-making model adopted by UNISA in formulating online learning policies was inefficient, because it was not conceptualised in a sufficiently collaborative way, as implementers felt that there was unnecessary intrusion by management (Nyoni, 2012).

One of the key features of bureaucratic policy-making processes is the use of committees in decision-making processes. Decision making on the e-learning policy and other institutional policies at all the universities is reached through Senate Committees. In a study covering six Federal Universities in Nigeria, Ogbogu (2013:online) noted that committees are vital institutional arrangements that facilitate and improve internal decision making in Nigerian universities. The use of committees therefore provides a solid basis for administrative decisions, because it allows the university to benefit from the expertise and experience of faculty and other staff members (Bowen & Shapiro, 1998). It is generally assumed that committees assist the university management in arriving at meaningful decisions that facilitate change and enhance the performance of the system. At University A, it was observed that, in cases where one member of the committee shared an opinion that was opposed to the group, their views did not affect the final decision. Ogbogu (2013:online) notes that, although committees are vital tools for university administration, the decisions they make are sometimes not implemented, due to the overbearing structure of university management.

The literature shows that committee meetings often suffer from overloaded agendas where decision-makers handle many issues at the same time and cannot spend enough time on any one of these issues (Kegley & Wittkopf, 2010). The results on policy making at University A indicate that there is committee lethargy and policies end up receiving little attention at university committees. One actor at University A observed that ". . . policies get shoe-holed through the process." Damerow (2010:online) also noted that the pressures of circumstance during policy-making processes limit the ability for decision makers to choose between many policy alternatives. The discussion so far concludes that committees are imperfect mechanisms for deliberating on e-learning policy problems in HEIs.

9.3.2 Collegial approaches to developing e-learning policies

Shrifian (2011:1170) argues that a collegial management approach has the potential to engage all stakeholders in the achievement of educational goals. The aims of leaders and followers coalesce to such an extent that it may be realistic to assume a harmonious relationship and a genuine convergence leading

to agreed decisions. A collegial approach was followed in formulating the Ed-Tech policy. Collegial rationality assumes that academics as professionals of their disciplines have authority over what they teach and control over the conditions of their work, hence the need for them to be extensively involved in the development of e-learning policies. Globally, collegiality remains an important value and ideal in most HEIs; however, Kogan (2002:59) observes that collegiality exists only in mixed or diluted forms, in tension with hierarchical, competitive and bureaucratic systems.

One finding of the study is that, when e-learning policies are formulated by administrators, bureaucratic and rational processes are likely to be followed (University A) and, when such policies are formulated by academics, a collegial approach is likely to be followed (University C). Luckett (2006:325) noted that, in South Africa, one might expect academics, especially from research-led universities, to adopt collegial rationality. With few exceptions, her data suggested that academics subscribe to collegial rationality. Consonant with her views, findings showed that a collegial approach was followed by a group of academics at University C in formulating an educational technologies policy. By contrast, a bureaucratic approach was followed by administrators at University A (Director, CEL and Director, QMO) in formulating the e-learning policy. Drawing from this discussion one would conclude that it is usually better when e-learning policies are formulated by academics who are likely to choose a collegial approach that takes into account wide stakeholder views and allows for extensive discussion of such policies.

9.3.3 Incremental approaches to developing e-learning policies

At University B, the e-learning strategy was developed through making gradual changes to existing strategies. The literature argues that e-learning policy making is a political process that is iterative; it involves a change in practices so decisions that have been made in the past must be developed by gradually adding on (Mbugua, 2014). This iterative process results in incremental policy rather than radical policy – there are no drastic changes (Mbugua, 2014). The process is marked by continuous negotiation where each stakeholder aims to avoid controversy through compromising on some of their demands in order to maintain a peaceful negotiation process (Mbugua, 2014). The process results in a mutually agreeable policy that is then implemented but, given the complexity of back and forth interactions, it takes a long period of time to develop e-learning policies. Similarly, a study by Okem (2010:70) at University of Kwazulu Natal (UKZN) argued that the transient nature of technology makes incrementalism an ideal model of policy development in e-learning.

9.4 The constitution of policy actors in e-learning policy-making processes in HEIs

The composition of policy actors influences the discourses in e-learning policies. Institutional discourses shape the way subjects talk about things by determining the language and the relevant issues used to frame the 'object' or 'process' (Aragon-Durand, 2009). Looking at the composition of actors in e-learning policy-making processes, this section centres on the responsibility for e-learning at the three universities in the context of how HEIs in South Africa have made some structural provisions for e-learning in their organisational structures. In some cases these units duplicate the same activities or, as in the case of University A, lead to conflict amongst the key players interested in e-learning.

9.4.1 The location of leaders in e-learning policy-making processes in HEIs

First, it is important to consider the location of the units that developed the e-learning policies in the three cases. Depending on the level at which policy is made local, national and international arenas, the actors involved and the prevailing discourse, policy processes and outcomes will differ significantly (Jones, 2009). The Centre for e-learning at University A was a technologically strong unit that was established with the sole purpose of administering the LMS at the institution, managing open labs and providing support to learners and lecturers in using the system. The Director for e-learning did not come from an educational background. The unit employed an instructional designer with an educational background to assist lecturers and learners in using the LMS. However, despite the presence of an instructional designer, the Director for e-learning dominated the process of developing the policy, which could account for the dominance of technocratic perspectives.

A number of studies have revealed that the kind of e-learning policies produced by HEIs in South Africa depends on the bias of the unit that is responsible for e-learning (Madiba, 2009; Czerniewicz, 2006).When HEIs set up structures to support the use of ICTs in teaching and learning, the centres that took responsibility for e-learning differed in their emphasis, with some being more technologically strong and others being more pedagogically strong. Policies coming from technologically strong units tend to be technocratic (Madiba, 2009).

Technocratic discourses were also noted at University B, which combined this discourse with an instrumental discourse. At University B, the development of the e-learning strategy was triggered by the Director, Teaching and Learning Technologies Unit (TLTU). A task group was then set up to develop an e-learning strategy to deal with computer literacy at the university. The presence of a leader with a strong

pedagogical background, however, did not result in a policy that looks at the incorporation of ICTs in pedagogy. Instead there was much focus on the technological tools that could be made available and how it was inevitable to acquire these tools, as globalisation calls for more efficiency and adaptability (Extract 1, Appendix 6). It is possible that University B policy failed to offer alternative discourses of ICTs in pedagogy because of their history and mission. As previously disadvantaged institutions, the provision of technological infrastructure was gleaned from the perspective of being able to compete in a global world, at the expense of providing good pedagogy to learners. The policy was informed by instrumental discourses that link the presence of technologies with efficiency in teaching and learning, so as to compete in a global world.

9.4.2 The location of units responsible for developing e-learning policies

There are historical, institutional, structural divides in e-learning in some universities in South Africa. Czerniewicz et.al (2007:57) observed that

> *. . . the structural divides [in e-learning in universities] are significant and may be due to a lack of senior level monitoring of the kind of integrated work required of ICTs in higher education, itself a new area spanning several disciplinary domains. They may also reflect long-standing tensions within universities between the craft knowledge of practitioners in what are generally regarded as support posts, and the specifically discipline-based knowledge of traditional researchers.*

In most universities in South Africa, when ICTs started being used, it was not clear which departments should take the responsibility for e-learning (Madiba, 2009). At the stage of drafting the e-learning policy at University A, policy delegates grappled with the idea of whether to have an e-learning policy separately or to have it as part of the teaching and learning policy.

> *There's always been the thinking between whether we should have e-learning separately or whether e-learning needs to be part of the teaching and learning policy. . . . at the time we thought that we should have an e-learning policy that basically talks about the use of technology for teaching and learning* (Director, e-learning).

Consonant with this challenge, at University C, stakeholders also debated the location of the centre for educational technologies, with some stakeholders preferring to have it under ICTs and others preferring CHED, because of its cross-faculty approach and developmental role (University C Draft Framing Document, 2004).

One of the findings at University A was that historical, institutional structural divides which assigned the responsibility for e-learning to the university promoted a conflict of interests between two centres, CEL and CHED, both involved with ICTs in teaching. At University A, the e-learning policy was developed by a group of stakeholders who did not share a uniform identity and uniform ideals of teaching and learning with technologies. This finding was consistent with the finding by HEQC, which noted that, as a result of the merger of two institutions, the university had not formed a uniform identity (HEQC, 2011). Nyoni (2012:297) notes that transforming organisations in South Africa, particularly HEIs, is a challenge, as some departments are staffed with people who harbour different cultures, language and political orientations.

Czerniewicz et al. (2007:56) argue that the most recent trend in South Africa is to locate online learning in newly created structures, specifically framed to support higher education development (e.g., University of Cape Town, Durban University of Technology and University of the Free State). The reason for this is that most expertise regarding the use of ICTs in teaching and learning is located within the teaching and learning structures. The location of such centres in learning and teaching structures represents a significant shift from the past, and signals an emphasis on the educational aspect of educational technology.

9.5 Stakeholder engagement in e-learning policy-making processes

This study also considered the engagement of stakeholders during the problem definition. Policy choices reflect the interplay of social, economic, cultural and political considerations in a given context (Dawes et al., 2015). Effective problem formulation depends on clearly understanding stakeholders and their interests, both separately and in relation to each other (Dawes et al., 2015:6). The data showed that HEIs use low levels of stakeholder engagement, namely consultation, at the problem definition stage. It was noted that the bulk of stakeholders at University C were merely consulted at the problem definition stage. Similarly, at University B, stakeholders averred that the meetings were mainly informative in nature, driven by champions. At University A, the dialogue lacked openness as it was structured around fixed issues and problems that had been raised by HEQC. Good policy development demands that all stakeholders, not just 'key' stakeholders (Freeman, 1999), whether powerful, knowledgeable, resourceful, or deeply affected by the problem or its alternative solutions, be considered during every stage of the policy cycle from framing issues to evaluating results.

From the analysis of stakeholder maps at the three universities, it is important to discuss the context setters, because they are the group whose interests needed to be managed; they posed a threat in policy making if their interests had been neglected. The context setters at University A were HEQC, DHET and

the Dean's Forum. At B, SAPC, donors and the private sector were amongst the context setters; at C the donors and stakeholders consulted set the context. Context setters are an important group to manage. Newcombe (2003:845) avers that:

> Their level of interest in the organization's strategies will remain low as long as they feel satisfied with the policies adopted. If they become dissatisfied then, because of their powerful position they can easily increase their interest and end up becoming key players in the process.

The internet has no border and has created a need for education policy that reflects a diverse environment (Oake, 2010). In light of this assertion, e-learning must reflect an interconnected existence between various players, actors, relationships, structures, environments and processes in a given context (Oake, 2010). Consonant with this view, Weaver-Hightower (2008:157) argues that policy analysts should make use of the policy ecology metaphor to understand the complexity of e-learning policies. He avers that:

> Each policy considered exists within a complex system that reflects varied international, national, regional and local dynamics. Using this metaphor provides analysts with a view of the regularities and irregularities of any policy, its process, its texts, its reception and its degree of implementation

9.5.1 Stakeholder philosophies on e-learning and policy outcomes

Chiumbu (2008:94) asserts that actors in policy-making processes are not neutral, rather, ". . . they bring to the policy agenda worldviews and ideological perspectives that guide their action and also shape their interaction with others," Therefore, to understand the complexity of the three discourses that informed the three policies, it is important to consider how much policy actors were aware of the philosophies that inform their practice.

Keeley and Scoones (2000:3) argue that discourses and the institutional practices upon which they rely are so entrenched that people are unaware of them and the way they shape worldviews. In this sense, discourse works ideologically and remains hidden to its users or subjects. The analysis revealed that terms and concepts such as e-learning in the three universities are often used uncritically and few actors who participated in the formulation of e-learning policies took time to interrogate their own presuppositions about the meaning of concepts. Words and expressions are attached to different meanings, depending on who says what, to whom, where and under what circumstances. Given the diversity in this conceptual space, e-learning policy making becomes a potential site for the development of ideology. The meaning of words or

concepts is conditioned above all by the social organisation of the participants involved (Barreto, 2008). Leacock (2008:112) argues that:

> There is need for decision makers in universities to be aware of how natural biases in human decision making processes can influence our better judgment and how being aware of these systematic biases can improve the chances of making the decisions that will enable ICTs to have a greater positive influence and fewer negative impacts on education in the future.

9.6 The exercise of power in institutional e-learning policy-making processes

Power is a key concept for understanding policy-making processes. This study showed that nothing categorical can be assumed about power in any institution. However, extending from the pluralist notion of power, this discussion concentrates on the sources of power and its exercise. Power in this thesis meant participation in decision making which was analysed only after careful examination of a series of concrete decisions made during the policy-making process. There were various notable ways by which power was variably exercised during the policy development processes at the various cases.

Various studies acknowledge that e-learning policy-making processes at national levels are complicated due to the diverse group of stakeholders involved (Mbugua, 2014; Konayuma, 2012). This study also showed the complexity of e-learning policy making at institutional levels, as evidenced by the conflict experienced at University A. There is a paucity of studies on how actors should be constituted in e-learning policy-making processes at local institutional contexts, addressing the problems associated with power dynamics that characterise policy-making processes.

9.6.1 Institutional structures and portfolios as sources of power

Institutional structures and portfolios bring with them a form of hierarchical authority and power. The form of hierarchical authority within the cases provided the sources of power which structured the organisational context within which the policies were formulated. In some cases this affected not only the range of people involved, but their ability to participate (or influence those who participated). The way that such formal authority was translated into power to influence, to do or not to do, varied between the cases. One of the main differences between the cases was the extent to which formal hierarchical authority played a role in shaping the processes examined. While it played a decisive role at University A, its role was substantially less at Universities B and C. At University A, the Director, CEL and Director, QMO were able to effectively translate their formal authority into actual, effective power to influence the process and the policy outcome.

At University B, the e-learning champion enjoyed the support of the Vice Chancellor whose ideals on digital engagement fitted into his vision of promoting the online LMS into a FOER that could be used by other institutions through partnerships.

The policy-making process within university A was formal and tended to respect and reinforce institutional portfolios and hierarchical authority structure. At University C, the situation was quite different; the culture of decision making at the university was more informal and less procedural, characterised by negotiated consensus paying less respect to the formal authority structure. At University B, the process was incremental and largely dominated by the e-learning champion. The effect of these differences is that the key actors involved in the e-learning policy-making process at University A were more able to translate their formal authority into power by determining what issues would be considered in the final policy. Similarly, at University B, the e-learning champion wielded power because of his immense involvement in championing e-learning. The respondents at University B confirmed that the champion had all the expertise, but was, however, supported by actors who had little knowledge to contribute towards e-learning.

Chapter 7 showed that power in policy-making processes at University A resided in positions of authority and fields of expertise. Observations drawn from the findings show that non-academic library staff were marginalised in the policy-making process because of their position and the nature of their work. The policy stakeholders from the library wanted to be included as instructors on the LMS to give them the power to manage their information literacy courses, which were not registered programmes. However, the e-learning unit did not cooperate in this endeavour. The power lay with the e-learning unit to determine who could participate in the e-learning platform. More power was given to academics to act as instructors on the LMS rather than non-academic staff, despite the fact that those in the library also participate in teaching functions.

In some institutions where universities have been formed out of the merger of different institutions, with different cultures, there are still departments with ill-defined roles and, in some cases, roles that seem to overlap. This situation continues to enforce institutional turf conflicts amongst various groups, as noted in the case of University A. Such anomalies result in inconsistent conceptual grounding of e-learning policy issues where different centres participate in e-learning policy making to further the interests of their units.

9.6.2 Individuals as sources of power

The literature notes that, within the institutional locale, not all people are equipped to view situations in the same way due to their position; some are better positioned than others (Aragon-Durand, 2009). For example, there are some individuals who can become part of the local bureaucracy and have access to information and who control resources not possessed by others. Such was the case at University A, where institutional management exercised power on policy actors by determining the genre of the policy, how it was written and structured. The genre of the policy was determined by the policy on policy making at the university which was developed by the QMO. Having a policy on policy making meant that the institution already exercised its power to determine the ways by which social agents would relate in policy-making processes and, since the QMO was part of the process of developing the e-learning policy, it operated from a position of power. Literature on policy analysis shows that "most powerful groups control or have access to a wide range of discourse roles, genres and so on. They control formal dialogues with subordinates, and issue commands or law". (Van Dijk, 1989).

At University A, the policy was written using a procedural genre which gave instructions on how to do something, combined with a hortatory genre which determined which of the stakeholders would do what. An impersonal language, used to mask the voice of the policymaker and to foreground the voice of the institution, was used. As noted in Chapter 8, impersonal language creates social distance and discourages other stakeholders from contesting the institution's voice. Genres as forms of interaction promote certain social relations between the people interacting. The policy on policy making dictates standard and institutional ways in which people should behave. Fairclough (2003:76) warns of governance genres that can be enunciated through policy. Governance genres are ways through which management communicates with subordinates in an organisation. Such genres increase social distance between management and subordinates to intimidate individuals holding lesser positions of power.

9.6.3 Discourse and power

This study also noted that power is exercised during policy-making processes through the dominance of certain discourses. The mechanisms by which power is emphasised were analysed as linguistic phenomena, hence grammatical structures in texts (such as using passive form or normalisation) were interpreted as constraining or enabling agency of certain actors in society.

At University A, the policy is laden with managerialist discourses that are conveyed by words such as 'efficiency', 'effectiveness' and 'quality' (Recall Section 8.1.1c). Managerialist discourses of efficiency tend

to foreground the management functions of e-learning systems such as the LMS, whilst marginalising discourses on the learner's learning. Kearins (1997:5) argues that the discourse of efficiency, productivity and effectiveness is so normalised in the literature that it would be difficult to develop a persuasive argument that organisations should be anything other than efficient, productive and effective. The values underscored in management writing are those which reinforce compliance with organisational goals of efficiency, rather than resistance to such strategies (Kearins, 1997). Such imperatives of organisational behaviour are imbued in the ideology of rational functionalism (Pfeffer, 1981). The worker is expected to work for the greater good of the organisation, fulfilling organisational rather than individual goals. The legitimisation and justification of these concentrations of power (status quo bureaucracies) are clearly facilitated by theories which argue that efficiency, productivity and effectiveness are dominant dynamics underlying the operation of organisations (Pfeffer, 1981). It was observed that such discourses narrowed the discursive space of the e-learning policy, as their dominance and normalisation in the policy left little room for contestation from policy actors.

The findings also revealed that people in powerful positions may sometimes choose not to exercise their power. At University A, one dean who was knowledgeable in e-learning decided not to get involved in the initial development of the policy "Somehow I am Dean for *e-learning* but the institution *chose* not to engage me so I just sort of stayed clear of the process" (Dean, Dean's Forum). The findings showed that subjects are an important group to consider in policy-making processes as they tend to exercise their power saliently through inaction and resistance, rendering the policy ineffective. Even though management has control and outcomes power, the overall power lies with the subjects to implement or not to implement the policy. In this case, University A's policy ". . . *has become a case of trying to win academics*" (Director, Quality Management). Discourses have the power to shape the positioning of stakeholders or groups in relation to the broader social world (Fridkin, 2012). The effect in e-learning policy making is that it trickles down to the policies. As seen from the findings at University A, views on social media and pedagogy in e-learning were subjugated via the dominance of the CEL and the QMO in the policy-making process, resulting in a technocratic policy.

9.6.4 Knowledge as power in e-learning policy-making processes

Institutions shape and are shaped by the type of knowledge claims the subjects make and how these knowledge claims construct specific discourses on and meanings of the policy problem (Aragon-Durand, 2009). Aragon-Durand (2009:88) argues that knowledge claims are dependent upon the actors' values and

beliefs, which are conditioned by the actor's position within the institution. Findings from universities A and B indicated that e-learning policy making in HEIs is hampered by a lack of conceptual knowledge on e-learning as a policy area. Knowledge as a resource in policy-making processes has power:

i) to influence the content of policy documents and dialogues
ii) to support inclusive policy making by ensuring that all voices are heard
iii) to improve the efficiency and effectiveness of policy processes (Jones et al., 2013:6).

Braathe and Otterstad (2013:1200) argue that the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power. Knowledge and power are integrated with one another (Foucault, 2002) and are always already embedded in ideological constructions about e-learning as phenomena. In support of the argument raised by Braathe and Otterstad, the literature has also shown that knowledge influences the actors' ability to make credible knowledge claims, either individually or as part of broader networks (Jones et al., 2013). In policy making, the expertise brought by one actor affects the way other actors receive the contribution and view the ideas.

> Different actors give weight to particular kinds of arguments or information, or people with certain kinds of qualifications or experience. This will privilege certain groups, networks who become well-integrated with policy processes developing and applying technical knowledge on specific issues and interpreting problems or promoting common practices. The ideas of these groups can be central to how policy is made (Jones et al., 2013:6).

Different types of knowledge each have their own strengths, weaknesses and unique power dynamics when brokered into policy. In this discussion, three types of knowledge are considered in e-learning policy-making processes in HEIs, as espoused by (Jones et al., 2013:6), namely:

1. Research-based knowledge
2. Practice-based knowledge
3. Participatory knowledge

Research-based knowledge is produced by scientists and academics and professional bodies. While it has the potential of being an extremely valuable resource for policy dialogue, debates that are strongly couched in technical terms serve (intentionally or not) to exclude large groups of stakeholders from the process,

while particular disciplines and perspectives can dominate understandings of possible actions and policy responses. At University A, the involvement of the QMO and the CEL in the process promoted the dominance of quality and managerial discourses and a rigid focus on the LMS. QMO, having been mandated by the institution to take charge of policy making, worked with HEQC and it was inevitable that ideas from HEQC were translated into the policy. Jones et al. (2013:6) evince the idea that actors who 'translate' research-based knowledge for non-expert audiences wield significant power to frame messages and steer debates. Likewise, the power from QMO at University A was felt in the resultant policy, as well as the failure to consider the views of actors from CHED, who relied on the comprehensive learning technology frame.

Practice-based knowledge is knowledge from the experience of implementing policy and practice. It is gained through hands-on action. This type of knowledge is often tacit in nature; it is held by individuals and groups with long histories of tackling an issue such as the MEd-Tech Group at University C. Project reports are a rich source of practice-based knowledge. Participatory knowledge is held by a person individually, or collectively by a group. It is drawn from living daily life, knowledge about a culture, people and place, and challenges gained through direct experience in a given context.

It is important for e-learning policy making in HEIs to balance the different types of knowledge brought forward by various actors. An over-reliance on technical knowledge results in technocratic policy making, with little citizen involvement in framing the problem and little understanding of what has worked in the past (Jones et al., 2013). At the same time, participatory knowledge must be balanced with technical to avoid populist approaches to policy making; likewise, policies based only on what has been shown to be effective may be slow to innovate.

9.7 The challenges of formulating e-learning policies

HEIs in Africa use policy-making models based on research from developed countries. These models are devoid of the political, economic and social context of Africa and do not provide an African solution to e-learning policy making (Mbugua, 2014). The literature notes that there is a paucity of research on the drivers and dynamics of policy decisions that arise from institutional factors, and that this is unique to developing country contexts (Gilwald, 2010). Local policy research would lead to an understanding of the political, social and economic context of policy making, therefore enabling policymakers to take more effective approaches that would be more likely to succeed on the continent.

Generally, HEIs tend to approach e-learning policy making in a technical way that fails to consider the inherent politics that surround e-learning policy making in these institutions (Mbugua, 2014). Gilwald (2010) and Aina (2010) proposed that HEIs in Africa should take a political policy approach to policy studies in Africa, rather than the technical reforms approach that is currently in the mainstream. They also proposed that local research linking benefits of ICT use to macro-level development indicators on the continent would be useful for ICT policy making. The literature notes that reforms in higher education tend to be ineffective, because they are approached from a technocratic perspective, while ignoring the underlying policy-making processes and politics involved in understanding how transformative change can happen in order to make higher education relevant to the needs of African countries (Aina, 2010).

Institutional e-learning policies have been written to facilitate changes in teaching and learning with technologies. However, this study concludes that changing and transforming well-rooted old organisations with their embedded cultures is a challenge, as it involves dealing with attitudes, perceptions and long-held ideologies (Nyoni, 2012). Nyoni (2012:293) notes the challenges that were faced at UNISA in trying to engage staff in an open and distance learning type of teaching environment, as most academics lacked the technical knowledge to operate in this environment. In South Africa, there is scepticism from staff to use certain e-learning technologies. At UNISA, for example, personnel with varied qualifications, cultures, races and experiences, some of whom are not open- and distant-learning compliant, may be worried by reform because it may threaten their comfort zones and might lead to uncertainties (Nyoni, 2012: 293).

User-friendly and functional policy guidelines or frameworks that are collectively (by team approach) agreed upon by all affected stakeholders are a pre-requisite for allaying fears, empowering staff and giving them ownership of these guidelines. The challenge is to win the support and the participation of all stakeholders by using the persuasive team approach to participate in the process of crafting policy frameworks for use as guidelines in their working environments.

9.8 Summary

Considering the relationship between policy making and policy discourses in the construction of e-learning policies in HEIs in South Africa, the overall objective was to understand the role of actors, policy frames and power in shaping the discourses of policies regulating the integration of ICTs in teaching at universities. This study adopted a critical policy studies orientation, as espoused by Bacchi (2000). Based on this approach, policy making was considered to be a complex and complicated process of negotiation and struggle over ideas and practices, based on different values, frames and power dynamics. Following a

critical approach to policy analysis implied providing a comprehensive account of how e-learning policy making took place within the individual cases, understanding the context and how this impacted on the discourses found in the policies.

There are various factors impacting the discursive construction of e-learning as a policy problem brought on the agenda of institutional policy making at the three universities. A relationship was found between the factors impacting policy problem construction and e-learning policy discourses. Discourse as a form of social practice is inherent in the existing practices to use technologies in the institutions. Reactionary policies result from solving problems that exist on the ground and the proposed solutions tend to be reactionary. E-learning champions as a driving force in policy discussions play an important role in constructing the discourse of e-learning in HEIs, together with strong institutional leadership.

There is a relationship between the framing of policy issues and the discourses embedded in the policies; however, the relationship is complex as some frames are subjugated via the dominance of others. Language as socio-cultural practice and social resource of a group can reveal a lot about how people think, what philosophies inform their speech and how these ideas are translated into policies. The discourses found in the policies point to varying levels of power in policy-making processes, which is also determined by which individuals participate in the process and what power they have to influence the outcome.

CHAPTER 10

CONCLUSIONS AND RECOMMENDATIONS

10.0 Introduction

Chapter 10 concludes the study. This chapter is divided into 7 sections. Section 10.1 is an overview of the study; Section 10.2 highlights the major findings of the study. Section 10.3 answers the main research question. Section 10.4 discusses the contributions made by the study. Section 10.5 dwells on personal reflections. Section 10.6 highlights the recommendations of the study and Section 10.7 ends with areas for further research.

10.1 An overview of the research

This study started with an introduction to the context of e-learning policies in the SAHE landscape. E-learning remains a complex area to navigate, due to the lack of understanding on the role of ICTs in teaching and learning. The study noted that South African HEIs find themselves in a unique position where they develop institutional e-learning policies in the absence of a national policy. This has led to institutions approaching e-learning policy making in varied ways. A review of prior research showed that research on institutional e-learning policies in HEIs in South Africa has been limited. It was in this context that this study sought to understand the relationship between institutional approaches to e-learning policy making and policy discourses.

A trajectory of approaches to policy making was reviewed, from traditional rational linear models of policy making to pluri-centric models. The study noted that no single model of policy making is superior. However, pluri-centric models have been praised for their concentration on understanding the actors involved in policy making and the ways in which the involvement of certain actors impact on the contents of the policies. Hidden contradictions in the theories applied to explain the role of technologies in education were also discussed. The study noted that these contradictions are embedded in discourse and are present in the positions that various stakeholders in HEIs use to negotiate an understanding of the relationship between technology and education. The study grappled with issues associated with the predominance of technological determinism in the academic literature, policies and educational practice. It was noted that alternative conceptions of technology are important in developing our understanding of the relationship between technology and learning, as well as identifying practical implications and limitations of deterministic discourses in the practice of teaching and learning in HE.

The study explained how stakeholder theory and CDA were combined to map the interplay between policy-making processes and e-learning policy discourses. A multiple-case study research design was used to investigate the research problem in the thesis. Various methods were used to gather data, combining policy analysis with responses from semi-structured interviews and document analysis. The location of the case studies within the broader context of HEIs in South Africa was discussed. The study also identified the stakeholders who formulated the e-learning policy at University A, the e-learning strategy at University B and the Ed-Tech policy at University C. The policy problem at the three universities was located within the context of discourses that were present in the social context.

Having introduced the cases, the study went on to trace the policy-making processes of e-learning policies at the three universities. The study noted how the policy 'problem' came to be recognised as an issue that required institutional policy intervention at the three universities, paying particular attention to the discourses, values, ideological assumptions and views which framed the policy context in which the policy problem was located. Attention was paid to understanding the role and influence of various stakeholders in the process, the framing of issues and the exercise of power. Findings from the three cases revealed divergent approaches in formulating e-learning policies. University A followed a largely rational, bureaucratic approach whilst University B took a cautious, incremental approach. University C followed a collegial approach, engaging a number of interested stakeholders in the process. The findings also showed some challenges in e-learning policy making.

An analysis of policies showed that the Ed-Tech policy at University C was largely imbued with a critical discourse, whilst the policies at Universities A and B relied on deterministic and instrumental discourses. By looking at the interaction between texts, discourses and practices, the analysis of policies exposed the discursive power relations that are promoted through various text genres and discursive types in the writing of e-learning policies. The study noted that the language and discourses embedded in institutional e-learning policies represent individual and group differences, interests and power sharing, among various university stakeholders, on how to use technologies for teaching in various contexts.

The discussion offered an explanatory critique of the relationship between policy-making processes and e-learning policy discourses. In conclusion, the theses' empirical findings on processes of formulating e-learning policies at the three universities call for reviews of institutional policy-making models and

approaches to policy making in HEIs. The findings point to the limitations of traditional bureaucratic models of policy making in crafting policies on e-learning. Collegial approaches are an effective method of formulating e-learning policies. They engage more stakeholders in policy deliberations and are less prone to conflict and power dynamics. The study recommends that impact evaluation studies of e-learning policies be conducted in various institutions.

10.2 Major findings of the research:

The major findings of this research were:

1. The collegial approach is an effective approach to formulating e-learning policies. Collegial approaches allow for greater consultation and participation in decision making. They are less reliant on rules and procedure. There is a relationship between collegial processes of e-learning policy making and critical discourses. Collegial and incremental approaches to e-learning policy avoid conflict in policy making, whilst the bureaucratic approach is prone to conflict. A reactionary approach to e-learning policy making is seen as a sub-optimal method of developing e-learning policies, as opposed to taking a pro-active approach.

2. There are limitations in using bureaucratic models to craft policies on e-learning.

3. Technological determinism and instrumentalism constitute a broader base of institutional e-learning policy discourses, compared to critical discourses. Policies developed from technologically strong units tend to rely on deterministic discourses, whilst policies developed by academics are more critical of the role of ICTs in teaching. Faculty involvement in e-learning policy making is important.

4. The framing of policy issues either promotes or hinders the ability of policy actors to explore a wide range of reasonable arguments to competing policy ideas. The different frames used by policy actors point to certain attributes of e-learning policy problems. 'Issue'-specific frames limit e-learning policy interactions and show an inconsistent conceptual grounding of e-learning policy issues. Some frames result in policy actors identifying wrong problems to policy and offering wrong solutions. The framing of e-learning policy issues shows a lack of awareness of policy problems and solutions in e-learning. Compelling frames are built in institutions that know what their target audience wants. When institutions know the needs of their target audience, they are likely to come up with frames that take care of opposing worldviews. Whilst some frames invoke shared values amongst actors in a policy-making group, others promote disintegrated values and solutions.

5. There are contradictory perspectives that policymakers associate with the use of ICTs in teaching and learning. These are largely shaped by the knowledge accumulated from working in a particular field of expertise and the context in which one operates. Dominant discourses in institutional e-learning policies provide some insights into both internal and external power dynamics, which are not apparent on the surface.

Table 10.1 shows the similarities and differences in the findings drawn from the three cases.

Table 10.1 Similarities and differences in the three universities

Findings	**University A**	**University B**	**University C**
1.Policy making model	Rational – Bureaucratic	Incremental	Collegial
2.Dominant discourses	Deterministic	Deterministic-Instrumental	Critical
3.Unit developing the e-learning policy	CEL – technologically strong unit	ICS – technologically strong unit	CHED – pedagogically strong unit
4.Policy frames used by policy actors	LMS, Part of pedagogy, Comprehensive	FOER Transformation	Comprehensive Transformation
5.Dominant policy frames in the policy	LMS	FOER-Transformation	Transformation Comprehensive
6.Stakeholder engagement	Consult-online discussion platform	Inform-meetings mostly informative e-learning round table discussions	Consult-interviews for stakeholder consultations
7.Actors who drafted the policy	Director, CEL Director, QMO	Director, ICS Professor, Information Systems Professor, EMS	Director, MEd-Tech Group Transformation officer Professor
9.Approaches to policy making	Reactionary	Reactionary	Proactive
10.Institutional management buy-in	Director, CEL supported by management, huge investments made to acquire the LMS	Vice Chancellor active supporter of e-learning champion	Supported at senate level
11.Power	Director, QMO operated from a position of power holding institutional mandate for policy making	E-learning champion also member of Executive Committee at Senate, also had a substantial amount of funding for e-learning	No notable exercise of power
11. Availability of expertise in e-learning	Director CEL and CHED all had expertise in e-learning	Director, ICS has expertise in e-learning Other policy actors were less knowledgeable about e-learning	MEd-Tech Group had expertise in e-learning

10.3 The relationship between policy-making processes and e-learning policy discourses

E-learning policies as textual and discursive outcomes of policy-making processes are shaped by how they have been conceptualised and designed, by whom and in what context. The analysis has shown that the claims, values and assumptions embedded in the discourse of the policies depend on the institutional context in which a policy is formulated. The policy-formulating processes also affect the discourses present in that these processes determine who has a voice and whose voice is marginalised in the policy-making process.

The institutional context gives shape to discursive interactions (Prochaska, 2014).This means that the formal arrangements adhered to within institutions establish who talks to whom, about what, where and when. In bureaucratic organisations, an over-reliance on formal, predetermined procedures tends to limit the discursive space for e-learning policies. The formal rules at University A determined who would get involved in the process, at what stage and how, resulting in a few stakeholders dominating the process, hence the dominance of certain discourses. E-learning policies are negotiated with various stakeholders. They involve a change in attitudes, practices and beliefs, so change happens gradually and they are developed gradually, adding on to existing practices. They cannot be radical or drastic changes. At University B, the strategy was a build-up from the computer literacy to information literacy strategy, then an e-learning strategy, and much later a strategy on open educational resources. The challenge with bureaucratic and incremental approaches is that they make actors approach the issue technically, following procedure, whilst losing sight of the implicit politics that pervade policy discursive spaces.

There is politics involved in implementing transformative change, especially where people's beliefs, values and practices are challenged. An incremental approach avoids conflict; however, since the same procedure is followed and, likely, the same actors who participated previously will participate, the dominance of some discourses is expected. In contrast, collegiality allows for the same level of engagement in the process and the sharing of power. Collegiality has the potential to engage all stakeholders in the achievement of educational goals.

Policy making is an arena of struggle over ideas. The point of who gets involved in the process is critical, as policy discourses tend to echo the ideological sentiments of policymakers. The outcome of e-learning policies may be different, depending on the composition of actors who formulate policy and their ideological positioning on the role of ICTs in teaching and learning. The findings revealed a relationship between stakeholders' value assumptions and ideological beliefs, and their social roles in the institution. Across

social roles, those subscribing to a critical discourse on the role of ICTs tended to come from an educational background or were affiliated to a department whose role is to promote education, such as CHED. Likewise, technocratic discourses were mostly dominant in the interview transcripts of stakeholders who belonged to technologically strong units such as e-learning and ICTs.

10.4 Contributions made by the thesis

10.4.1 Contributions to discourse

Policy discourse is one way in which social practice in institutions is shaped. Making a significant contribution means adding to knowledge or contributing to the discourse – that is, providing evidence to substantiate a conclusion that is worth making (Petre & Rugg, 2010). This study contributes to the discourse of teaching and learning with technologies in HEIs. It gives insights into the assumptions policymakers make about teaching and learning with technologies and the implications of these views in framing policy issues. For policymakers, it provides critical reflection in that it gets into the heart of assumptions associated with different discourses. Often, policymakers sit in boardrooms and prescribe solutions to policy problems, without reflecting on the philosophies that inform their interaction. Most policy actors are not aware of the ideological assumptions that inform their thinking. The analysis of policies contributes to both critical reflection and a paradigm shift in personal beliefs.

Policy documents have for some time been recognised by critical discourse analysts as embedding and reinforcing certain understandings (Fairclough, 2000). It is clear from the findings that policymakers understand the use of ICTs in teaching and learning in varied ways. The divergence in these viewpoints results in institutions creating different policies that differ in what they mostly emphasise; they are likely to impact practice differently. Language is a means of communicating. “It is imperative that management make a conscious attempt to shape language to meet corporate goals and objectives” (Fairclough, 2001c:231). To substantiate the claim that this study has made a contribution to knowledge, the results of the analysis of e-learning policies were peer-reviewed by colleagues in the profession at the SAIMS International Conference and published as proceedings to the conference. A linguistic analysis of policy discourses contributed towards reshaping the discourses in e-learning policies in HEIs. Kirkwood (2014:206) recommends that, rather than just considering technical issues and or idealising promises made about technologies, ‘joined up thinking’ is required to integrate the multiple contextual factors that all influence how technology is actually used in teaching and learning.

10.4.2 Contributions to knowledge

This study makes a contribution to knowledge about how policymakers in HEIs understand the relationship between technologies, teaching and learning. The study exposes the philosophies behind the ways in which policymakers think about e-learning, also, how the talk or discourse about e-learning frames policy problems and solutions, are assumed in this regard. By analysing the discourses informing e-learning policies, the study shows how language is used by policymakers to make sense of the use of technologies in learning. In this thesis the researcher argues that it is important for administrators, faculty and management in HEIs to reflect on their philosophical positions in e-learning policy interactions. In a similar light, Kanuka (2008:64) emphasised the need for university leaders and educators to understand their philosophical orientations of teaching and technology. He averred that stakeholder views of e-learning technologies are grounded on their philosophies in practice, and how their beliefs about teaching and technology guide their practice (Kanuka, 2008). Understanding how policymakers negotiate the role of ICTs in teaching and learning and the philosophies behind their thinking is important in the context of this thesis; it helped to make sense of how the involvement of certain actors in policy making influence the discourses in the e-learning policy. The study also contributes towards an understanding of how personal philosophies of teaching and learning with technologies permeate e-learning policies. Depending on who participates, which office they represent in the institution, and how they think about the policy issue, the outcome of policy could be different.

The study contributes towards understanding how power is exercised among stakeholders in e-learning policy-making processes; how some stakeholders are key to the process; how they influence the process and how others are left with little power to influence decisions**;** how institutional structures mediate power relations among stakeholders; the roles of responsibility given certain centres of power by virtue of how the institution is structured; how some offices are given the authority or power to handle policy-making, to define who can participate in the process, who says what and whose voice is heard. This study makes a contribution to the domain of institutional policy making. The idea of formulating an e-learning policy contributes to knowledge about institutional policy-making processes. Even though the idea is well-established in the literature, each individual process of policy making brings with it certain institutional and cultural peculiarities which add to both the understanding of that particular process, as well as bringing broader ideas on developing e-learning policies in other contexts. The study contributes to knowledge on how to solve a particular policy problem and what to consider in order to make the process successful. This

is particularly important in a South African context where institutions continue to invest a lot of money in the acquisition of electronic technologies for teaching and learning.

10.4.3 Contributions to theory

This study demonstrates that Stakeholder theory holds much promise as an analytical framework for e-learning policy formulation processes in HEIs. This study is significant in that it represents one of the few stakeholder analysis case studies of institutional e-learning policy formulation processes. This study used Stakeholder theory to analyse policy making in HEIs, a theory that, to the researcher's knowledge, has not been fully utilised in IS research. Rather than following the mechanistic linear approach to policy analysis, this study employed two theoretical frameworks, Stakeholder theory and CDA, to offer a rigorous critical analytic approach to policy making that could act as an alternative to mechanistic analyses.

10.5 Recommendations

Findings revealed the strikingly different ways in which e-learning policies were developed at the three universities. Drawing from these findings, the study concludes that e-learning policy making in HEIs does not follow a rational order. In view of this complexity, it is recommended that policy analysis on e-learning in HEIs should focus more on actors and interactions, as policy making is a process of interaction. In this process, power is reflected through the struggle of competing discourses. The dominance of some views in policies points to a poor constitution of actors in policy dialogues, the low levels of tolerance in the policy dialogues and the fact that some views were denied priority. The nature of the dialogue is, in turn, influenced by the knowledge that actors bring to the process. HEIs should strive to raise awareness and increase knowledge about e-learning to help cultivate the right perspectives and philosophies about practice. This will guard against the dominance of technologically deterministic views. HEIs should conduct extensive research before drafting policies. A strong body of expertise, coupled with experience, should lead e-learning policy making. E-learning policy-making processes in HEIs should not stop with the development and adoption of policies. It is recommended that universities evaluate and review their e-learning policies to ensure that they remain relevant.

10.5.1 Factors impacting e-learning policy making

There are a number of factors which may impact e-learning policy-making processes in different institutions. The study recommends that:

- Institutions should pay more attention to existing institutional tensions before introducing a policy. Policy cannot be used as a plaster to cover an existing wound. University A had problems of institutional identity following the mergers. The different departments were yet to have a sense of belonging to one team. The e-learning policy was introduced as a means to try to pull all stakeholders together, to engender a change in practices. However, the process incurred a number of challenges. Those stakeholders involved in policy making should be aware of the existing groupings that could hinder the successful development of a policy. It is recommended that institutional turf conflicts arising from the history of institutional mergers be resolved to make policies work in this context.

- Proactive policy-making processes allow policymakers to shape the content of e-learning policies better than reactionary policy-making processes that result from reacting to activities happening on the ground. At University C, data showed that taking a proactive approach allows more stakeholders with relevant expertise to be engaged in the process and to engage in an open dialogue where issues are framed broadly to widen the discussion. The processes at Universities A and B showed that reactionary approaches limit the framing of issues and promote narrow dialogues that are geared towards specific issues and problems. It is recommended that, where possible, institutions should adopt a proactive approach to formulate policies in order to engage in open dialogues.

- HEIs should reconsider the use of rational bureaucratic models in crafting policies on online learning. Collegial approaches are effective in that they tend to be inclusive and are less prone to conflict and resistance, as noted at University C. Where more stakeholders are included, issues are likely to be framed comprehensively, resulting in a critical policy on educational technologies. It is recommended that the policy on policy making at University A should be flexible to allow the involvement of diverse stakeholders in the policy-making process and to deepen their level of involvement.

- It is recommended that e-learning policies should be supported by coordinated policy implementation plans. The greatest risk for the organisation is to approach implementation tentatively. Given the situation at University A, where they have a social media policy and e-learning policy which can achieve the same goal, it is suggested that multiple policies might overload formal administrative capacity and compromise active policy implementation. It is

recommended that the institution strives for less policy complexity and more policy synergy. There is need to streamline the policies on ICTs to ensure policy coherence and reduce duplication.

10.5.2 The framing of e-learning policy issues

In identifying e-learning policy problems to be addressed, institutions should embark on extensive stakeholder consultations. It is recommended that interactions on e-learning policies draw from comprehensive learning technology frames and part of pedagogy frames. The study showed that these two frames fared better in discussing e-learning issues at University C, resulting in a policy that is critical of the role of ICTs in pedagogy.

Utilising an LMS requires an understanding of its affordances and pedagogy, so that appropriate materials and activities are produced that align with strategic goals. A greater understanding of Web-based courseware tools such as Web CT and Blackboard is needed to develop a conceptual understanding of the pedagogy behind their uses. It is recommended that institutions looking towards developing e-learning policies should start by conducting an information session to educate all stakeholders about the problems to be solved and to help them understand the policy issue better. It is recommended that actors use a comprehensive learning technology frame and parts of pedagogy frames that lead to critical discussions on the role of technology in education. Policy actors should avoid issue-driven frames that fix the dialogue on specific issues and problems.

10.5.3 The composition of actors in e-learning policy-making processes

The production of an e-learning policy requires multi-stakeholder participation, because it involves advocating for the change of attitudes, views and ideologies. If HEIs are to be understood in this context, it is recommended that e-learning policy making should involve groups to achieve a greater sense of plausibility for policy and to improve the likelihood of policy implementation. It is recommended that e-learning policies be negotiated with academics to understand their needs and how they can be supported in this endeavour. Policies should not be cast as control tools by management, as the overall success of the policy is dependent on the ways academics will receive the policy. It is also recommended that e-learning policies be developed by people with pedagogy knowledge.

10.6 Personal reflections

At the time that I started this research, most HEIs in South Africa were still at the stage of formulating policies to cope with a changing context of teaching and learning with technologies. New centres were

being introduced to support lecturers in integrating ICTs in their teaching. Most universities at that time were also purchasing LMSs. My concern at the time was to understand the motivations for using ICTs in teaching and learning in HEIs, an area that was becoming largely influenced by private sector interests. I wanted to understand who makes the decisions to introduce technologies into teaching, how they understand e-learning and the role that technologies should play in the process. I also wanted to know how universities go about developing policies in this respect. My assumption was that if HEIs have sound policies to guide the use of ICTs in teaching, there is a higher chance that technologies will add value to students' learning. Adopting a multiple case study provided me with in-depth data to draw substantive conclusions on the relationship between policy-making processes and e-learning policy discourses in HEIs in South Africa. Stakeholder theory and CDA were both good and adequate (respectively) theoretical and analytical frameworks for exploring the relationship between policy-making processes and e-learning policy discourses.

10.7 Areas for further research and conclusion

In concluding this work, the researcher refers back to the main research question of the study. Searching for answers to the question: "How do policy-making processes shape e-learning policy discourses in HEIs in South Africa?" *has* been an insightful journey. This journey has led the researcher to finding answers to research questions raised and has also generated some new ones. The researcher is left wondering how e-learning policies have impacted on the activities of teaching and learning with technologies in different universities in South Africa, and whose interests are served by these policies.

These questions are not directly related to the study, but are the next logical step that needs to be addressed if HEIs are to engage in better policy-making processes, resulting in better e-learning policies. For this reason, three areas for further research arising from this study have been identified.

Firstly, there is need to conduct an impact evaluation of the policies on e-learning in HEIs. Measuring the policy impact through both qualitative and quantitative means would allow for more accountability and increased knowledge for policymakers to make more evidence-based policy choices.

Secondly, one could conduct the same study in another university with the researcher being a participant in the study, either as action research or an ethnographic study. This would give the researcher a better understanding of the policy-making process and would eliminate some of the problems which arise from participants who are unable to remember the details of the process.

Thirdly, a study on institutional policy-making processes in multiple countries would shed more light on how institutional governance structures in different countries, the context and the actors, affect the discourses in e-learning policies. Institutional policy-making processes in HEIs in South Africa may not be the same as in other regions and other parts of Africa.

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APPENDIX 1

LIST OF PUBLIC UNIVERSITIES IN SOUTH AFRICA

Traditional Universities

1. University of Cape town
2. University of Fort Hare
3. University of the Free State
4. University of Kwazulu Natal
5. University of Limpopo
6. North West University
7. University of Pretoria
8. Rhodes University
9. University of Stellenbosch
10. University of the Western Cape
11. University of the Witwatersrand

Comprehensive Universities

12. University of Johannesburg
13. Nelson Mandela Metropolitan University
14. University of South Africa
15. University of Venda
16. Walter Sisulu University
17. University of Zululand

Universities of Technology

18. Cape Peninsula University of Technology
19. Central University of Technology
20. Durban University of Technology
21. Mangosuthu University of Technology
22. Tshwane University of Technology
23. Vaal University of Technology.

* Two new universities were launched in 2013, Sol Plaatje University and the University of Mpumalanga. These may be tentatively classified in the Universities of Technology category pending clarification of their programs.

APPENDIX 2

PREVIOUS RESEARCH DONE ON E-LEARNING, POLICY MAKING AND DISCOURSES IN HEIS IN SOUTH AFRICA

Authors	Date	Title	Focus	Findings
Mostert and Quinn	(2009)	Using ICTs in Teaching and Learning: reflections on professional development of academic staff	-Comment on the undesirability of an unnatural separation of ICTs from teaching and learning in dominant discourses within institutional and national environments in SA. -The introduction of ICTs in HE has redefined the role of the lecturer. -Although ICTs are presented as a solution to most teaching and learning challenges, the use of ICTs in this context poses a number of challenges for lecturers.	HEIs have tried to cope with the change and institutionalize new practices through: 1. Devising coherent institutional strategies and policies for change. 2. Promoting professional development of staff.
Czerniewicz & Brown	(2009)	A study of the relationship between institutional policy, organizational culture and e-learning use in four South African Universities	-Explored the relationship between institutional e-learning policy and use. -Focused on how the differences in these relationships play out in different institutional types and the ways in which organizational culture mediates the relationship. -Identified four cultures in HEIs that impact on the types of policies formulated namely 1. Collegiality 2. Bureaucracy 3. Corporate 4. Enterprise	1. Policy is associated with frequency of use. 2. Policy is associated with critical mass 3. The Structured institutional types (where policy is present) reported more courses online, a higher frequency of individual use, better support and more resources available. 5. Institutional policy has an ambiguous role to encourage innovation without stifling it. 6. Prescriptive policies result in passive compliance to policy
Czerniewicz and Jaffer	(2007)	Partnership for Higher Education Think Tank Conceptual Framework: Framing the issues, interventions and investigations of the E-learning Initiative	-Different views about the relationship between technology and society influence approaches to and activities of using educational technology -Three *dominant views* of viewing this relationship include: 1. Technological Determinism-learning and teaching activities are driven by technological concerns. 2. Social Shaping of Technology-technology is shaped by society. Pedagogy is central and drives the use of technology for teaching and learning. 3. Technology and society are interwoven. Learning is driven by educational goals and technology opens up new opportunities for teaching and learning activities.	1. Varied views on change in society and in HE are reflected in *policies* which frame, enable and constrain the possibilities of e-learning in HE and in society broadly. 2. More studies should make explicit the assumptions underpinning plans and activities as they impinge on the perceived roles of ICTs in education. 3. The *dominant discourse* of ICTs in society and in education is intimately connected with the themes of globalisation and innovation. 4. Dominant discourses are expressed in the language of the information society and the networked society 5.Dominant discourse assumes that ICTs in society are an automatic "good"
Czerniewicz, et.al	(2007)	ICTs and South African Higher Education	1. How do practitioners and researchers working in HEIs understand ICTs and their relation to change? (Czerniewicz, Ravjee and Mlitwa, 2007:2) 2. Dominant conception of ICTs as a tool 3. Variance in the language and meanings of terms used to describe e-learning	1. Among practitioners and researchers and in the absence of national policy on ICTs, there is a diverse set of meanings and uses for ICTs and its relation to change-from improvement to innovation and transformation (Czerniewicz, Ravjee and Mlitwa, 2007:2).
5. Okem	(2010)	A policy analysis of e-learning at the university of Kwazulu Natal	1. The purpose of this study was to identify and examine the factors that enhance and/or inhibit the implementation of e-learning at UKZN. 2. To understand the factors associated	1.E-learning needs to contextualized e-learning. 2. A significant number of respondents see the need to develop an e-learning policy. 3. The approach to e-learning policy formulation at UKZN fits into the incremental model (ie. policy

			with the formulation of an e-learning policy at UKZN.	formulation is gradual and it is informed by the learning that emerges from implementation).
6. Jaffer, et.al	(2007)	The role of ICTs in higher education in South Africa: one strategy for addressing teaching and learning challenges	1.There is a tendency for institutions to base their choices of integrating ICTs in education on what is technologically possible rather than on what is educationally needed. 2.They argue that educational technology interventions should be based on educational needs as opposed to technological concerns.	1.The potential of ICTs is seen in light of meeting the teaching and learning challenges facing HEIs in SA. 2.These challenges include an increasing pressure on higher education institutions from government to meet the social transformation and skills needs of South Africa, and the varying student academic preparedness, large class sizes and multilingualism currently experienced in these teaching and learning contexts.
Hodgkinson-Williams	(2009)	National environmental scan of the use of ICTs for teaching and learning in higher education.	1.The key challenge facing HEIs in SA is that of dwindling financial resources. 2.HEIs in SA like other international universities are also increasing their enrollments targeting international learners as a way of obtaining additional funds.	1.In view of transforming the HE sector in SA there is need to increase participation in most institutions resulting in the massification of the sector. 2. Lecturers are not necessarily appropriately trained or experienced in supporting students and dealing with large class sizes often having conflicting role expectations in terms of increasing research and dealing with large class sizes.
8.Ravjee	(2007)	Politics of e-learning in SA higher education.	1. e-learning practices appear together with an entirely new vocabulary, institutional policies and structures, and substantial institutional budgets. 2. ICTs introduced in the midst of competing views on higher education transformation suggesting that ICTs are not an automatic good but need to be problematized. 3. Notes the dominance of views that treat ICTs as neutral technologies associated with globalization 4. Dominant discourses treat ICTs treated as fundamentally inevitable tools to ensure progress in Higher Education change.	1.The overly optimistic view un-problematically sees a straightforward causal relationship between the use of ICTs and the enhancement of teaching and learning, 2.The more cautious approach insists on taking into account, in addition to technology, other variables in the context such as colonial histories, the division of universities by race, inherited inequalities and academic cultures,c. 3. Need to develop critical Views which show that technology may sometimes improve pedagogical practices; at other times it may function to stigmatize and exclude people. 4. We need to problematize technology (its assumptions, role, effects and meanings), because ICTs always operate within broader socio-economic, political and cultural contexts, and within specific educational contexts, what end, but also who will use them
11. Ngambi	(2008)	"A Critical Discourse Analysis of Students Anonymous Online Postings.	Ng'ambi 2008) used these same discursive types but adapted their definitions for the context of his study which was students anonymous online postings within a course. He defined Neutrality as not taking sides on a topic in a discussion, Corporatism as implying collaboration, Technological optimism as acknowledging technologies potentials, Pragmatism as addressing practical issues and Legitimacy as referring to authoritative discourse. Within an educational context a researchers have used various forms of discourse analysis to understand peoples' attitudes towards technology	
12. Brown	(2009)	(I'm) not good enough: contrasting discourses of	Research on discourses of ICTs in general have revealed a variety of	Technological determinism most dominant. The common themes which emerge are a strong,

		ICTs amongst South African university students	themes. Whilst terminology differs between contexts (whether the ICT discourses are viewed in relation to policy, education, government etc) the themes which are common across the settings are ones of technological optimism, efficiency, liberation, imperialism/ globalisation (digital divide) and productivity (Wilson 2003; Thompson 2004; Budd 2005). Tech(nological) optimism (optimism bordering on determinism) and Pragmatism (pragmatic use on the ground ensuring results.	dominant (almost uncritical) view of technology as being essential, and by association the skills to use ICTs as being more highly valued and necessary than other skills.
13. Mlitwa	(2006)	Dominant Perspectives on ICT and Higher Education	While the intake trends are growing at an increasing rate in academic institutions however, the conceptual framework is lagging behind. There is a lack of consensus on conceptions of a relationship between ICT and learning processes in academia. As a result, it is difficult to understand motivations for educational technology intakes, and to make sense of ICT adoption patterns, trends, and processes within and between higher education institutions. In view of this complexity, this paper analyses the common concepts, meanings, and implications attached to the interaction of technology and education by academics, IT practitioners, institutional policy makers, and the literature in higher education institutions.	The paper closes with the argument that since technology is socially-embedded and context-based, practitioners should be wary of perspectives that claim to offer "one size fits-all solutions" to every challenge. Instead of being driven by a technological hype, it is important to focus on intended objectives.
14. Bozalek and Ng'ambi	2015	Explore the context of learning with technology.	They reveal that three areas must be considered to foster meaningful learning with technologies: context, pedagogical creativity and technology	

APPENDIX 3

VIEWS OF EDUCATIONAL TECHNOLOGIES ASSUMPTIONS AND IMPLICATIONS FOR TEACHING AND LEARNING

Philosophy	Assumptions	Implications for teaching and learning
Technological determinism (TD)	• Technology is neutral, outside human control and predictable • E learning technologies have inner logic that can bring certain determined pedagogical results • There is a techno-logical solution to every educational problem. • As long as we introduce ICTs and teach students on how to use them lecturers will automatically change the way they teach (Ornellas et al, 2009). • A technology enabled education that suits the visions and interests of decision makers self-serving TD (Hughes, 2001) • Technology is a determinant of change and progress in teaching and learning • What is important is to make computers available or accessible (Postman). • "Technology enhances education", "it breaches many walls created by distance and time zones", "it unites people and creates powerful and synergistic partnerships at local, regional and global scales", "it motivates students and energises the classroom" (Mlitwa, 2006:4).	• Does not consider the existence of other factors that affect the pedagogical integration of ICT from other perspectives. • Places a profound significance on the way technologies influence society. • Subverts the role of human agency to that of technologies • Forces our minds to adapt to technological change not on how to shape it (Mackenzie and Wajcman, 1999) • Minimizes our power to control technological developments. • constructivist theorists who see technology as an agent for change fall under this category (Mlitwa ,2006:4). • A focus on access results in pedagogically poor applications of technology where ICTs are only used in transmission modes of teaching and learning (Mostert and Quinn, 2009).
Instrumentalism	• A strange sibling of technological determinism (Davison, 2001) • Belief that technology is neutral but human controlled. • Widely accepted view of technology • Identified as uses determinism (Dahlberg, 2004) • Uses determinism focuses on the technological uses of e-learning artifacts • E learning tools viewed as neutral tools that are simply meant to extend the user's capacities. • E learning technological artifacts are effective in any setting. • The transfer of technology in any setting is only inhibited by its costs and not the context where it is implemented. • One size fits all approach, LMs must work efficiently in any setting	• Limits the possibilities to which technologies can be applied • Viewing e learning artifacts as neutral means that there is a techno-logical fix to every educational problem (Dahlberg, 2004).
Substantive	• Technologies have the unremitting power to change society and us. Technologies can change the way HEIs operate how they teach how learners learn and also change the way learners and the educators function at the same time. • Technologies are pervasive in our societies • Technology is autonomous but value laden • Technology is a vehicle of a culture of domination • Culturalists believe in the substantive power of	• We need radical changes to the school culture • There are certain aspects that must change in HEis to facilitate teaching and learning with technologies. • Technology is given some magical powers that makes it control us.

Philosophy	Assumptions	Implications for teaching and learning
	technology to change our societies (Aviram and Talmi, 2004). • We must strive to adapt the educational system to the new culture • ICTs have a powerful defining impact on all important aspects of our lives and our culture • ICT is a defining technology • ICT revolution is part of intertwined 21st century revolutions transforming western culture to postmodern culture	• Subverts human power or human agency to shape technologies to their own needs.
Social Construction of Technology (SCOT)	• Policy makers must not impose what they think are the best e-learning technologies but they must ask what criteria has been used to say it's the best and what groups of stakeholders have been consulted in defining it as the best. • Policymakers must look to the social world in addressing e learning policy problems • To understand how a technology is used you need to understand the social context in which it is embedded. • Interpretive flexibility of technology. A certain groups could share the same meanings of particular terms. In this case is there any shared meaning of what e-learning is?	• The academic study of educational technology needs to be pursued more vigorously along social scientific lines, with researchers and writers showing a keener interest in the social, political, economic, cultural and historical contexts within which educational technology use (and non-use) is located. (Selwyn, 2010: 66)
Critical theory	• Critical theory is somewhere between the extremes of Instrumentalism (technology is purely neutral) and Determinism (technology controls everything) because it sees technology and social practices as developing in tandem and influencing one another. • The means (technology) affects the ends (human purposes), but human purposes (ends) also influence what technologies (means) are developed. • Technologies are not fully neutral in that they contain the values of their makers and values inherent in their design, but technology is also not in control of society. For example, the bias towards efficiency in today's technology is a reflection of capitalism which developed in tandem with it over the last several centuries.	• Not seeking to reveal some claims and ideas in e-learning as being simply or positively "false" or "untruthful". The purpose here, rather, is to undertake a kind of "ground-clearing" exercise in order to call into question ways of talking about and justifying e-learning that obscure a more complicated reality. (Friesen, 2008: 181)

APPENDIX 4

LIST OF PARTICIPANTS FOR INTERVIEWS AT UNIVERSITY A

	Role	**Date**
1.	Deputy Librarian	28 July 2014
2.	Information Literacy also housed in the library	28 July 2014
3.	Web Editor-Marketing and communication.	Teaching and learning workshop
4.	Web Manager	22 August 2014
5.	Dean Informatics and Design	19 June 2014
6.	Director, E learning	24 March 2014
7.	Educational Technologist, Centre for Higher Education Development	7 April 2014
8.	Centre for Higher Education Development	3 November 2014
9.	Director, CHED	7 April 2014
10.	Director, Quality Management	5 June 2014
11.	Teaching and Learning Coordinator in the Faculty of Education	Teaching and learning workshop
12.	Teaching and learning coordinator in the Faculty of Education	Teaching and learning workshop
13.	E-learning instructional designer	25 August 2014
14.	ICT Head of Department	22 August 2014

LIST OF PARTICIPANTS FOR INTERVIEWS AT UNIVERSITY B

	Role	**Date**
1.	Professor Computer Science	July 2014
2.	Director, Information Systems	18 August 2016
3.	Professor, EMS	Email response to interview guide questions August 2016
4.	Director, E learning	Several email conversations and telephonic responses to questions July 2014

LIST OF PARTICIPANTS FOR INTERVIEWS AT UNIVERSITY C

	Role	**Date**
1.	Professor COEHR	28 July 2016
2.	MEd-Tech Group, Director.	May 2014
3.	Professor, CHED	July 2016 telephonic

APPENDIX 5

E -LEARNING POLICY AT UNIVERSITY A

POLICY STATEMENT

Extract 1

All programmes are required to have a minimum web presence for all academic offerings, consisting of, or showing evidence of active use of

i) The relevant subject guide posted online
ii) Effective use of a populated calendar with all key dates for the duration of the offering
iii) One of the communication tools activated to ensure effective asynchronous communication between the lecturer and student;
iv) A grade book or other means of giving feedback to the student regarding moderated assessments.

The use of additional technology and tools should be incorporated or enhanced in all the processes of teaching and learning, unless it poses a security threat to assessment procedures or institutional systems.

University A (2011:1)

POLICY PROCEDURE PRINCIPLES

Extract 2

Other Technology Applied Learning:

Where special, independent or unique technologies, software or systems, other than the central LMS, are required that fall outside the knowledge, experience and Institutional culture, the offering department takes responsibility for the acquisition, installation, maintenance and operation to ensure the required technologies can be sustained. Any cost will be incorporated into the normal budgetary processes of the offering department. (Examples of these technologies may include Personal Digital Assistants (PDA), Smart-phones and other mobile communication devices, Electronic Voting Systems (EVS) also called "clickers" or Video Conferencing (VC) systems.)

University A (2011:6)

INTENT OF THE POLICY

Extract 3

Coordination:
The University shall maintain a central repository for e-learning programme information and a support structure for facilitating the development and refinement of e-learning programmes, policies, procedures, and services and representation of the Centre for e-Learning in relevant and appropriate Senate committees.
Tracking of student progress:

The effective utilisation of an integrated (LMS) will allow for the proper balance between the delivery and interaction of content with structured academic communication and at the same time allowing for the management and tracking of student progress.

University A (2011:2)

Extract 4

ICT Support:

The university shall assure that the Institution's administrative policies and procedures allow for an effective and efficient ICT structures and infrastructure with sufficient resource allocation to support and maintain the quality of e learning offerings and services" technologies.

"The infrastructure of the university, faculty and department is expected to provide accommodation of the aspects below for the delivery of instruction via online web-based technologies:

- Secure and reliable programmes, systems, servers, networks, and up to date origination equipment. There must also be proper redundancy built into the systems to allow for business continuity.
- Rapid disaster recovery systems.
- Adequate storage and backup systems.
- Provision of software licenses (browsers, communications, subject development, etc.).
- Appropriate systems management and maintenance.
- Supply of secure Internet access and service.Technical training and assistance to lecturer and students as end users of the services" –

Additional response items shall include the effectiveness and efficiency of the delivery systems, access to academic resources, access to lecturer, and access to student services.

University A (2011:2)

Extract 5

Institutional Adjustment for Non-Residential Students: Programmatic and administrative procedures should be developed to accommodate populations that cannot easily *access* traditional campus-based (residential) study at University A due to constraints of time, distance, disability, and personal/professional issues through the appropriate use of technology for Learning and Teaching.

University A (2011:2)

Extract 6: Positioning e-Learning in terms of its purpose and benefits

Transfer of students: E learning must first be seen as part of the transition process of students from secondary education where some or all have been exposed to the use of technology as part of the Department of Education e-learning policies, to the efficient use of technology in the workplace. Existing staff must be able to *develop* and *enhance* their teaching methodologies through the use of e-learning.

Access to University A educational services: providing all students, including part time and distance education students, convenient access to the educational resources of the university

Capacity building: Existing staff must be able to develop and *enhance* their teaching methodologies through the use of e learning. Students must be encouraged to *grow* to become lifelong learners

Outreach: The application of these methodologies is appropriate to create an enlightened and liberally educated citizenship, provide professional *development* opportunities,

enhance the global competitiveness of HEIs business and industry,

inform public policy development,

enhance the *effectiveness* of public institutions,

foster economic *development*,

provide convenient *access* to educational programmes

University A (2011:3)

APPENDIX 6

E -LEARNING STRATEGY - UNIVERSITY B

Extract 1

The mission statement has among its key points, the following aim:

- further global perspectives among its staff and students, thereby strengthening intellectual life and contributing to South Africa' s reintegration in the world community;

It is difficult to imagine how global perspectives can be strengthened in the current world without a well-reasoned approach to the use of ICT in teaching and learning. Nothing can overcome national barriers like sound communication practices using the global information highway to supplement face to face encounters. For this to happen, all our staff and students must possess sound knowledge of the appropriate tools for communication and information sharing and have the required digital academic literacies.

Responding to the challenges and opportunities of globalization will require a sound e-learning strategy at both national and institutional level, and one that recognizes the importance of responding to globalization…..

University B (2004:10)

Extract 2

Assist educationally disadvantaged students gain access to higher education and succeed in their studies. Access to higher education involves more than merely opening the doors of learning; access requires building strong foundations that lead to digital academic literacies. Access in relation to e-learning has three important components that act as filters; institutional readiness, physical access and epistemological access.

University B (2004:24)

Extract 3

One of the strengths of technology is its ability to deliver flexible learning, something which is necessary for sound lifelong learning. Technology can help us overcome the boundaries of timetables, semester schedules, and other practices that make the offering of residential courses rigid and inflexible at present.

Digital academic literacies are key to attainment of lifelong learning, as is the use of technology to deliver programmes flexibly. Through its mission, University B is committed to becoming a quality lifelong learning institution… Both staff and students are encouraged to become life-long learners, hence staff and student development is pivotal. A learning culture within the institution that recognizes informal and non-formal learning would be encouraged

The university will use technology creatively and effectively to help grow the enrolment of part time learners freed from geographic and time tabling restraints, and to deliver life-long learning opportunities to its students and alumni.

(University B, 2004)

Extract 4

Students will have the necessary skills, attitudes and resources to use technology creatively in taking responsibility for their own learning and becoming independent learners

Academic staff will have the necessary skills, competencies and attitudes, educational and theoretical background, as well as access to the technology needed to develop and manage courses that include access to and use of information and communications technology, and an understanding of the key competencies implied by each of the four digital academic literacies.

(University B, 2004)

Extract 5

Information and Communication Technologies will be integrated into the curriculum to promote the four digital academic literacies, including basic computer literacy, digital information literacy, digital information fluency, and digital knowledge creation.

Technology will facilitate the transformation of teaching and learning according to a constructivist paradigm leading to active and independent learning (Information literacy).

Students will have the necessary skills, attitudes and resources to use technology creatively in taking responsibility for their own learning and becoming independent learners.

Students will have access to information from a wide variety of sources, including print and digital media.

Text 1: Internal environment at University B

The university's mission statement

The university mission statement begins with the following paragraph:

"The University is a national university, alert to its African and international context as it strives to be a place of quality, a place to grow. It is committed to excellence in teaching, learning and research, to nurturing the cultural diversity of South Africa, and to responding in critical and creative ways to the needs of a society in transition. Drawing on its proud experience in the liberation struggle, the university is aware of a distinctive academic role in helping build an equitable and dynamic society."

E-learning can impact on this mission directly, particularly through the graduation of students who are competent in the relevant **digital academic literacies**. Excellence in "teaching, learning and research " will *only* be possible in the 21st century through the effective use of technology within the academic programme. In helping to build "an equitable and dynamic society", University B will need to draw on ICT to enable us to jump beyond the disadvantages of apartheid education, because correctly applied according to socially and educationally sound principles, technology can transform teaching and learning for the better and have an impact on the broader society.

It is difficult to imagine how global perspectives can be strengthened in the current world without a well-reasoned approach to the use of ICT in teaching and learning. *Nothing* can overcome national barriers like sound communication practices using the **global information highway** to supplement face to face encounters. For this to happen, all our staff and students must possess sound knowledge of the appropriate tools for communication and information sharing and have *the required* digital academic literacies.

Text 2: Goals and objectives of the e-learning strategy

Provide and promote the technology to enable the university to produce graduates who are able to use technology to find, understand, apply, analyze, synthesize, evaluate and report on information from a wide variety of sources and who are competitive for twenty first century careers.

Technology will be used to facilitate the transformation of teaching and learning according to a constructivist paradigm leading to active and independent learning (digital academic literacy).

Learners will have access to information from a wide variety of sources, including print and digital media. Learners will be encouraged through technology to become independent learners.

Academic staff will have the skills and technology needed to develop and manage constructivist courses that include access to and use of ICTs.

The learning management system will be used for the tracking and mentoring of undergraduate and post graduate students.

Academic staff will produce high quality learning content that, wherever possible, will follow the Open content philosophy

Management information systems and online learning systems will be linked so that the right information is available when it is needed in the format in which it is required.

Each student who graduates from the university will demonstrate a digital academic literacy appropriate to their field and level of study

The university will use technology effectively to help grow the enrolment of learners, freed from geographic and timetabling restraints, and to deliver life-long learning opportunities to students and alumni

Student access to computing labs will be extended to 24:7 for those labs where demand exists and it is feasible

The university will develop a forward looking approach to the provision of audiovisual services in support of teaching and learning

Technology will be used to facilitate the recognition of prior learning

Digital library services will be integrated with learning management systems

The university will maintain its investment in the Learner Management System and will continue to build a community of practitioners and researchers around this tool, which will be kept free (open source) under the GNU,GPL and supported by the university

APPENDIX 7

UNIVERSITY C

EDUCATIONAL TECHNOLOGIES POLICY

Extract 1

"While the university remains committed to being a residential institution providing a high-contact experience, it recognizes that specific course objectives require flexibility and that educational technologies can support flexible delivery"

"With regard to online learning environments, there should not be a single, required, instructional approach or technology. This means that the requirements of specific learning and teaching situations should drive the selection of appropriate technology."

University C (2004:online)

Extract 2

While the commitment is always to effective educational innovation rather than technological "bells and whistles", it is acknowledged that complex and/or expensive solutions may also be appropriate in certain circumstances"

University C (2004:online).

Extract 3

Three categories describe the possible relationship of ICTs and University courses/ programmes:

ICT-supplemented (The focus here is on supporting overall course management, and would generally involve course management, administration, information sharing and other organising activities.)
ICT-curriculum integration (The focus here is on the curriculum. ICT activities directly relate to and support curricular objectives and teaching / learning activities.)
ICT-based courses (These would be online courses which range to the extreme of little / no face to face contact. They are likely to support flexible learning.)

University C (2004:online)

Extract 4

The university is committed to supporting a range of teaching, learning and educational technology approaches. We believe that different levels, disciplines, courses and programmes have different requirements.

Similarly, we recognize that a wide range of technological solutions need to be available, so that educational needs, together with cost effectiveness, should remain at all times the key factors in decision-making.

University C (2004: online)

APPENDIX 8 : UCT ETHICS APPROVAL

UNIVERSITY OF CAPE TOWN

Faculty of Commerce Ethics in Research Committee

Courier: Room 2.26 Leslie Commerce Building Upper Campus University of Cape Town
Post: University of Cape Town •Private Bag •Rondebosch 7701
Email: Harold.Kincaid@uct.ac.za
Telephone: +27 21 650 5041
Fax No.: +27 21 650 4396

Patricia Chikuni
University of Cape Town
trishchikuni@yahoo.com

UCT/COM/281/2013 11th October 2013

Dear Researcher,

Project title: The relationship between policy formulation processes and e-Learning policy discourses in HEIs in South Africa

This letter serves to confirm that the project entitled, **"The relationship between policy formulation processes and e-Learning policy discourses in HEIs in South Africa"** as described in your final submitted protocol 2013, has been approved. You may proceed with the research. Please note that if you make any substantial change in your research procedure that could affect the experiences of the participants, you must submit a revised protocol to the Committee for approval. Best wishes for great success with your research.

Regards,
Harold Kincaid
Professor Harold Kincaid
Commerce Faculty Ethics in Research Committee

OUR MISSION is to be outstanding teaching and research university, educating for life and addressing the challenges facing our society

APPENDIX 9

RESPONSE LETTER ON ETHICAL CONCERNS FROM THE INSTITUTION

UNIVERITY OF CAPE TOWN

Department of Information Systems, Leslie Commerce Building
Engineering Mall-Upper Campus
Private Bag, Rondebosch 7701,
Cape Town, South Africa

Tel: 27 21 650-2261

Fax +27 21 650-2280

2014

Dear Sir

Thank you for your response concerning conducting my research at your university. I understand the ethical concerns you raised, pertaining to conducting my research at that institution. I have had a discussion with my supervisor to help me muddle through the process of conducting my research with utmost integrity and ethical practice. To address the concerns raised, this is how I will ensure that my study poses no harm to the participants at your institution nor to the institution itself:

1. Concerning the identity of participants and the institution, I do acknowledge that mentioning that these universities are in the named Province might compromise the identity of both the participants and the institutions. Throughout my report I will not mention the province any of the three institutions is coming from. The names of the institutions will be hidden and identity will be masked by the use of pseudonyms. The identity of the participants will also be hidden. An informed consent form will be signed with participants to ensure that they willingly participate in the study and that they will not be coerced in any way to participate without consent. The informed consent form will cover the issue of not revealing the identity of participants and the use of pseudonyms.

2. To ensure that the research poses no harm to the participants and the institution, the findings of this study will be discussed with the respondents prior to submitting my final thesis. The researcher will also ensure that the study is as objective as possible and that it poses no threat to the institution.
3. The findings of this research will not be used in any way to outdo competition between various institutions concerned. My study is not institutional research commissioned by UCT but it is simply an academic research exercise that I am conducting to full-fill the requirements of my PhD studies at UCT. My supervisor Prof Wallace Chigona is not involved in any policy making circles at UCT. UCT will not in any way be privileged by my research. This research could however help those who will participate at your institution to reflect on the processes of formulating e-learning policies at their institution assuming that they find the results to be valuable.

I will destroy any documents from the study soon after completing my analysis. The final document will be made public. I undertake to send a copy to your institution after completion of my research. I appreciate the help that you have rendered me to date and for pointing me to conduct my research with integrity, fairness and ethical conduct.

I look forward to hearing from you soon.

Yours Sincerely

Patricia Rudo Chikuni (CHKPAT005)
UCT, Department of Information Systems)

APPENDIX 10

A LETTER OF INTRODUCTION

UNIVERITY OF CAPE TOWN

Department of Information Systems,
Leslie Commerce Building
Engineering Mall-Upper Campus
Private Bag, Rondebosch 7701,
Cape Town, South Africa

Tel: 27 21 650-2261

Fax +27 21 650-2280

25 March 2014

Dear Sir/Madam

Re: PhD Research – The relationship between policy formulation processes and e-Learning policy discourses in Higher Education Institutions (HEIs) in South Africa

My name is Patricia Rudo Chikuni. I am studying towards a PhD in Information Systems at the University of Cape Town (UCT), Department of Information Systems. As part of the requirements for my PhD studies, I am carrying out research on a project entitled *The relationship between policy formulation processes and e-Learning policy discourses in HEIs in South Africa.* E-Learning policies provide evidence of how HEIs are addressing the challenges of teaching and learning using ICTs. This study seeks to understand stakeholder perspectives on the formulation and content of such policies.

You have been identified as one of the suitable participants in this study. To this end I would like to conduct an interview with you seeking your opinion on matters pertaining to e-Learning policy at your Institution and your perspectives on the use of ICTs in teaching and learning. The findings of this study will be shared with you, other participants in the study and other relevant

authorities interested in e-Learning in Higher Education Institutions. Kindly be assured that the study is purely an academic exercise and the information that will be gathered from you will be treated with maximum confidentiality and will be used for academic purposes within the realms of this study only.

I would like to seek permission to record the interview to assist me with data collection. Your participation in the interview is voluntary and will be conducted at a time that is convenient for you. The interview will last between 40-45 minutes.

Thank you in advance for sparing your time and effort in assisting me with this study.

This research has been approved by the Faculty Research Ethics Committee in the Department of Information Systems at UCT.

Kindly sign the consent form attached to show your willingness to assist in this research.

Yours Faithfully

Signed by candidate

Signature Removed

Patricia Rudo Chikuni- Student Number (CHKPAT005)

Should you require any further details, please do not hesitate to contact me on

Cell: 0842753400 email: CHKPAT005@myuct.ac.za, trishchikuni@yahoo.com.

Supervisor:

Prof Wallace Chigona
Department of Information Systems
University of Cape Town
Private Bag, Rondebosch 7701, South Africa
Tel:(0) +27 21 6504345
Emai: Wallace.chigona@uct.ac.za

APPENDIX 11

INFORMED CONSENT FORM

Thank you for agreeing to participate in this study entitled:

The relationship between e-Learning policy formulation processes and e-Learning policy discourses in Higher Education Institutions in South Africa.

Participation

Your participation in this study consists of one interview, which will take anything between 40-50 minutes. This interview will be audio taped, unless requested otherwise by the participant. There may be additional follow-up/clarification through email, unless requested otherwise by participant. Participation is voluntary and you have the right to terminate the interview at any time. Any information gathered from you will not be used in this study if you choose to withdraw.

Purpose

The purpose of the interview for which you are being asked to participate is to understand how the constitution of actors who participate in formulating e-Learning policies and their personal views about e-Learning, affects the contents of e-Learning policies. You will be asked a series of questions on your personal views on e-learning and on the e-learning policy at your institution. The study uses stakeholder theory to understand policy formulation. As a result opinions will be sought from all stakeholders involved in e-Learning or teaching and learning with technologies. You may pass on any question that makes you feel uncomfortable.

Privacy

Insights gathered from you and other participants will be used in writing a qualitative research report, which will be read by my professor and presented to the University of Cape Town examinations board for examination purposes.

Direct quotes from you may be used in the report. Indicate if you would like to provide your name and other identifying information or would like to be kept anonymous.

Select one of the following
a) I would like my name used and understand that what I have said in this interview will be used to write a report for this study, publications and other research output, so that anything I have contributed to this project can be recognised ☐

b) I do not want my name used in this project ☐

Privacy will be ensured through confidentiality and the use of pseudo names. The identity of the Institutions will not be revealed in the report. A summary of the results will be available to participants upon request.

Risk

This study poses little to no risk to its participants. I will do my best to ensure that confidentiality is maintained by not citing your actual name within the study and the research report.

Acknowledgement of consent

I ……..agree to take part in the study as outlined in the covering letter received from the researcher. I understand that participation is entirely voluntary and that I will not be forced to answer questions. I will also be able to withdraw from this project at any time I wish and this will not compromise my status at my workplace.

I acknowledge that the study will be conducted by Patricia Rudo Chikuni and I understand the contents of this form and willingly agree to participate in the study.

I along with the interviewer have agreed to sign and date this form

Participant

Signed……

Date……

Researcher

Signed…….....

Date…….....

This research has been approved by the Commerce Faculty Ethics in Research Committee, University of Cape Town.

APPENDIX 12: INTERVIEW GUIDE

This is a guide for a semi-structured interview for a thesis entitled ***"The relationship between policy formulation processes and e-Learning policy discourses in Higher Education Institutions in South Africa"*** The interview is part of a research study to pursue a PhD in Information Systems at the University of Cape Town. The aim of the study is to explore stakeholder perspectives on e-Learning policy formulation processes in HEIs. The research will target (e-Learning policy makers) in HEIs. The results of this study shall only be used for academic purposes.

A set of questions is presented below. The interviews will take between 40-50 minutes each. Based on the participants' responses, more exploratory questions not listed below could be added to better understand the issues raised. Handwritten notes and audio recordings will be used for recording the interviews. The audio recording will be subject to authorization by the participants.

Policy formulation:

1. What issues triggered the development of an e-Learning policy? What was the purpose of coming up with an e-learning policy? What was your interest at the time in developing an e-Learning policy?
2. Describe the process that you had to go through to formulate the policy?
3. Who was involved in the process of formulating the policy?
4. Can you describe each stakeholder's involvement, the roles that they played and their interest in the process of formulating the policy?

Power:

1. What were the specific routines, specific interactions, processes involved in formulating the e-Learning policy?
2. What challenges did you face in reaching decisions? Are there any stakeholders who dominated the process?
3. When you wrote the policy who were the key stakeholders that you considered important for the success or failure of the policy and why?
4. How was power exercised during the process of formulating these policies?
5. How do you feel about the e-learning policy and the issues addressed in the policy?

Personal philosophies on e-learning:

1. E-Learning means different things to different people. What in your view is e-Learning?
2. What are your personal views about the role of ICTs in teaching and learning? What is your personal vision of a technology enabled education?

3. What are your personal philosophies of teaching and learning with technologies?
4. What in your opinion is the place for educational technologies in teaching and learning? Should e-learning replace traditional teaching or should it supplement what is your opinion?.
5. There's this whole debate about the role of e-learning technologies in teaching and learning. Some say that e-learning technologies have an instrumental role in teaching and learning , others believe that they have a substantive role in teaching and learning. Where do you locate yourself in this debate?

Framing of e-learning policy issues

1. What were the problems that you thought an e-learning policy at UoT should address?
2. Did you understand the problem from the same perspective as others?
3. What did other stakeholders in the process think about the policy problems to be addresses?
4. Did the resultant policy address your concerns? To what extent?
5. Are there any issues which you feel the policy should have included or excluded?

The context of e-Learning in the institution

1. As the (Director or other title) of the e-Learning unit at UoT what are your roles of responsibility ?

2. When deciding on what e-learning technologies to adopt for UoT what are the factors that influenced your decisions on what technologies to adopt. Who are the key people that have the ability to ensure that your choice is realized or not.
3. Ever since LMS have been introduced in HEIs a number of institutions have been moving from one system to the other. Could you explain these transitions in light of your choices of LMs at UoT?
4. You mentioned the consortium, How does the consortium influence the work done by the e-learning unit?
5. Describe the working relationship that you have with the Centre for e-learning?

Feedback and Evaluation of policy

1. What were some of the concerns of those who reviewed the policy after it was developed?

2. If you were asked to improve on the policy today what would you improve?

3. What problems have emerged from the use of the selected e-Learning technology and how are they being remediated?

The future of e-Learning

1. What are the major challenges for e-Learning in HEIs in South Africa?
2. What are the prospects of e-learning in HEIs?

APPENDIX 13

Appendix 13 The benefits of technology in pedagogy adopted from Draft Report on MEd-Tech Group Consultations [University C] (2003:3).

Benefits of technology in pedagogy	**Views**
1.Technology is motivating for students	*Students see it as stimulating – 'why am I doing this?' type questions can be addressed by making it relevant. It provides another lens, input or medium – "the medium really is the message".* *In my experience, one of the surest way to get students to respond positively is to present them with a fully integrated multimedia kind of learning environment. They love that, they see the value straight away.*
2.Technology promotes group work	*My existing methods to gain student involvement in group projects is to use a pin-board where students have to post ideas and comments on the project anonymously, and online discussions could have the same effect.*
Technology supports inter-disciplinarity	*Key cross-curricular connections can be built in the area of new media. University C has expertise in digital arts, games and virtual reality (computer science), semiotics and online media (media studies and commerce). Unfortunately, however, there are few, if any, connections between these curricula, owing to their positioning in different faculties.* *Students graduating from these departments need to learn real-world development methodologies which require multi-disciplinary teamwork, understanding of development processes, communication skills, and respect for contributing disciplines.*
3.Technology helps in classes with very diverse students	*I think that if technology can be used for self-paced learning. Given the diversity of background knowledge students bring with to the course, that can go a long way in helping in teaching better. Currently I have a class with some students who have never used computers before, sitting in the same class with people with wide experience (but have to do the course because they have no paper to show). This creates a problem of pacing the learning for these learners and I*

	see this as an opportunity for technology.
4.Technology helps in acquiring research skills	*There needs to be a research skills component to the curriculum - at first year level (Web literacy, library use, searching skills) and at third year (journalistic and academic research skills, online databases etc). This is likely to be similar in other faculties.*

APPENDIX 14

PHILOSOPHICAL POSITIONING OF ACTORS AND DOMINANT VIEWS ASSOCIATED WITH DIFFERENT PHILOSOPHIES

Philosophical Position	Assumptions	Views/Quotes
Technocrats	1. The role of ICTs in teaching judged numerically looking at the number of system users. The problem is that the numbers do not always translate to learning. User uptake dominant discourse for administrators.	*"There are certain elements you can use like how much are people using the system? When we started to get into the wireless environment we had about 3000 new users in the system between 6-7 months that tells me that some people are using it. How they use it doesn't matter. It says that we are using the connection for something" (Director, ICTs).*
	2. What is important is to make computers available. Provide technological infrastructure	*"We deal with open labs. This IT Centre is the biggest in Africa. We have about a thousand students that sit" (Director, ICTs)* *"Unisa started setting up physical space … In our space with the normal teaching and learning you needed to keep the contact after and outside the classroom and you also needed additional tools to assist you in teaching and learning and we started with interactive white boards, data projectors, power-point and other tools even video to teach in the classroom to supplement the way we teach and learn. If you look at distance and face to face it seems like they are almost meeting in the middle" (Director, e-learning).*
	3. Making content available through the LMS.	*"It's a technicist view and it doesn't come near to explaining the role that technologies play in the teaching context. It doesn't talk to teaching and learning it talks to populating the LMS. If you speak to the Director, e-learning all he says is the LMS. When he comes even near you all he says is LMS?", (Dean).* *Most universities have implemented the LMs it would seem as if lecturers don't actually use the platform that much and students prefer to use social media. The concern with academics is that they feel that it is limiting.*
	4.Disregard for learning goals and objectives	*The pedagogy is the point that we should be asking ourselves. What is it that we want our learners to do? and what is it that we want our learners to know and be able to do?, what tasks do we want them to do and what technology do we need to assign those tasks?. (Dean)*
	5. Technology gains precedence over learning objectives.	*"The technology is third in line but the policy is written with technology as first in line. In fact I want to go as far as to say that we shouldn't have an e learning policy any more but we should have a teaching and learning policy in which e- learning is described" (Dean)* *"I believe that it should be developed by the Centres of teaching and learning. In all universities where I have seen it really work*

		is when it is a subset of teaching and learning"
	6.The LMS provides a suitable platform for quality management of teaching and learning in an e-learning environment	*"The way that our quality management system works is that they tend to be so risk averse that no mistakes take place, it's almost like to say that I want you to put the door on this wall but please do not beak this door. They tend to be so "Draconic" and it leads to very rigid policy and very low levels of creativity "restrictive" is the word am looking for" (Dean).*
Philosophical Position	**Assumptions**	**Views/Quotes**
Instrumentalists	1.Technology is human controlled and autonomous	*"Technology is influenced by user uptake. 20 years ago that was not seen as a laptop. You now have it because of the requirements out there, so technology is evolving because of demands either by corporate sector or from the users" (Director, ICTs).* *"Technology should be seen as a supportive element we can't ignore for instance that students come with this (cellphone) can we adopt teaching and learning to use this, you know what I mean ? my feeling on the matter is that any HEI that comes and ignores the fact that it is around they're running into major problems. What they can do is to accept that these are around ,how can they optimize the students use of it so then that answers the question" (Director, ICTs).*
	2.E-learning technologies as neutral tools	"*I take the LMS as one of the ICT tools available for us. We should not focus on the tool, the tool itself a computer, a blog, LMS has nothing to offer us , it is how academics use it for teaching and learning" (Professor, CHED)* *"Some of the tools are created e.g. social media is supposed to be for socialisation and things like that so as educators can come up with new ways of using those tools in teaching and learning and I always say once a lecturer uses the tool in a different way from what manufacturers actually meant it for that's when we say there is some innovation in teaching and learning so my philosophy is that the focus should not be the tool the tool is neutral you have to say why am I using this tool what teaching and learning challenges do I have, what problems do students have that this tool can assist me in solving so we should approach it from that angle" (Professor, CHED).* *"I have a large class to teach, it's not possible to teach it properly can I look for an ICT tool to enable me to teach this large class effectively we should come up from here, from the need to the tool and look for the tools available out there and the affordances i.e. The possibilities that they offer for teaching and learning and then apply it from that angle "(Professor, CHED).* *"But what the policy should not do is to prescribe how people use ICTs because the ICTs is not just one thing, it's not one tool, there are lots of tools and they are changing every day. Whatever we are using today may not be used tomorrow, so the policy should not prescribe how a tool should be used that should be left to the academics to appropriate it the way they see fits their teaching and learning needs and their student learning needs" (Professor, CHED).*

		"My philosophy is that the focus should not be the tool the tool is neutral you have to say why am I using this tool what teaching and learning challenges do I have, what problems do students have that this tool can assist me in solving so we should approach it from that angle. I have a large class to teach, it's not possible to teach it properly can I look for an ICT tool to enable me to teach this large class effectively we should come up from here, from the need to the tool and look for the tools available out there and the affordances ie. the possibilities that they offer for teaching and learning and then apply it from that angle" (Professor, CHED) "*I think technologies are tools that should supplement teaching. Teaching is teaching but technologies are tools to enhance it"* (Librarian, Information literacy).
		"*E-learning is using electronic tools for teaching and learning and that can mean different things, … but blackboard is the in-house tool that we pay for so it brings in a standard across the university"* (Librarian, Information Literacy).
		"I would say that it's just a tool. It's a tool because it's still about teaching and still about learning but how you will use your tools whether blackboard Mendeley, Moocs etc. how you gonna use it to help you with your students to have that learning process happening" (Librarian, Information Literacy).
	A focus on the technological uses of the artifact	*Some of the tools are created eg social media is supposed to be for socialisation and things like that so us as educators can come up with new ways of using those tools in teaching and learning and I always say once a lecturer uses the tool in a different way from what manufacturers actually meant it for that's when we say there is some innovation in teaching and learning (Professor, CHED).* "*Technology is influenced by user uptake. 20 years ago that was not seen as the laptop you have its because of the requirements out there, so technology is evolving because of demands either by corporate sector or from the users now starting to use it becoming consumer based" (Director, ICTs).* "*We can't turn a blind eye to things like social networks, what you have to do is say… can education use these things (web 2.0 technologies)?, and the answer is yes they can, but they must not cloud the issue and make technology the demand and not the requirement" (Director, ICTs).*
Philosophical Position	**Assumptions**	**Views/Quotes**
Substantive theorists	*Technologies have an unremitting power to change societies.*	*It's been a sort of natural development into using technologies for teaching and learning and it adds value because now you can get this thing that fits outside of your classroom"* (Director, E-learning).
		"Well as the center for e-learning I would put it as substantive. The people who work on e-learning feel that it is largely

		substantive" (Director, E-learning).
Philosophical Position	**Assumptions**	**Views/Quotes**
Critical		*For me the issue is that if you are using ICTs you should understand the pedagogy behind the use of that tool. The LMS is being used as a dumping ground of course materials (Professor, CHED).* *When I look at it there is no educational value in how people are using the LMS they are just putting materials and all that it's just a different form of giving students content they would have just given a print based thing but provide the same thing in a different media.* *"I think the danger sometimes is that tools take preference over the teaching part. The balance should be there. So for me it really is like having a test online for instance like that it marks it for you and everything it is a lot of time saving but you have to ensure that the test you are asking is valid and reliable not that because its saving you time but to find a balance between how you will use it to help you with your teaching and that you are not just old fashioned you stand in class doing all your teaching and your students doing all the listening but there is a lot of interaction" (Librarian, Information literacy)*
		"I think technologies are tools that should supplement teaching. Teaching is teaching but technologies are tools to enhance it" (Librarian, Information literacy).
		"*Different lecturers have different drivers. To some people its whatever is new I will be using. Doesn't matter what it is if the latest technology is to stand on the roof and teach from there, then that lecturer will be there on Monday standing on the roof to teach the students*" (Deputy Librarian) "Just because you are using technology doesn't mean that you are using it effectively" (Deputy Librarian).

APPENDIX 15

Seven principles for good practice in undergraduate education by Chickering and Gamson (1987:online)

Encourages Contact between Students and Faculty	Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few Faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.
Develops Reciprocity and Cooperation among Students	Learning is enhanced when it is more like a team effort than a solo race. Good learning like good work is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions sharpens thinking and deepens understanding.
Encourages Active Learning	Learning is not a spectator sport. Students do not learn much just by sitting in classes listening to teachers, memorizing pre-packaged assignments and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. They must make what they learn part of themselves.
Gives Prompt Feedback	Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. When getting started, students need help in assessing existing knowledge and competence. In classes students need frequent opportunities to perform and receive suggestions for improvement. At various points during college and at the end, students need chances to reflect on what they have learned, what they still need to know and how to assess themselves.
Emphasizes Time on Task	Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for Faculty. How an institution defines time expectations for students, faculty, administrator, and other professional staff can establish the basis of high performance for all.
Communicates High Expectations	Encourage more and you will get more. High expectations are important for everyone… for the poorly prepared, for those unwilling to exert themselves, and for the bright and well-motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations for themselves and make extra efforts.
Respects Diverse Talents and Ways of Learning	There are many roads to learning. People with different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learn in new ways that do not come so easily.

The seven principles were intended as a guideline for faculty members, students and administrators in universities to follow to improve teaching and learning. They were developed based on research for over 50 years in diverse communities Hispanic, Asian, young, old, rich and poor communities. The Walker Center for Teaching and Learning at the University of Tennessee Chattanooga provides examples of each of the seven principles in action. In encouraging contact between students and faculty they note that one could use computer conferencing, list serves, discussion forums, and encourage email correspondence and use,

APPENDIX 16

Objectives as listed in the IIS under the above teaching and learning goal together with minor modifications to the language

adopted from University B e-learning strategy (2004:13)

Original	**Modified (changes)**
Technology will facilitate the transformation of teaching and learning according to a constructivist paradigm leading to active and independent learning (information literacy)	Technology will be used to facilitate the transformation of teaching and learning according to a constructivist paradigm leading to active and independent learning (digital academic literacy)
Learners will have access to information from a wide variety of sources, including print and digital media	No change
Learners will be encouraged through technology to become independent learners	No change
Academic staff will have the skills and technology needed to develop and manage constructivist courses that include access to and use of information and communications technology	No change
Use technology for the mentoring of undergraduate and postgraduate students	Incorporated into: The learning management system will be used for the tracking and mentoring of undergraduate and postgraduate students.
Academic staff produce high quality learning content that wherever possible will follow the open content philosophy	
Management information systems and online learning systems will be linked so that the right information is available when it is needed in the format in which it is required.	No change
Each students who graduates from university B will be information literate according to their field and level of study.	Each student who graduates from University B will demonstrate a digital academic literacy Appropriate to their field and level of study.

Technology will help to grow the enrollment of part time learners, freed from geographic and time tabling restraints and to deliver life- long learning to distance students and alumni	University B will use technology effectively to help grow the enrollment of learners, freed from geographic and time-tabling restraints, and to deliver life- long learning opportunities to students and alumni.
Develop a forward looking approach to the provision of audiovisual services in support of teaching and learning	University B will develop a forward looking approach to the provision of audiovisual services in support of teaching and learning.
University B will sustain creative development of its own learning management system.	University B will maintain its investment in the learner management system and will continue to build a community of practitioners and researchers around this tool, which will be kept free (open source) under a licence and supported from the university.

APPENDIX 17

Guiding questionnaire: [Med-Tech Group] Consultations 2003

1 **Teaching and learning – the curriculum**

1.1.What do you see as the most important teaching and learning needs in your faculty/department/courses?

1.2. Do any of these key teaching and learning needs suggest or require a technology provision?

1.3 Have you explored these possibilities of using technology in your teaching?

- If yes, what kind of help, if any, would you have needed to do it better?
- If no, what has stopped you? What assistance would you like to get going?

2. Discipline-specific

2.1 Is there anything about the discipline/course you are involved in that requires some kind of use of technology?

2.2 What are the barriers to doing so? What could help?

3. Resources

3.1. How are the available technology resources in your faculty being used for teaching and learning?

3.2. Are the available technology resources in your faculty being used optimally for teaching and learning?

4. Educational technology unit at University C

4.1 Do you see a role for an educational technology unit? If yes, what do you think its functions should be? Where should such a unit be located - why?

5. Imagining possibilities

5.1.What are the educational technology projects you most admire?

APPENDIX 18

LIST OF DOCUMENTARY SOURCES

1. White paper on e-education (Department of Education)
2. Integrated e-Learning Implications for pedagogy, Technology & Organisation by Jochems et al.
3. Teaching and Learning Policy (University A)
4. Assessment policy (University A)
5. Higher Education Qualifications Framework (HEQC)
6. Quality Assurance policy (University A)
7. Policy on policy development and approval policy (University A)
8. Integrated information strategy for University B (2002)
9. Project team meeting notes University B June 2003
10. Project plan University B 20 Sept 2002
11. Comments on discussion document-University C
12. Draft Discussion Document New Centre of Educational Technologies- University C
13. Internal Report on Educational Technology [University C]
14. Summary of MEd-Tech Group Needs analysis-University C
15. Report on MEd-Tech Group Consultations 2003-University C.
16. MEd-Tech Group Report 2003 [unpublished]
17. University C Vice Chancellor's Report 2003
18. University C Report to Council 2004