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University of the Witwatersrand, Johannesburg, South Africa

ON TEACHING ECONOMICS 1: A QUALITATIVE CASE STUDY OF A SOUTH AFRICAN UNIVERSITY

Emmanuel Oluseun OJO

A thesis submitted to the Faculty of Humanities at the University of the Witwatersrand, Johannesburg in fulfilment of the conditions for the degree of Doctor of Philosophy

Main supervisor: Professor Shirley Booth
Co-supervisor: Professor Lorenzo Woollacott

April 2016

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Date

ABSTRACT

The global financial crisis of 2007–2008 changed the way the world thinks about economics as a discipline and brought about awareness of how economics is taught at universities. In view of an on-going global debate about the economics curriculum and its teaching, this doctoral study places the South African context within the global higher education sphere and explores how introductory economics is taught in first-year at a South African university. This study explored the teaching of Economics 1 at a mainstream, globally-ranked public university in South Africa with very similar content and structure to the Economics 1 curriculum in the West.

The main aim of the doctoral study was to investigate the qualitatively different ways in which university teachers (lecturers and tutors) teaching Economics 1 at a South African university conceive of, experience and understand their teaching and tutoring roles. On the basis of this, three research questions were asked: (I) What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?; (II) What are the qualitatively different ways tutors at 'the University' understand teaching Economics 1?; *and* (III) What is/are the implication(s) for students' learning of teaching Economics 1 within the current setting at 'the University' through the lenses of relevant conceptual frameworks and the outcome of the empirical study?

Teaching in higher education, the disciplinary context of economics' undergraduate teaching and its implications for students' learning underpinned the choice of the literature, the three conceptual frameworks and the research methodology. By asking the three research questions above to guide the research process, the empirical study used a qualitative methodology – phenomenography – that aims to explore the qualitatively different ways in which a group of people experience a specific phenomenon, in this case teaching Economics 1 in higher education. On the basis of phenomenography as a conceptual framework in itself, this doctoral study further analysed the

empirical data using two conceptual frameworks - a four-context framework for teaching in higher education and the concept of semantic gravity, relating to segmented and cumulative learning, as conceptual lenses.

Two sets of conceptions of teaching emerged on the basis of answering the first two research questions. A careful, comparative analysis of these two sets (lecturers' and tutors' sets of conceptions of teaching) led to six conceptions of teaching Economics 1 in higher education as follows: (I) team collaboration to implement the economics curriculum; (II) having a thorough knowledge of the content; (III) implementing the curriculum in order for students to pass assessment; (IV) helping students learn key economics concepts and representations to facilitate learning; (V) engaging students through their real-life economics context to acquire economic knowledge; *and* (VI) helping students think like economists.

The first three are characterised as being teacher-centred and the later three as student-centred. Applying the concept of semantic gravity (Maton, 2009), I argue that the latter two more complete conceptions of teaching imply cumulative learning in which students are able to acquire higher-order principles whereby they are able to apply the knowledge acquired through the teaching of Economics 1 in new contexts. The first four conceptions are seen as favouring segmented learning. According to this analysis, the fourth conception, although characterized as student oriented, should be regarded as favouring segmented learning which is not in line with the aims of higher education. As for the four-context model of teaching in higher education, the analysis from the empirical data showed that there is a very strong connection between the pedagogical and disciplinary contexts in relation to the six conceptions of teaching emerging from the analysis, though the disciplinary context is stronger than the pedagogical context.

In summary, three implications can be drawn from this doctoral study on the basis of the empirical data, literature and conceptual frameworks as the basis

for improving undergraduate economics education. These are as follows: (1) the need to make the economics curriculum aligned with real-life contexts of undergraduate students; (2) the need to rethink the economics curriculum in light of the current global debates within the discipline of economics; and (3) the need to bring pedagogical development into the team.

Key words/phrases:

- Conceptions of Teaching;
- Teaching in Higher Education;
- Higher Education Research;
- Undergraduate Economics Education; *and*
- Phenomenography

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ABBREVIATIONS USED WITHIN THIS DISSERTATION

CHE	Council for Higher Education
DEE	Developments in Economics Education
DHET	Department of Higher Education and Training
DoE	Department of Education
HEI	Higher Education Institution
LCT	Legitimation Code Theory
NRF	National Research Foundation
ORF	Official recontextualising field
PRF	Pedagogic recontextualising field
SAQA	South African Qualifications Authority
SCEQ	Student Course Experience Questionnaire

LIST OF TABLES

Table 4.1 Profile of lecturers teaching Economics 1 at 'the University' in 2012

Table 4.2 Profile of Tutors tutoring Economics 1 at 'the University' in 2012

Table 4.3 Summary of the three phases of the data collection for this doctoral study

Table 4.4 Excerpt of final coding template

Table 5.1 Categories of Description: Lecturers' ways of understanding teaching Economics 1

Table 6.1 Categories of Description: Tutors' ways of understanding tutoring Economics 1

Table 7.1 Overall team conceptions of teaching Economics 1

Table 7.2 Summary of selected research on university conceptions of teaching from a relational perspective

Table 7.3 Classifying the conceptions of teaching according to Maton's (2009) semantic gravity

Table 8.1 Summary of the empirical results from the data chapters (chapters five and six)

LIST OF FIGURES

Figure 2.1 The 3P model of teaching and learning. (Biggs, Kember & Leung, 2001, p. 136)

Figure 3.1 The unit of a science of experience, a way of experiencing something: Marton and Booth (1997, p. 88)

Figure 3.2 A visualisation of the 'Four-Context framework for teaching Economics 1 in higher education' adapted from Ojo and Booth (2009, p. 320)

Figure 3.3 Semantic gravity and structuring of knowledge (Maton, 2009, p. 46)

Figure 4.1 Description of the coding through the lecturers' code manager at the preliminary stage using ATLAS.ti® focusing on two themes of teaching and learning

Figure 4.2 An illustration of the process of conducting this thesis' phenomenographic case study

Figure 7.1: A multiple-level categorisation model of conceptions of teaching (adapted from Kember, 1997, p. 264)

Figure 7.2: A simplified visualisation of the 'four-context framework for teaching Economics 1 in higher education'

Figure 7.3: Summary of correlation conceptions of teaching and the 'four-context framework for teaching Economics 1 in higher education'

Figure 7.4: Mapping the different conceptions of teaching across the overlapping 'four-context framework for teaching Economics 1 in higher education'

TABLE OF CONTENTS

COPYRIGHT NOTICE i
DECLARATION ii
ABSTRACT iii
ACKNOWLEDGEMENTS vi
ABBREVIATIONS USED WITHIN THIS DISSERTATION viii
LIST OF TABLES viii
LIST OF FIGURES ix

CHAPTER ONE 1
INTRODUCTION TO THE STUDY 1
1.1 Introduction 1
1.2 Statement of the problem 2
1.3 Rationale for the study 3
1.4 Aims of the study and research questions 4
1.5 Why the choice of this South African university? 5
1.6 Central argument of the study 7
1.7 Structure of the thesis 7

CHAPTER TWO 9
REVIEW OF LITERATURE ON ECONOMICS EDUCATION AND TEACHING IN HIGHER EDUCATION 9
2.1 Overview of the chapter 9
2.2 Exploring the notion of university-level economics education 9
2.3 'Thinking like an economist' as 'skill' in teaching economics at university level 12
2.4 The framework of South African university-level economics education 13
2.5 Instructional methods used in undergraduate economics education 14
2.6 The place of threshold concepts and troublesome knowledge in undergraduate economics education 19
2.7 Higher education research, teaching and learning 21
2.8 Research on teaching in higher education 26
2.9 Conclusion 29

CHAPTER THREE 31
THREE CONCEPTUAL FRAMEWORKS 31
3.1 Introduction 31
3.2 Phenomenography 32
3.3 The four-context framework for teaching economics in higher education 37
3.4 Maton's sociological concept of semantic gravity and teaching in higher education 42
3.5 The key ideas from this chapter 44

CHAPTER FOUR 46
RESEARCH METHODOLOGY AND DESIGN 46
4.1 Introduction 46

4.2 Phenomenography as research methodology 46
4.3 The qualitative study 47
4.4 The research design 48
4.4.1 Sample selection 49
4.4.2 Data Collection 51
4.4.3 Data analysis 56
4.4.4 On ethical consideration, trustworthiness and quality of the study 60
4.5 Reflections on data collection and analysis 61
4.6 Adjudicating the dependability of a phenomenographic study 62
4.7 Criteria for presenting extracts from interview transcripts in subsequent chapters 63

CHAPTER FIVE 65
A PHENOMENOGRAPHIC ANALYSIS OF LECTURERS' WAYS OF EXPERIENCING TEACHING ECONOMICS 1 65
5.1 Introduction 65
5.2 Lecturers' ways of understanding of teaching Economics 1 at 'the University' 66
5.3 The structure of the outcome space 73
5.4 Conclusion 76

CHAPTER SIX 77
A PHENOMENOGRAPHIC ANALYSIS OF TUTORS' WAYS OF EXPERIENCING TUTORING ECONOMICS 1 77
6.1 Introduction 77
6.2 Tutors' Ways of Understanding Tutoring Economics 1 at 'the University' 77
6.3 The structure of the outcome space 85
6.4 Conclusion 88

CHAPTER SEVEN 89
DISCUSSION: FINDINGS IN THE LIGHT OF THE LITERATURE AND THE CONCEPTUAL FRAMEWORKS 89
7.1 Introduction 89
7.2 Laying out the overall conceptions of teaching across the team 90
7.3 Relating the conceptions of teaching proposed by other researchers and those presented in this study 93
7.4 Making sense of the six conceptions of teaching in higher education in the light of the 'four-context conceptual framework' 99
7.5 Making sense of the six conceptions of teaching in higher education in the light of Maton's sociological concept of Semantic Gravity 104
7.6 On the validity of my study 107
7.7 Conclusion 108

CHAPTER EIGHT 110
CONCLUSIONS 110
8.1 Introduction 110

8.2 Re-examining the research questions and making the link across the different chapters presented in this thesis 110
8.3 Pulling together the empirical findings 112
8.4 Implications for enhancing teaching 115
8.4.1 The role of student experience in enhancing teaching: Using real-life world examples to teach economics 115
8.4.2 The role of the curriculum in enhancing teaching: Revisiting the economics curriculum in the light of recent developments 116
8.4.3 The role of the teachers in enhancing teaching: Significance of the pedagogical development of the team 119
8.5 Practical recommendations 121
8.6 Concluding reflections 123

REFERENCES 125

Appendices 139
APPENDIX A: 139
GAINING ACCESS TO CONDUCTING THE STUDY 139

Appendix A1: 140
APPLICATION TO THE HUMAN RESEARCH ETHICS COMMITTEE 140
(NON-MEDICAL) FOR CLEARANCE OF RESEARCH INVOLVING 140
HUMAN SUBJECTS 140

Appendix A2: 146
FORMAL LETTER OF APPROVAL BY THE HUMAN RESEARCH ETHICS COMMITTEE TO CONDUCT THE STUDY 146
LETTER TO THE HEAD OF SCHOOL 147

APPENDIX B: 148
RESEARCH INSTRUMENTS 148

Appendix B1: 149
CONSENT & INFORMATION SHEET FOR PARTICIPANTS 149

Appendix B2: 150
CONSENT & INFORMATION SHEET FOR PARTICIPANTS 150

Appendix B3: 153
LECTURERS' AND TUTORS' INTERVIEW SCHEDULE 153

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

In 2008, the world's attention was turned to the global economic crisis. This created an awareness that how [university] economics students are educated '…has much wider implications for society than is commonly imagined' (Ward-Perkins & Earle, 2013, p. 1). The Principles of Economics course, generally called 'Economics 101, ECON 101' (Dalziel, 2011), is an introductory course at universities and the medium through which university students in their first year are introduced to economics as a discipline. A claim from the literature on the teaching of economics is that university students' performance is consistently poor (Dalziel, 2011; Mallik & Lodewijks, 2010). This is both a global (Dalziel, 2011; Mallik & Lodewijks, 2010) and national challenge. Within the South African context, evidence of 'high dropout and failure rates in the undergraduate [...] economics modules' is apparent (Bokana & Tewari, 2014, p. 261). This dismal performance of South African university students in economics is one among the broader challenges of increasing access and improving throughput and retention, which are elements of the key ongoing national discourse in South African higher education (Council on Higher Education (CHE), 2010).

The place of undergraduate economics education, its implications for the wider society and the consistently poor performance of university students in economics modules are three issues highlighted above. Essential to these three issues is the teaching of economics in higher education. The present study is contextualised in teaching economics, specifically the teaching of an introductory economics course called 'Economics 1' at one of the South African universities' Department of Economics. This course is similar to Dalziel's first-

year Principles of Economics course within an American higher education system. The Economics 1 course at this South African university, similar to the claim of Schoer, Ntuli, Rankin, Sebastiao, and Hunt (2010), has been 'offered across faculties and draws students from the humanities, science, engineering and commerce' (p. 12). The present study seeks to find out teachers' understanding of teaching this 'Economics 1' course at this university. Again, there is a similarity to the claims in the global and South African literature which characterize the Economics 1 course as reliant on the lecture method as the traditional method of teaching, its highly technical and often mathematical nature, and large class sizes (Becker & Watts, 2001; Ross, 2014; Schoer et al., 2010; Simatele, 2010; Ward-Perkins & Earle, 2013).

1.2 Statement of the problem

It is well documented in research on higher education that teachers' understanding and experience of teaching in higher education has implications for student learning (Prosser & Trigwell, 1999; Ramsden, 1992), whether for improved grades and throughput, or understanding of principles. Prosser and Trigwell (1999) argue that, 'there is something the university teachers can do about learning - not trying to change the student, but trying to change the context experienced by the student' (p.7), thus researching teaching as it is experienced by the students. In other words,

> students' thoughts and actions are profoundly affected by the educational context or environment in which they learn; [thus research insights into] our own experience as teachers, can help us to decide on the best ways to organise the curriculum, evaluate teaching in order to encourage improvement, and plan satisfactory programmes for teaching lecturers to teach better. (Ramsden, 1992, p. 6)

Ramsden (1987) calls for a relational approach to researching the experience of teaching and learning in higher education. He argues that,

> a relational perspective links the improvement of the professional practice of teaching with research into student learning. It offers an alternative to paradigms which reduce the complex relations between students, subject content, and teaching to

> characteristics of instruction and of students, and whose findings and prescriptions often appear distant from everyday teaching problems. (Ramsden, 1987, p. 275)

In researching teachers' experience of teaching Economics 1 with a relational perspective, specifically a phenomenographic perspective, this doctoral thesis examines the qualitatively different ways in which these teachers understand and experience their teaching. This results in 'conceptions of teaching' in higher education (Dall'Alba, 1991; Samuelowicz & Bain, 1992; Trigwell & Prosser, 1996), which have implications for students' learning. This answers the need to 'take a strong, active interest in the teaching of economics' (Oosthuizen, 2008, p. 175).

This doctoral study intends to contribute to literature on university teachers' conceptions of teaching economics as a response to the claim that 'there has been very little relational research into university teachers' conceptions of teaching' (Prosser & Trigwell, 1999, p. 20). There is also a dearth of literature on university conceptions of teaching in South Africa. In particular, it contributes to the literature on teaching economics, and has implications for enhancing the conditions for students' learning.

1.3 Rationale for the study

According to Prosser and Trigwell (1999) 'to have students achieve high-quality learning outcomes is one of the aims of most university teachers' (p. 108). At the same time, 'teaching in higher education is a very complicated and detailed subject' (Ramsden, 1992, p. 12). Understanding the different ways teachers think about teaching and function as teachers, offers great insights into the complicated subject of university teaching. As Ramsden argues, 'success in learning how to improve your own teaching is related to the extent to which you are prepared to conceptualise your teaching as a process of helping students to change their understanding of the subject matter you

teach them' (Ramsden, 1992, p. 16). A relational research perspective into university teachers' conceptions of teaching has implications beyond just the teachers' practice. Invariably, 'each of [the] ways of experiencing teaching has implications for the ways in which students will learn' (Ramsden, 1992, p. 16). University teachers' experience of and conceptions of teaching thus have an impact on students' learning in higher education. It is worthwhile to find out what these are in relation to teaching Economics 1, as this adds to knowledge in the important field of higher education teaching, and its consequences for students' learning.

1.4 Aims of the study and research questions

The starting point of this study is the teaching of Economics 1 at a South African university, henceforth also referred to as 'the University'. The purpose of the empirical research is to investigate the qualitatively different ways in which these teachers (lecturers and tutors) teaching Economics 1 at 'the University' conceive of, experience and understand their teaching and tutoring roles, and the implications for students learning Economics 1, and then to theorise on the implications for student learning. In summary, the key aims of my doctoral research are as follows:

1. To gain insights into the qualitatively different ways in which teachers teaching Economics 1 understand teaching, where 'teachers' includes both lecturers and tutors;
2. To investigate the teachers' conceptions of teaching Economics 1 through the lens of three conceptual frameworks; *and*
3. To examine the implications for students' learning of teaching Economics 1 at 'the University'.

The specific research questions asked to examine the teaching of Economics 1 at 'the University' are:

I. What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?

II. What are the qualitatively different ways tutors at 'the University' understand teaching Economics 1?

III. What is/are the implication(s) for students' learning of teaching Economics 1 within the current setting at 'the University' through the lenses of relevant conceptual frameworks and the outcome of the empirical study?

1.5 Why the choice of this South African university?

One of the key motivations of the mergers that took place after the demise of apartheid in 1994 was the incorporation of the South African higher education system into the global knowledge economy (Sehoole, 2005). These mergers were 'a major restructuring and reconfiguration of the higher education institutional landscape and of institutions that included the mergers of institutions and the incorporation of some institutions into others' (Badat, 2015, p. 175). Badat (2015) explains that,

> in 1994 the higher education 'system' consisted of 21 public universities, 15 technikons, 120 colleges of education and 24 nursing and 11 agricultural colleges. By 2001 all the colleges of education were either closed or incorporated into the universities and technikons. Thereafter some of the 36 universities and technikons were either merged, unbundled or incorporated to give rise to the present landscape of 11 universities, 6 comprehensive universities (one distance) and 6 universities of technology. Two institutes of higher education were created as facilities through which particular academic programmes of the existing universities could be provided in provinces that did not have universities. After 1994, alongside the dominant public higher education a small but growing private higher education sector began to take root. (p. 187)

The mergers resulted in the harmonization of South African public higher education, resulting in the current higher education landscape with three institutional types: universities, universities of technology and comprehensive universities. The Minister of the Department of Higher Education and Training (DHET) specified that,

> [the] 26 public universities includes the Sol Plaatje University and University of Mpumalanga, both of which are new universities entering their second year of operation, and the Sefako Makgatho Health Sciences University (SMU), which was promulgated as a juristic person in May 2014 and will open its doors to its first student cohort in January 2015. SMU is the third new university to be established since the dawn of our democracy in 1994. SMU incorporated the former MEDUNSA campus of the University of Limpopo on 1 January 2015, and will have its first intake of over 1000 new students registering for the 2015 academic year. All continuing students of the former MEDUNSA campus of the University of Limpopo will be registered as SMU students in 2015. (Nzimande, 2014, p.2)

The current landscape of South Africa's higher education system evolved from the mergers, which resulted in the creation of a single coordinated higher education system (Sehoole & Ojo, 2015). According to the authors,

> traditional universities are those that were not affected by mergers, although some of them incorporated some entities of higher education institutions during the merger process, without this having any impact on their identities. Universities of technology were established out of a merger of two or three technikons, whereas comprehensive universities were established out of a merger of a university and a technikon. (p. 255)

Within these institutions, as will be explained in chapter two, the content of the economics curriculum and the logistics behind teaching are pertinent to the teaching of economics to university student (Jacobs, Viviers, & Naudé, 2005). With respect to the curriculum, a South African first-year undergraduate economics programme is similar to what one obtains in the West, with core modules of introductory microeconomics and macroeconomics (Luiz, 2009).

The commonality of these two factors across the teaching of economics in South African higher education led me to select one of the mainstream, globally-ranked traditional universities for this study. The South African university selected as a case study is representative of the context of the teaching of economics in first-year and the racial composition of the student body is characteristic of what obtains in other South African universities. Thus, this case study is very representative of context and content of first-year economics teaching in South African universities.

1.6 Central argument of the study

Six conceptions of teaching in higher education emerged from the empirical data collected in this study. These six qualitatively different ways in which the teachers experience teaching Economics 1 at this South African university are, teaching as (I) team collaboration to implement the economics curriculum; (II) having a thorough knowledge of the content; (III) implementing the curriculum in order for students to pass assessment; (IV) helping students learn key economics concepts and representations to facilitate learning; (V) engaging students through their real-life economics context to acquire economic knowledge; and (VI) helping students think like economists. These conceptions of teaching from the phenomenographic analysis are mapped out across the 'four-context framework for teaching in higher education', which relates teachers' ways of experiencing their teaching to the interplay of four contexts - official, pedagogical, disciplinary and social - that define higher education teaching.

Since the essence of teaching is to help students to learn, I argue that the overall six conceptions of teaching impact on students' learning. Applying Maton's sociological concept of semantic gravity (Maton, 2009), I argue that the later more complete conceptions of teaching indirectly imply cumulative learning in which students acquire higher-order principles whereby they are able to apply the knowledge acquired through the teaching of Economics 1 in new contexts.

1.7 Structure of the thesis

The *first chapter* presents the outlines for this doctoral study.

Chapter Two examines the literature to ground this doctoral study in the existing body of knowledge. A dichotomy is observed in the literature reviewed.

On the one hand there are the dominant non-theoretically informed studies and debates on Economics Education extensively published by professional economists, and on the other, fewer, more theoretically-informed debates on teaching and learning in higher education.

Chapter Three presents the three conceptual frameworks of this doctoral thesis. These three conceptual frameworks are: phenomenography, the 'four-context framework for teaching in higher education' and the sociological concept of semantic gravity.

Chapter Four outlines the research design and methodological framework which guides the study's design.

Chapters Five and Six concern the empirical study in which I present a detailed analysis of the data collected on the teachers. The categories of descriptions are described, illustrated and discussed in these chapters. Outcome spaces illustrating the hierarchical ordering of these categories of descriptions are also presented.

Chapter Seven integrates these findings, unpacks the use of the conceptual frameworks as devices to make meaning of the data, relates the conceptions of teaching proposed by other researchers and those presented in this study and discusses the implications of my overall conceptions of teaching Economics 1 on students' learning.

Chapter Eight concludes the thesis by drawing on the key issues that have emerged in the study through an exploration of the different self-contained units: the literature review, the data chapters and the discussion chapter. The chapter emphasizes the new knowledge that my thesis has contributed.

CHAPTER TWO

REVIEW OF LITERATURE ON ECONOMICS EDUCATION AND TEACHING IN HIGHER EDUCATION

2.1 Overview of the chapter

The primary focus of this doctoral study, as stated in chapter one, is to investigate teachers' understanding of teaching Economics 1, a first-year undergraduate course at 'the University'. The purpose of the chapter is to explore the two key themes - economics education and teaching in higher education - which are at the core of this literature review. In addition, my objective in this chapter is to present a synthesis of relevant higher education literature pertinent to my research questions, thereby presenting critical issues and debate around these themes. I conclude this chapter by drawing out the key issues emanating from the review of the literature in the light of higher education literature on teaching introductory Economics.

2.2 Exploring the notion of university-level economics education

There are numerous studies published on undergraduate Economics Education, with the dominant discourse that of academic economists, who have published widely on the subject in the United Kingdom, United States and Australia (Becker, 2003; Becker, 1983a, 1983b, 1996, 1999, 2000, 2003, 2004, 2005; Becker & Watts, 2001; Becker, 2001a; Parker, 2013). This dominant perspective has taken a quantitative stance in exploring the debates around teaching, learning and assessments in Economics teaching in higher education. Thus, there is a lack of an educationalist's perspective, which uses an educational theoretical lens to contribute to the field. This section opens up this literature review by expounding on the disciplinary field of Economics and within the mainstream literature delineates the field of Economics Education.

Economics is a disciplinary, theoretically-based subject taught at undergraduate and postgraduate levels at universities globally. According to Backhouse and Medema, 'economists are far from unanimous about the definition of their subject' (2009, p. 221). The authors emphasize the breadth of the subject of economics, especially over the past 200 years. For the purpose of this doctoral thesis, considering its focus on teaching Economics and not necessarily on the entire debate on the breadth or acceptance of a definition for the subject or argument against how it is taught (Peterson & McGoldrick, 2009), I adopt the definition given to the subject by the authors of the main textbook used at 'the University' in the context of teaching Economics 1:

> Economics is the social science that studies the choices that individuals, businesses, governments, and entire societies make as they cope with scarcity and the incentives that influence and reconcile those choices. The subject may be divided into two main parts: Microeconomics and Macroeconomics. (Parkin et al., 2010, p. 2)

The authors acknowledge that students currently studying economics are doing so at a time of enormous change, including mentioning the global economy that slipped into recession in 2008, which 'quickly evolved into a global jobs crisis' (Verick & Islam, 2010, p. 5). Teaching economics now is

> at a time when economists are tackling subjects as diverse as growth, auctions, crime, and religion with a methodological toolkit that includes real analysis, econometrics, laboratory experiments, and historical case studies, and when they are debating the explanatory roles of rationality and behavioral norms, [and] any concise definition of economics is likely to be inadequate. (Backhouse & Medema, 2009, p. 231)

The subject of economics is more complex than ever with a number of mathematical models used in exploring some of the complex dynamics around human behaviour (Pressman, 2013).

The world's attention turned to economic events triggered by the 2008 global financial crisis and since then Economics Education has become an essential dialogue in secondary school Economics Education (Walstad & Soper, 1989; Walstad, 2001) and university-level Economics Education (Walstad, 2001;

Watts & Becker, 2008; Becker & Watts, 1995; Zarenda & Rees, 1984). Becker (2001b) explains that Economics Education has focused

> on the scholarship of teaching economics, encompassing the organizations advocating the need for economic literacy as well as those delivering the subject of economics, […] addressing topics at any education, training, or schooling level, are typically concerned with the secondary and tertiary levels as they address the content to be taught, methods of teaching, evaluation of those methods, and information of general interest to teachers of economics. (p. 4078)

With this definition, Becker elucidates the significance of economic knowledge in delineating the concept of economics, which correlates to what other literature has presented on the field (Becker, 2003; Becker, 1997, 2005). The terms 'economics education' and 'economic education' (Becker, 2001b, p. 4078) are viewed synonymously and used interchangeably in most studies. For the purpose of this study, I shall specifically use the term 'Economics Education'.

A broad consensus exists among Economics faculty that enabling students to think like an economist is the overarching goal of Economics Education (Siegfried et al, 1991). This notion is emphasised within the South African context by Professor LK Oosthuizen, a South African economist and academic (Oosthuizen, 2008). In his treatise, he notes that,

> economics education is concerned with the benefits, costs, production, and financing of dissemination of economics knowledge, while economic literacy is a term used to describe the ability of individuals to recognize and use economic concepts, and the economic way of thinking in order to improve their well-being and to understand the world around them. (2008, p. 2)

He concludes that, while economic literacy [knowledge] is the goal, economics education is the process.

Finally, McKenzie (1977) put forward the notion of economics education research as the 'study of how economists teach and what they teach' (p. 5). Though McKenzie's claim is very useful in illuminating the field of economics education, Becker's delineation is aligned to the heart of this study. According to Becker (2001a), economics education provides '[…] a body of knowledge and

views regarding what is and should be taught, how it is and should be taught, its assessment and evaluation with regards to student learning and attitudes, and teacher performance in generating those changes in students' (p. 4078). As noted in the introduction, this doctoral study will investigate the ways in which lecturers and tutors at a South African university understand teaching in an introductory economics course.

2.3 'Thinking like an economist' as 'skill' in teaching economics at university level

As noted in the previous section, 'thinking like an economist' is the overarching goal of economics education. I argue that acquiring this 'skill', as my empirical data later shows, is pertinent to the role of lecturers and tutors involved as faculty teaching introductory Economics. This 'skill' is about understanding economic relationships. Siegfried et al. (1991, pp. 199-202) summarize what this entails as (i) using chains of deductive reasoning in conjunction with simplified models (such as supply and demand, marginal analysis, benefit-cost analysis, and comparative advantage) to help understand economic phenomena; (ii) identifying trade-offs in the context of constraints, distinguishing positive (what is) from normative (what should be), tracing the behavioural implications of some changes while abstracting from other aspects of reality, and exploring the consequences of aggregation (e.g., the fallacy of composition); and (iii) describing the redistributive implications of changes in economic institutions and policies, amassing data to evaluate and refine our understanding of the economy, and testing alternative hypotheses about how consumers and producers make economic choices and how the economic system works.

From the authors' assertion, thinking like an economist includes problem-solving which is the focus of the curriculum of undergraduate economics

education which this study focuses on. Expounding on Siegfried et al.'s (1991) claim on what it takes to think like an economist, Pol and Carroll (2005) argue that 'thinking like an economist means first to decide which assumptions to make and then build simplified models in order to understand the economy around us (following the model-building approach)' (p. 3). On the basis of a model-building approach, there is a strong preference for using mathematics as a tool in teaching economics at undergraduate and postgraduate levels. A functional understanding and knowledge of mathematics as a tool for the study of economics in universities has become a necessary requirement for students of economics (Siegfried et al., 1991).

2.4 The framework of South African university-level economics education

Though South African institutions of higher education offer various programmes in Economics, the focus of this study will be on the teaching of Economics 1 at one of the mainstream traditional universities in South Africa. This university offers Economics as a programme of study at both undergraduate and postgraduate levels. Within the South African university system, the goal of enabling university students to study economics rests on two factors: the content of the economics curriculum (what is taught) and the logistics behind it (including teaching and assessment) (Jacobs, Viviers, & Naudé, 2005). In terms of what the Economics Department in South African universities teach at the undergraduate level, the study by Jacobs et al. (2005) reveals that:

> the Universities of Pretoria, Johannesburg, Free State, North West: Potchefstroom, Vaal Triangle and Mafikeng campuses, and Western Cape offer a general or introductory Economics course together with first level micro- and macroeconomics. The University of Kwa-Zulu Natal only offers macroeconomics on the first level together with one semester in introductory economics. The University of South Africa offers two semesters of introductory economics. The Universities of Cape Town, the Witwatersrand, Stellenbosch and Venda offer only first level micro- and macroeconomics but all offer economics for non-specialists for students not familiar with the subject. (Jacobs et al., 2005, p. 20)

This claim of the structure of the Economics teaching in South African institutions is supported by Steenkamp (2006) and Luiz (2009), and it fits into what is considered to be international best practice according to Steenkamp, Viviers and Naudé (2007). This also aligns with Siegfried et al.'s (1991) blueprint for economics curricula for introductory microeconomics and macroeconomics courses, and validates the earlier definition adopted of Economics being comprised of these two parts. Siegfried et al.'s (1991) 'tree' configuration brings illumination to the economics curricula and this is summarised as:

> the 'branches' are contextual courses (economic history, history of economic thought & comparative economic systems); international courses (comparative systems, economic development, international finance & trade) and public sector economics (labour economics, taxation and public finance). The 'trunk' includes quantitative courses; intermediate macroeconomics and intermediate microeconomics, while the 'roots' are introductory microeconomics and macroeconomics courses (Siegfried et al., 1991, pp. 205-205).

Within the context of 'the University' in which the empirical data of this study is collected, the 'roots' of the first-year undergraduate programme fit into this illustration of a two-semester structure which teaches introductory microeconomics and macroeconomics.

2.5 Instructional methods used in undergraduate economics education

Of fundamental importance to undergraduate economics education is the teaching role teachers, including both lecturers and tutors, have to undertake to immerse students into economic knowledge and understanding. The 'development of economic attitudes, opinions, and economic understanding in students and adults' (Walstad, 1987, p. 223) is very significant as to what these teachers do in higher education. This section discusses how economics is taught in universities. The starting point of this section is to differentiate between classical and neoclassical economics. It examines existing strategies

used in teaching undergraduate economics and contextualises the pedagogy of undergraduate economics education within South African higher education.

Economics as a programme of study at undergraduate level provides students with the opportunity to learn about the basic operations of the economy. Undergraduate students are taught 'neoclassical economic theory', and the 'creators of neoclassical economics (Stanley Jevons, Leon Walras, Francis Ysidro Edgeworth, and Vilfredo Pareto) are credited with transforming the study of economics into a rigorously mathematical scientific discipline' (Nadeau & Marshall, 2008, p.2). It is the 'idiom of most economic discourse today, the paradigm that bends the twigs of young minds' (Gaffney, 1993, p. 17). 'Classical economic theory' on the other hand is the

> particular approach most early economic thinkers adopted when analyzing the economy which looks at classes or groups of people rather than at individuals. Classical economics focuses on what determines the wages received by workers (on average) rather than how much was made by each individual worker, and on what causes the rate of profit to rise and fall in the whole economy rather than the factors affecting the profits of an individual firm. It focuses on explaining the generation and distribution of an economic surplus. (Pressman, 2013, p. xvi)

Pressman (2013) argues that

> classical economics pretty much died during the twentieth century, and most historians of economic thought attribute the demise of classical economics to the greater use of mathematics, especially the calculus, and the rise of marginal analysis, which was aided and abetted by the mathematics of the calculus (p. xvi).

There is currently a growing interest in understanding what economists teach and how they teach economics in higher education (Alauddin & Tisdell, 2000; Becker, 1996, 1997, 1999, 2000; Colander, 2004, 2005; Reimann, 2004a). Colander (2004, p. 63) argues that, 'most academic economists are simultaneously teachers and researchers, although they often consider themselves one or the other first'. Elaborating on this, the author emphasizes that 'those who consider themselves to be researchers first, tend to think of

teaching as a necessary annoyance, and research on economics education as not real economics research' (Colander, 2004, p. 63).

Though some economists have 'always been interested in understanding and improving the teaching of economics' (Becker & Watts, 2001, p. 267), 'economics instructors frequently adopt a lecture approach, emphasizing passive learning, narrow forms of evaluation, few or no writing assignments and a reliance on textbooks and routine problem sets' (Siegfried et al., 1991, p. 206). This traditional lecture approach is the dominant feature of teaching economics in Europe and the United States (Becker, 1996; Land, Reimann & Meyer, 2005). The situation is no different in South African universities, which are typified by lecture theatres with large classes where the lecturer stands in front of the class to teach. Though more alternatives to this conventional lecture approach are evolving, a key weakness of this conventional lecture approach, commonly known as 'chalk-and-talk' in literature (Becker, 1996, 2000; Becker & Watts, 2001), is a reliance on the textbooks as the main tool of teaching. Siegfried et al. (1991) argue that this approach of instruction in economics is limiting intellectual stimulation. Arguably, considering the diversity of undergraduate students who enter South African higher education in first year, chalk-and-talk and its reliance on the textbook creates a major challenge for first-year students within the economics discipline, as the academic performance portrays within the context of this study (Sebastiao, 2010).

Becker (2000) suggests at least two types of approach to teaching that seem especially well-suited to the instruction of economics in a way that gets or keeps in step with the rest of higher education. One involves the idea of getting students actively involved in the learning process through such activities as classroom games; and a second and emerging approach involves the use of the

Internet (Becker, 2000). Studies conducted between 1995 and 2005 surveyed U.S. academic economists to investigate how economics is taught in four different types of undergraduate courses at post-secondary institutions (Watts & Becker, 2008). Their findings reveal that 'younger economists are more likely to know and use new technologies or research methods (for example, internet data searches, computer displays and presentations, and experimental economics) in teaching economics, while experienced economists rely more on lectures' (Watts & Becker, 2008, p. 285). Expounding on this claim further, Becker and Watts (2001) profiled some of the field's leading educators' alternative practices: active and cooperative learning; writing; the internet; discovery through sampling; and examples from the world around us.

In their most recent publication, *Teaching Economics to Undergraduates: More Alternatives to Chalk and Talk*, Becker, Watts and Becker (2006) as co-editors identified more alternatives to chalk-and-talk: restoring fun to game theory; using classroom experiments to teach economics; using active learning techniques in large classes; using team term paper and presentations; and using Nobel Laureates in economics to teach quantitative methods.

Some of these 'global trends in the teaching of economics' (Watts & Becker, 2008, p. xi) are relevant to large class size which is typical of undergraduate economics classes, especially to help maximise students' learning possibility. This development is in line with Becker (2000) who earlier argued that teaching practices within departments of economics will probably move beyond the chalk-and-talk, preaching mode that characterized the 20th century style of economics teaching, as students now expect to be engaged in the learning process and appear unwilling to sit passively through lectures. A key strength of these alternatives to chalk-and-talk, traditional teaching approach is how these avenues engage students actively.

Becker's dual instructional method paradigm (2000) of active students' participation and the use of the internet is a strong argument for teaching economics in the 21st century. But to what extent is this claim truly 'pedagogical'? On teaching strategies which actively involve students' participation, some are very relevant within the time constraint of a large class lecture e.g. restoring fun to game theory (Dixit, 2005); using active learning techniques in large classes (Buckles & Hoyt, 2006); and using Nobel Laureates in economics to teach quantitative methods (Becker & Greene, 2005). Others such as using classroom experiments to teach economics (Hazlett, 2006); and using team term paper and presentations (Watts, 2006) are more relevant to small class groups such as in the tutorial system that is associated with teaching first-year undergraduate economics education. Which strategy is selected and used either in a large lecture or tutorial situation depends on how well teachers understand these alternatives to chalk-and-talk. Becker's argument in making this choice, which is strongly supported by the kind of teaching-learning environment predominant in South African higher education is that, 'in selecting these activities, it is important to keep in mind the amount of time required for their use versus the potential benefits to students' (Becker, 2000, p. 113). As for the use of the internet to teach economics, Goffe & Sosin (2005) argue that 'it isn't the technology that matters in online courses, but the use of active learning and other sound teaching techniques, as […] current evidence suggests that students do less well in online courses that simulate the typical in-class economic lecture classroom' (2006, p. 112). Though not directly relevant to this study, the use of the internet is the mainstay of Open and Distance Learning (ODL) situations in the 21st century.

On the idea of repeated doses of a single instructional technique, Siegfried et al. argue that a single pedagogical technique, such as lectures, is 'likely to

suffer from diminishing marginal returns because the human mind responds to variety, and the need for a balance among various approaches is likely to be more effective than reliance on any single method of teaching' (Siegfried et al., 1991, p. 210). In support of the need for alternative teaching methods in economics, Becker and Watts (1996) note that the 'available variety of teaching methods for use in undergraduate economics courses now offers the means for any instructor to increase student learning and interest in the subject' (p. 452). Drawing from their experience in the US, Becker (1996) notes that,

> while U.S. economists continue to engage in one primary mode of classroom delivery when student learning styles and their own teaching skills and interests vary so widely [...] more than any other group of scholars and teachers, economists should recognize that there is an important place for the consideration of alternatives. Some students and teachers are natural-born listeners and lecturers, some are talkers and discussion leaders, and some seem to learn or teach best using group activities that feature "hands-on" demonstrations of economic concepts and relationships. (p. 452)

Irrespective of the teaching method or a combination of methods used in undergraduate economics education, 'content matters' (Colander, 2004, p. 64), though that does not make delivery less important. The real-life situations, within which the content is taught is equally relevant to the teaching of Economics 1. A teaching method cannot replace the importance of facilitating students' understanding especially when it comes to concepts in economics, which are very fundamental to learning. All the 'how to teach' advice is of no avail unless there is an underpinning understanding of student learning (Prosser & Trigwell, 1999).

2.6 The place of threshold concepts and troublesome knowledge in undergraduate economics education

Davies and Mangan (2007) argue that certain concepts in economics, as in other various disciplines, act as thresholds to further understanding. These threshold concepts 'are "conceptual gateways" or "portals" that lead to a

previously inaccessible and initially perhaps "troublesome" way of thinking about something' (Meyer & Land, 2005, p. 373). Meyer and Land (2005) argue that when such a 'conceptual gateway' or 'portal' is not understood, then this lack of understanding may become troublesome and/or may lead to troublesome knowledge. Citing Perkins (1999), Meyer and Land describe such troublesome knowledge as knowledge that is 'alien', or counter-intuitive or even intellectually absurd at face value and that 'it increasingly appears that a threshold concept may on its own constitute, or in its application lead to, such troublesome knowledge' (2003, p. 2). Expatiating on the notion of 'troublesome knowledge', Davies and Mangan argue that,

> the notion of 'troublesomeness' comes into play here, in so far as ideas from disciplines run counter to the 'common-sense' notions that have been developed as individuals make sense of their experience. In the case of economics, it seems likely that narrowness of experience is one cause of this problem. Learners have one-sided experiences on which to draw. In making sense of prices they have much greater experience as consumers than as producers. They have greater experience of saving than investment. (2007, p. 713).

Meyer and Land identify five key characteristics of a threshold concept as: 'transformative; probably irreversible; integrative; possibly bounded within its conceptual space, and potentially (or possibly inherently) troublesome' (2003, pp. 4-5). On the basis of this characterization, Cousin (2006) notes that, 'showing attention to what might be difficult, emotionally and conceptually, in any subject area will allow teachers to develop a focus for their teaching' (Cousin, 2006, p. 5). Key economic concepts have to be identified and taught as building blocks, 'put into position once other necessary layers of understanding had been laid down' (Davies & Mangan, 2007, p. 713). The implication of this according to the authors is that 'one concept is more advanced than another because it requires more layers or prior understanding' (Davies & Mangan, 2007, p. 713).

2.7 Higher education research, teaching and learning

Higher education as a field of research is broad and multidisciplinary (Brennan & Teichler, 2008; McKenna, 2014; Tight, 2008, 2014). Tight (2014), having referred to higher education research as introspective, goes on to point out that it is 'not just undertaken by specialist academics and researchers in higher education departments or centres, [but] spread, albeit thinly, across all departments and disciplines, and within the administrative units of universities and colleges' (p. 93) . The field has been growing, 'drawing on multiple disciplines and looks both to the values and structures of those disciplines and to the professional world of work' (McKenna, 2014, p. 6). Some of 'the broad range of disciplines research on higher education draws from, which feed higher education research conceptually and methodologically, are education, psychology, sociology, political sciences, economics and business studies, law and history' (Brennan & Teichler, 2008, p. 261). By the broad and multidisciplinary nature of the field of higher education research, Brennan and Teichler (2008) argue that,

> a challenge for higher education research is to keep in touch with its varied disciplinary feeding grounds in order both to enhance its quality and to avoid being driven too much by thematic concerns and policy agendas. On the other hand, creative theme-based research has the potential and the need often to transgress disciplinary perspectives. Other disciplinary fields contribute to the knowledge base of higher education research, though often some of the themes which are addressed are positioned outside and cross-cut the various disciplinary areas. Additionally, since higher education addresses general features of teaching and learning, research and knowledge generation, it is dependent on co-operation with experts in all disciplines, whether or not they contribute directly to higher education research. (p. 261)

The broad range of the thematic areas on research in higher education which Brennan and Teichler (2008) alluded to in the excerpt above fall into four categories. These are:

> *the quantitative-structural aspects of higher education systems* (e.g. access and admission, patterns of institutions and programmes, student enrolment and flows, graduation and graduate employment); *the knowledge aspects* (e.g. developments of research and curricula, issues of quality and relevance, concepts and measurement of competences, job requirements of professional utilization of knowledge); *aspects of*

> *processes and persons* (teaching and learning, research processes and organization, students, the academic profession, emergence of higher education professions); and *organizational aspects of higher education* (steering and management, state and stakeholders, functions and powers of the academic professions within governance, institutional settings, costs and funding) (Brennan & Teichler, 2008, p. 261).

Though these are quite extensive, Tight (2014) identifies eight thematic areas on higher education research across different disciplines which are teaching and learning; course design; student experience; quality; system policy; institutional management; academic work; and knowledge and research (pp. 97-98). Of the eight thematic areas on higher education research mentioned above, the theme related to this doctoral thesis is 'teaching and learning', specifically teaching Economics 1 and its implications for students' learning.

The growth of higher education research has been due to the massification of higher education over the last few decades, first in the United States and Canada, followed by the United Kingdom (Tight, 2014). In addition to the massification argument as driving the field of higher education research, there have been social changes and developments in the global university system which has brought about a great diversity of students, leading to academic development in higher education as it relates to teaching and learning (Philip, Altbach, Reisberg & Rumbley, 2009). What is apparent today when considering higher education teaching and learning irrespective of the different disciplines is that, 'teachers are under pressure to demonstrate their effectiveness and efficiency…[as they] are expected to deal with an unprecedented broad spectrum of student ability and background' (Ramsden, 1992, p. 2).

According to Trigwell (2001), 'most universities now invest a considerable amount of time and funds in attempts to improve student learning, [through] teaching development …for academic staff and some of these lead to a higher degree in university teaching and learning' (p. 65). At the heart of this claim is

that, 'good teaching is oriented towards, and is related to high quality teaching' (Trigwell, 2001, p. 65). Consequently, research into higher education teaching and learning has become more widespread in recent times. Kandlbinder (2013) claims there are seven key concepts associated with the highly referenced researchers in higher education teaching and learning. The author's claim is summarised as follows: surface and deep approaches to learning (Ference Marton); constructive alignment (John Biggs); strategic approach to learning (Noel Entwistle); approaches to learning vary in different learning contexts (Paul Ramsden); conceptions of teaching influence teaching strategies (Keith Trigwell); critical thinking (Ronald Barnett); teaching approaches change according to context (Michael Prosser) (Kandlbinder, 2013, pp. 5-7). Through the work of these seven thinkers in higher education, the way we think about university teaching and learning have been changed over the years (Kandlbinder, 2013). The work done by Trigwell and Prosser (1996) is relevant to my research and overall argument in this thesis.

Only the relations between teachers' conceptions of teaching and their teaching strategies, which Kandlbinder connects to the work of Trigwell, and teaching approaches and context of teaching which he connects to the work of Prosser, are relevant to my work. There is an argument that teachers' ways of experiencing teaching has implications for students' learning, because

> teaching always involves attempts to alter students' understanding, so that they begin to conceptualise phenomena and ideas in the way scientists, mathematicians, historians, physicians, or other subject experts conceptualise them—in the way, that is to say, that we want them to understand them. (Ramsden, 1992, p. 5)

The place of learning as related to teaching is reinforced by Light, Calkins and Cox (2009) who claim that,

> learning, as it relates to students, [in higher education] is not merely a set of concepts or principles that teachers in higher education should be aware of and reflect upon in their own professional practice, but rather frames the whole academic enterprise.

> Academics are not simply expected to help students meet the demands of their formal studies, but also to meet the demand for ongoing learning themselves. (p. 46).

A final point to make in this section concerns the interconnectedness of higher education teaching and learning. This association takes place within a complex system of interactions between the teacher and the student (Whittaker, 2014) and aligns with the argument by Prosser and Trigwell (1999), that

> learning and teaching are fundamentally related, [and] that good teaching needs to be defined in terms of helping students learn. That it is the learning of students that needs to be the focus of good teaching, not the teaching activities of teachers. (p. 11)

This brings Biggs' *Presage-Process-Product*, or 3P model of teaching and learning to the foreground (Biggs, 1996; Biggs, Kember & Leung, 2001). As presented in figure 2.1 below, 'student factors, teaching context, on-task approaches to learning, and the learning outcomes, mutually interact, forming a dynamic system' (Biggs et al., 2001, p. 135), which connects teaching and learning. This model 'greatly facilitates our understanding of teaching for student learning' (Prosser & Trigwell, 1999, p. 12).

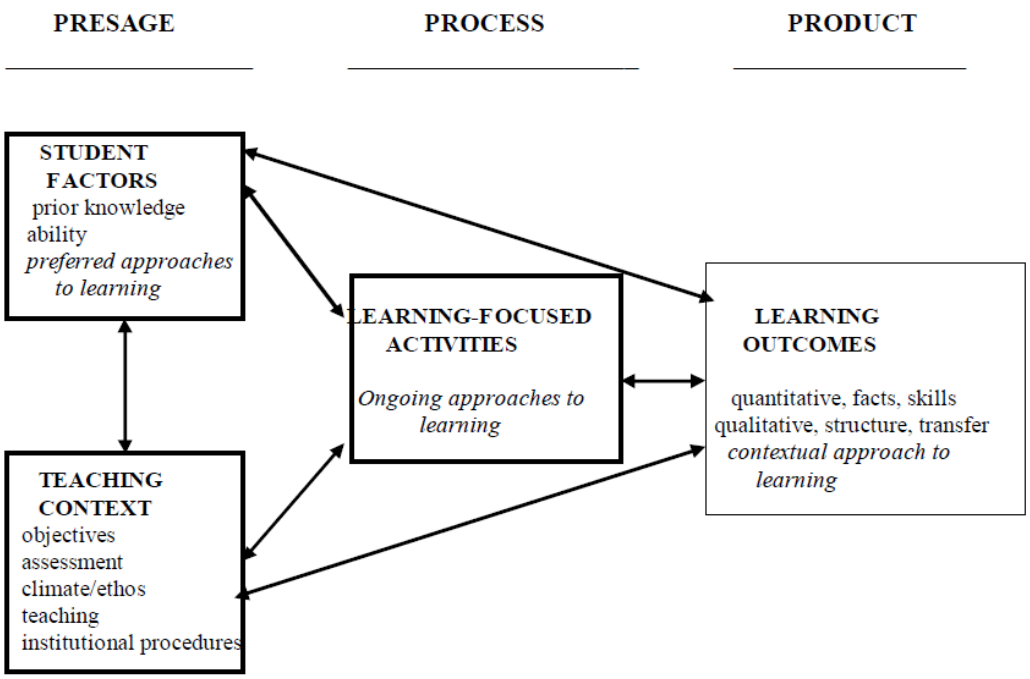


Figure 2.1. The 3P model of teaching and learning. Source: Biggs, Kember and Leung (2001, p. 136)

This model presents the interactions between teachers and students, showing the different factors that influence learning which allows the teachers to develop the kind of learning environment that facilitates students' learning. Although the 'heart of the teaching/learning system is at the process level, where the learning related activity produces or does not produce the desired outcomes' (Biggs et al., 2001, p. 136), the authors explain the presage state as follows:

> presage factors refer to what exists prior to engagement that affects learning. On the student side this includes such factors as prior knowledge, ability, and their preferred approaches to learning; and on the side of the teaching context, the nature of the content being taught, methods of teaching and assessment, the institutional climate and procedures, and so on. These factors interact to determine the on-going approach to a particular task, which in turn determines the outcome. However, as the reversible arrows show, each such factor affects every other factor, so that for instance the student's preferred approach will adjust to the particular context and course being taught, and to the success or otherwise of the outcome. (Biggs et al., 2001, p. 135)

Therefore, these presage factors are individual and institutional factors which 'exist prior to learning' (Biggs, 1996, p. 186). The two sets of 'student and teaching presage factors' (Biggs, 1996) interact in the process level where,

> [the] student, being immersed in [the] teaching context, interprets it in the light of their own preconception, orientations and expectations. This interpretation, and the decisions for action based on it, comprise a metacognitive activity focusing on the processes of learning - how to go about a task - in parallel with the cognitive act of engaging the content of the task itself. (p. 188)

The product aspect of the 3P model speaks to the

> product of learning [which may be] described and evaluated quantitatively. This assesses how much was learned, as tested, for example, by recall of details, while qualitative evaluation addresses the quality of learning, which assess, for example, how such details are structured. (Biggs, 1996, p. 188).

Thus, the 3P model does not just relate to teaching and learning in higher education, but it indicates that, 'students undertake, or avoid, learning for a variety of reasons; those reasons determine how they go about their learning; and how they go about their learning will determine the quality of the outcome' (Biggs, 1989, p. 10). Since learning and teaching are fundamentally related (Prosser & Trigwell, 1999), 'good teaching [has implications for student learning, and] needs to be defined in terms of helping students learn, that it is the learning of students that needs to be the focus of good teaching, not the teaching activities of teachers' (Prosser & Trigwell, 1999, p. 11).

2.8 Research on teaching in higher education

Ramsden (1992, p. 5) argues that, 'the aim of teaching is simple: it is to make student learning possible'. Teaching is about 'changing the ways in which learners understand, experience or conceptualise the world around them, [in which] the "world around them" includes the concepts and methods that are characteristic of the discipline or profession that they are studying' (Ramsden, 1992, p. 4). As simple as teaching in higher education is, and as seemingly clear what its goal is, evidence of research in the field of teaching in higher

education shows that teaching is not as simple and straightforward as in Ramsden's provocation.

Today's teachers work in a changing and complex higher education environment, with several issues to contend with. Apart from dwindling and scarce resources for higher education (Teferra & Altbach, 2004), other issues affecting higher education, even in South Africa, are pass rates, failure rates, drop-out rates, graduation rates and throughput rates (Letseka & Maile, 2008). Another pertinent issue relating to teaching in higher education includes having to deal with a broad spectrum of student ability and backgrounds coupled with larger classes (Ramsden, 1992; Woollacott, 2013; Woollacott, Booth & Cameron, 2014). This means that

> the average university teacher is now expected to be an excellent teacher: a man or woman who can expertly redesign courses and methods of teaching to suit different groups of students, deal with large mixed-ability classes, and juggle new administrative demands, while at the same time carrying a heavy research responsibility and showing accountability to a variety of masters as both a teacher and a scholar. (Ramsden, 1992, p. 2)

Consequently, 'teaching for diversity' (Tennant, McMullen & Kaczynski, 2010) describes what teaching in higher education is today. Irrespective of the complexity and diversity that characterise higher education teaching today, 'there is little in the world of education that is more depressing than bad university teaching' (Ramsden, 1992, p. 3). Against this background, this section reviews research on teaching in higher education from key authors in the field of higher education teaching.

From a methodological perspective, Tight (2012) identifies eight key methods or methodologies applied to researching higher education, including teaching in higher education. These are: documentary analysis; comparative analysis; interviews; surveys and multivariate analyses; conceptual analysis; phenomenography; critical and feminist perspectives; and auto/biographical

and observational studies. These methods or methodologies have been used in several studies on teaching in higher education in Australia (Benjamin, 2000; Dall'Alba, 1991, 1994, 2005; Mann, Dall'Alba & Radcliffe, 2007; Samuelowicz & Bain, 1992, 2001; Tight, 2015; Trigwell, 2000, 2006; Trigwell, Martin, Benjamin & Prosser, 2000; Trigwell, Prosser & Waterhouse, 1999), in the United Kingdom (Goodyear, Jones, Asensio, Hodgson, & Steeples, 2005), and in South Africa (Case et al., 2015; Case & Marshall, 2004; Collier-Reed & Ingerman, 2013; Collier-Reed, Ingerman & Berglund, 2009; Linder & Marshall, 2003; Maringe & Sing, 2014). While not all these studies have focused specifically on teaching in higher education, they have all been studies in higher education using one or a combination of the methodologies mentioned by Tight (2012). For those studies which have been specifically on teaching in higher education, different methodologies and theoretical frameworks have been used in research on teaching in higher education.

Phenomenography is one of the methodological perspectives into research in higher education mentioned in the previous section. According to Tight (2014), 'with the possible exception of phenomenography, there is no mode of inquiry that is specific to higher education research, rather it makes use of modes common throughout the social sciences (and beyond)' (p. 94). There is no dearth of phenomenographic studies on teaching and learning in higher education, though 'there has been very little relational research into university teachers' conceptions of teaching' (Prosser & Trigwell, 1999, p. 20). As Entwistle (1997) argues, 'since the first experiment in Gothenburg, phenomenography has emerged and has been widely used as a research tool in studying learning and teaching in higher education' (p. 128). Examples of disciplinary fields in higher education in which phenomenography has been employed are: computer science and engineering (Booth, 1992; 1997; 2001); economics education (Pang & Marton, 2003; 2005); sustainable design (Mann

et al., 2007); environmental education (Loughland, Reid & Petocz, 2002); geography education (Trigwell, 2006); mathematics education (Neuman, 1999); and physics education (Adawi & Ingerman, 2006; Booth & Ingerman, 2002; Ingerman, Berge & Booth, 2009). Other non-disciplinary, higher education-related areas in which phenomenography has been utilized are: scholarship of teaching in higher education (Trigwell et al., 2000); university teaching and learning (Åkerlind, 2004; González, 2011; Prosser & Trigwell, 1999; Prosser, Trigwell & Taylor, 1994; Trigwell, 2001) and conceptions of research in higher education (Brew, 2001). Of these examples of disciplinary and non-disciplinary higher education areas in which phenomenography has been adopted, those which concern economics education and higher education teaching (and learning) are of relevance to this study considering the research questions indicated in chapter one.

2.9 Conclusion

In concluding this chapter on the literature relevant to my research, I want to draw attention to two key arguments in the literature and on the importance of phenomenography for this doctoral thesis. In addition to these, I identify the key gaps in the literature and how this specific study plans to fill these gaps.

Two broad themes have now been reviewed from the literature: economics education and teaching in higher education. Within the literature on economics education, two major developments can be seen. On the one hand there are traditional, academic economists writing on their experience and understanding of teaching undergraduate economics, lacking educational theory (e.g. Becker, 2003; Siegfried et al., 1991; Watts & Becker, 2008). On the other hand, we see academics with strong backgrounds in educational theory applying different methodologies in higher education research (Tight, 2012).

Two broad themes explored in the literature focused on economics education and teaching in higher education. From the first theme on economics education, two major developments were identified from the relevant literature reviewed. The first is the traditional, academic economists writing about their understanding and experience of teaching undergraduate economics without any background in educational theory (for example, Becker, 2003; Siegfried et al., 1991; Watts & Becker, 2008). The second type of economics education research is of academics with a strong background in educational theory applying different methods or methodologies in higher education research involved in the teaching and learning of undergraduate economics education (Davies & Mangan, 2007; Meyer & Land, 2003, 2005).

Of the eight methodologies in higher education research identified by Tight (2012), I decided to adopt phenomenography, which although it 'is a relatively uncommon methodology in higher education research, …[it is] one of the fields in which phenomenography has been most developed and applied' (Tight, 2012, p. 197). In addition, phenomenography is particularly appropriate for research into teaching and learning in higher education (Tight, 2015). The use of a phenomenographic study in this thesis provides a contribution to knowledge by extending and developing what is currently known about conceptions of teaching in higher education within the discipline of economics in comparison to other disciplines. The results from other phenomenographic research focusing on the conceptions of teaching in higher education will be compared with my study and presented in chapter seven.

Finally, it is evident from the literature review that much of what academic economists have written with regard to conceptions of teaching economics has had a limited grounding in educational theory. One of the contributions of this study is to address this gap in the literature.

CHAPTER THREE

THREE CONCEPTUAL FRAMEWORKS

3.1 Introduction

This chapter discusses three conceptual frameworks which act as lenses in making sense of the data collected and analysed in the empirical chapters five and six. These three conceptual frameworks are: phenomenography, a four-context framework for teaching in higher education and Maton's concept of semantic gravity and the quality of learning, taken from his work in the sociology of knowledge. These conceptual frameworks are useful as organisers for the empirical data for two reasons. On one hand, these conceptual frameworks provide a link between my study and previous literature on teaching in higher education, and on the other hand they assist in making meaning of data to be collected with the aim of providing a structured approach to communicating the findings (Smyth, 2004).

The first of these three is phenomenography, and I will focus on its historical background, the concepts that underpin it as a conceptual framework and an argument for its appropriateness for researching teachers' conceptions of teaching economics in higher education. The second conceptual framework, 'four-context framework for teaching in higher education', ultimately derived from the work of Cross, Shalem, Backhouse, Adam and Baloyi (2008) and its interpretation of Bernstein's work on discourses (Ojo & Booth, 2009), and now extended to the present study, relates teachers' ways of experiencing their teaching to the interplay of four contexts that define higher education. The last conceptual framework, Maton's concept of semantic gravity (Maton, 2009) makes the connection between teachers' ways of experiencing their teaching and its connection to the potential for quality of the students' learning. These

three are considered to be relevant in helping to answer my research questions stated in chapter one.

3.2 Phenomenography

My objective in this section is to explore phenomenography as a conceptual framework, made up of concepts brought together from the many researchers who have extensively used it as a methodology or an approach to research to answer research questions in several fields. Since its introduction by Marton (1981), the nature of phenomenography has been described in somewhat different ways, which different researchers have classified differently through the period of its development (Tight, 2015). Tight (2015) classifies it as a research design, a methodology and theory. As a *research design*, it is 'an innovative research design which aims at identifying and interrogating the range of different ways in which people perceive or experience specific phenomena' (Tight, 2015, p. 1). As a *methodology*, I shall discuss phenomenography further in the fourth chapter in which I explain how I have operationalized my understanding of it as a research approach to collect and analyse my qualitative data in this doctoral thesis. Although 'phenomenography is an ever changing, growing specialisation' (Pang, 2003, p. 154), my focus here is not on what became known as 'new phenomenography' with its *theoretical* interest on variation (Pang, 2003) but traditional empirical phenomenography as it 'aims to investigate the qualitatively different ways in which people understand a particular phenomenon or an aspect of the world around them' (Marton & Pong, 2005, p. 335).

Phenomenography has its roots in research into students' ways of understanding texts they had read by interviewing them and analysing the data thus gained (e.g. Marton & Säljö, 1976). The outcomes of the research were seen to be sets of categories, each of which described a specific way of

reading the texts for understanding, and were together an hierarchically ordered whole description of coming to understand the meaning of the text. The research programme also involved studying the ways in which students understood key concepts in the texts and the distinct members of the set were called 'conceptions' (e.g. Dahlgren, 1975).

This came to a conclusion when, in a seminal paper, Marton (1986) first used the term 'phenomenography', which he later defined to be investigating 'the qualitatively different ways in which people experience or think about various phenomena' (p. 31). Phenomenography should not be confused with phenomenology, but it has been influenced at different stages of development and derived some of its conceptual framework from phenomenology (Marton, 1986). Phenomenography takes what has been called a second order perspective, focusing on the world as others perceive it, in contrast to the first order perspective which focuses on the world as it is (Marton & Booth, 1997; Tight, 2015). To further bring out the character of the second order perspective by describing and contrasting a first-order perspective, Marton and Booth (1997) argue that,

> in the research context, the distinction between the first- and second-order perspectives is primarily a distinction between two kinds of objects of research. Admittedly, this gives an outrageously uneven criterion for sorting the objects of research. We have on the one hand, all the scientific research conducted over the centuries which has yielded statements about the world – the physical, the biological, the social, the cultural – which we can all relate to without recourse to a consideration of human experience. On the other hand we have a relatively very, very small number of studies that yield statements about people's experience of the world. Investigations with a phenomenographic orientation belong to this group, along with, for instance, certain branches of anthropology, history and philosophy of science (p. 120).

According to Åkerlind (2005), the aims of phenomenographic research have certain implications for approaches to data collection and analysis that together distinguish phenomenography from other qualitative research traditions. As such, phenomenographic research deals with related, not independent meanings; awareness, not beliefs; context-sensitive awareness,

not stable constructs; interpretive, not explanatory focus; and stripped, and not rich descriptions (Åkerlind, 2005).

Knowing and understanding the world from a relational view is 'a qualitative change in a person's way of seeing, experiencing, understanding, conceptualizing something in the real world—rather than a change in the amount of knowledge which someone possesses' (Marton & Ramsden, 1988, p. 271). Prosser and Trigwell (1999) note that,

> essentially these ideas [theoretical ideas from phenomenographic perspective] suggest that the world, as experienced is non-dualistic. That is, students' and teachers' experiences are not constituted independently of the world of learning and teaching in which they are engaged, but they and the world of learning and teaching are constituted in relation to each other. In this sense the world of learning and teaching is an experienced world. From this perspective students' and teachers' experiences are always experiences of something (p. 10).

The uniqueness of phenomenography as a conceptual framework is its underlying assumption that,

> for any given phenomenon of interest, there are only a limited number of ways of perceiving, understanding or experiencing it. Typically, the number identified is relatively small – e.g. only four or five variants are commonly found – and, as with most forms of qualitative research, these are identified on the basis of a relatively small number of interviews (20 or fewer are typical). Most commonly – and, it would seem, most satisfactorily – the various ways of experiencing the phenomenon identified can be organised in a hierarchy, with each higher level encompassing those below it, and the highest level representing the most advanced or developed way of experiencing the phenomena (Tight, 2015, p. 2).

My point of departure in this section is on the basis of this fundamental premise - that there are limited ways in which people understand the world around them. Pang (2003) also notes that 'phenomenography set out to reveal the different ways in which people experience the same phenomena in the same situation' (Pang, 2003, p. 154). Two further fundamental concepts of phenomenography as a conceptual framework for my work are, I argue, 'ways of experiencing' as a unit of analysis of the empirical data; and the qualitative nature of variation in the ways in which people experience a given phenomenon.

As Marton and Pong (2005) point out, 'a "conception", the basic unit of description in phenomenographic research, has been called various names, such as "ways of conceptualizing", "ways of experiencing", "ways of seeing", "ways of apprehending", "ways of understanding", and so on' (p. 336). Marton (1981) had earlier described 'ways of experiencing' as representing 'categories of description' as follows:

> Conception and ways of understanding (or experiencing) are not seen as individual qualities...[instead] conceptions of reality are considered rather as *categories of description* to be used in facilitating the grasp of concrete cases of human functioning [of a phenomenon]. Since the same *categories of description* appear in different situations, the set of categories is thus stable and generalizable between the situations even if individuals move from one category to another on different occasions (Marton, 1981, p. 177).

Marton and Pong (2005) further add that these 'different ways of understanding, or conceptions, are typically represented in the form of categories of description, which are further analysed with regard to their logical relations in forming an outcome space' (Marton & Pong, 2005, p. 335). Thus, the 'ways of experiencing' or 'conceptions' are units of analysis and it is fundamental to phenomenography that these can be researched. Another way of expressing this in the context of this thesis is that teachers' ways of experiencing teaching or their 'conceptions of teaching' Economics 1 at 'the University' is the unit of analysis.

A 'conception' or 'way of experiencing' as a unit of analysis has 'two intertwined aspects: the referential aspect, which denotes the global meaning of the object conceptualized; and the structural aspect, which shows the specific combination of features that have been discerned and focused on' (Marton & Pong, 2005, p. 335). Marton and Booth (1997, pp. 82-109) expound on these two aspects when they ask the question, '*What does it take to see a motionless deer among the dark trees and bushes of the night woods?*' to explain the structural and referential dimensions of an experience, drawing out the meaning of the *internal* and *external horizons*:

> Structure presupposes meaning and at the same time meaning presupposes structure. The two aspects – meaning and structure – are dialectically intertwined and occur simultaneously when we experience something. Thus we can state that an experience has a structural aspect and a referential (or meaning) aspect. The structural aspect of a way of experiencing something is thus twofold: discernment of the whole from the context on the one hand and discernment of the parts and their relations within the whole on the other. And intimately intertwined with the structural aspect of the experience is the referential aspect, the meaning; in seeing the parts and the whole of the deer and the relations between them we even see its stance – relaxed and unaware of our presence, or alert to some sound unheard by us – and we thus discern further degrees of meaning. That which surrounds the phenomenon experienced, including its contours, we call its external horizon; the parts and their relations, together with its contours, we call its internal horizon (Marton & Booth, 1997, p. 88).

These intertwined aspects of a 'conception' as a 'way of experiencing' is illustrated in the figure below:

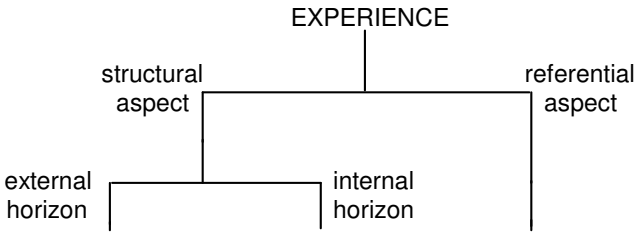


Figure 3.1. The unit of a science of experience, a way of experiencing something: Marton and Booth (1997, p. 88)

According to Pang (2003), 'the categories of descriptions and outcome space are instrumental to characterising how people experience reality' (p. 146). An outcome space is formed by establishing a hierarchy, drawing on the logical relationships between the categories of description, thereby presenting the main results of phenomenographic research (Pang, 2003). One element of these 'ways of experiencing' or 'categories of description' in terms of the hierarchy is its completeness. The idea of completeness of conceptions is premised on the aim 'to describe the key aspects of the variation of the collective experience of a phenomenon rather than the richness of individual experiences, and that it yields a limited number of internally related, hierarchical categories of description of the variation' (Trigwell, 2006, pp. 368-369).

It is the qualitative nature of variation in the ways of experiencing a phenomenon that makes it possible to conduct phenomenographic research. In other words, if you believe strongly that there is only a right and a wrong to a phenomenon, or if you believe strongly, as some people do, that everybody is entitled to their own opinion, then phenomenography makes no sense. It totally loses its relevance and applicability in researching within a phenomenographic framework. At the heart of this is the underlying assumption that there is a small number of qualitative different ways of experiencing a phenomenon which is to be found in a group of people - in my case, of teachers teaching Economics 1 at 'the University' - with varied characteristics, some in common and some different. Another way of putting this is that,

> while the outcomes of [phenomenographic] studies differ in the specific detail of each conception [or ways of experiencing a phenomenon], significant commonalities have emerged in themes running across the conceptions. All show, as key dimensions of variation in the meaning that [a phenomenon holds, in this case] teaching … for university teachers (Åkerlind, 2003, p. 375).

In concluding this section, there are two purposes phenomenography as a conceptual framework serves in this doctoral thesis. Firstly, it provides me with a well-established methodology for investigating the teachers' conceptions of teaching Economics 1 at 'the University'. Secondly, it helps to relate and compare my results with other phenomenographic studies on conceptions of teaching in higher education. The output of the first purpose is presented in the results chapters (chapters five and six), while that of the second is presented in the discussion chapter (chapter seven).

3.3 The four-context framework for teaching economics in higher education

According to Ramsden (1992),

> teaching [in higher education] always takes place within particular contexts (such as in the physics classroom, or in writing comments on your student's political science essay, or in discussing a new form of assessment with other members of your engineering department) […] and, of course, it always involves a particular subject matter. (p. 110)

In similar manner, Biggs (2003a) argues that 'teaching and learning in higher education take place in a whole system, which embraces classroom, departmental and institutional levels' (p. 1). These particular contexts which Ramsden (1992) noted above or system as Biggs (2003) described it, are the frameworks within which teaching takes place in higher education, in any subject matter. The aim of this section is to present what these are within Economics 1 as the subject matter [or discipline] and its teaching in higher education.

This study delimits the teaching of Economics 1 as occurring within higher education in a large lecture using traditional chalk-and-talk or tutorials with smaller groups. This aligns with the argument that lectures and classroom discussion (including tutorials) represent the primary means of teaching economics to undergraduate students as described by Marburger (2001). So, the Economics 1 lectures and tutorials constitute a field of interactions involving teachers and students as agents within higher education. Mediating the teaching of Economics 1 is the curriculum which defines and guides what is taught to these first-year undergraduate students. The purpose of this conceptual framework, called the four-context framework for teaching in higher education, is to bring out the different contexts involved in the whole system of teaching Economics 1 at a South African higher education institution.

I am proposing a model in which there are four inter-related contexts within the higher education environment that impact on the teaching of economics at 'the University': (I) the *disciplinary context* of Economics 1 in which neoclassical economic theory is the curriculum taught, learned and assessed; (II) the *pedagogical context* of the collaborative work of the lecturers and tutors in which a symbiotic relationship exists to teach the academic subject; (III) the

social context in which the lecturers, tutors and students relate as a collective, sharing and shaping their teaching and learning experiences within the Economics 1 course; and (IV) the place of the Department of Economics and 'the University' as providing the institutional setting, constructing the curriculum to be taught and providing the *official context* within which the three aforementioned contexts are operationalised and validated.

Of the four contexts of teaching in higher education now presented, three contexts - the official, pedagogical and social – were previously called 'domains of socialization' (Ojo, 2009; Ojo & Booth, 2009), based on a study focusing on institutional culture, throughput and retention at a South African university (Cross et al., 2008). The authors' ideas were rooted in Bernstein's distinction (1990, 1996) between the 'official recontextualising field' (ORF) and the 'pedagogic recontextualising field' (PRF). The meanings associated with the three contexts, earlier called 'domains of socialisation', are not different from how they are being used in the context of teaching Economics 1; in the same way these three were relevant in helping to 'shape students' experience and perceptions within the university environment' (Ojo, 2009, p. 39). I am now calling them, however, 'contexts' relevant to the teaching of Economics 1 at 'the University'. The three contexts previously called 'domains of socialization' are explained as follows:

> The official [context] is mainly concerned with issues of regulation by national higher education bodies and with institutional issues around vision, mission, policies and rules, produced and managed by university administration. The pedagogical [context] is concerned with academic production and reproduction, and considers institutional issues such as curriculum, teaching and assessment, located in academic faculties, departments and courses. The social [context] is concerned with issues outside the teaching–learning environment that nevertheless impact on the students at the university (Ojo & Booth, 2009, p. 320).

This quote above is not taken directly and accurately from the cited paper. In the original text, the word 'domain' has been replaced with the word 'context' as inserted in the quotation. I have introduced a fourth context, 'disciplinary context' which is concerned with the disciplinary foundations of economics,

guiding the curriculum of Economics 1 being taught. Economics as a discipline is founded on neoclassical theory as it is taught within the Economics 1 curriculum, and lays 'emphasis on mastering quantitative reasoning (widely interpreted as a sign of higher intellectual capabilities) [which] certainly stands behind the often dismissive attitude of economists toward the other, less formal social sciences' (Fourcade, Ollion, & Algan, 2015, p. 90). Furthermore, an 'important issue for the discipline of economics concerns the extensive interdependences between description, prediction and prescription' (Sen, 2008, p. 627). These features underpin the description of economics as the disciplinary basis in the Economics 1 curriculum taught at 'the University'. The Economics 1 curriculum combines introductory microeconomics and macroeconomics over a period of an academic year as explained in the handbook. This is the official handbook prepared by the Economics Department and handed out to first-year students at the beginning of the year at 'the University'. Included in this handbook is the Economics 1 full year curriculum or 'course outline'. The edition cited year was for the 2011 academic year. In this handbook, the year is divided into two courses. The first semester (February – June) is devoted to microeconomics, which deals with individual units such as households, firms, markets and industries. The second semester (July – November) is devoted to macroeconomics, which deals with the economy as a whole and problems like inflation and unemployment.

Within the contexts of the 'pedagogical and disciplinary contexts', the prescribed Economics is pivotal to mediate the teaching and learning process. A peculiarity of the Economics 1 course at this university is that there are first-year undergraduate students from different disciplines in the fields of Engineering, Law, Accounting, Commerce and Sciences, all taking this as a compulsory course which must be passed. The prescribed textbook titled *Economics: Global and Southern African Perspectives*, has been written within

a global and Southern African perspective. According to its authors, the objective of teaching Economics 1 is to present 'modern economics with emphasis on real-world examples and critical thinking, skills […] but where applicable, also offers Southern African students content which reflects Southern African economics realities, issues and data' (Parkin et al., 2010, p. iii).

Figure 3.2 below succinctly presents a visual representation of these four contexts.

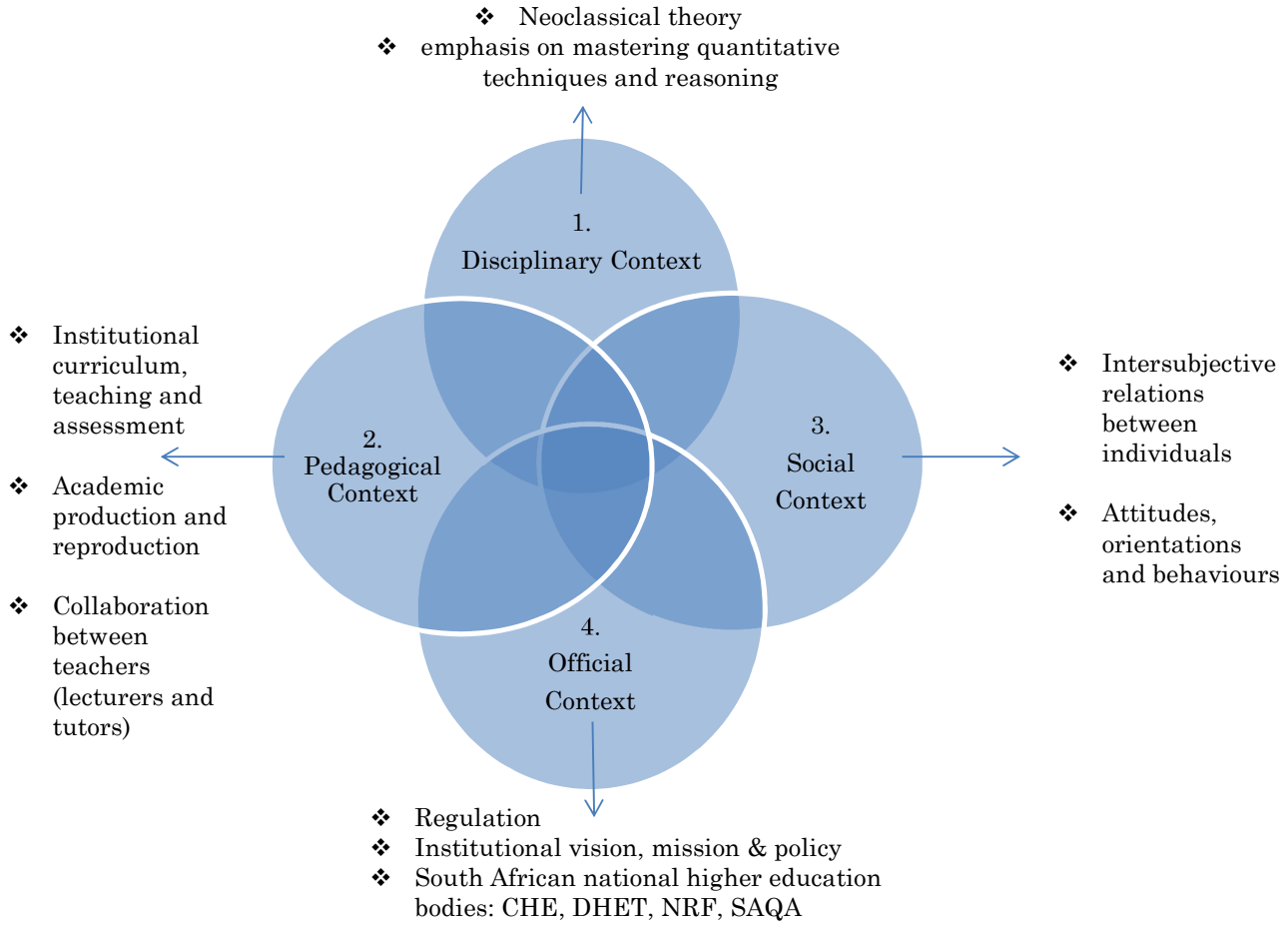


Figure 3.2: A visualisation of the 'Four-Context framework for teaching Economics 1 in higher education' adapted from Ojo and Booth (2009, p. 320).

In summarizing this section, the purpose served by this four-context model is to offer a framework within which the teachers' conceptions of teaching Economics 1 that emerge in the study can be related to the field of higher education, and act to shape the experience of the students' experience of learning economics.

3.4 Maton's sociological concept of semantic gravity and teaching in higher education

The basis of teaching in higher education is knowledge-building and student learning, as already outlined (Ramsden, 1992). The nature of the research questions, especially the third research question which is about the implications for students' learning, makes the work of Maton very relevant for this study.

Maton's *legitimation code theory* (LCT) 'brings together and develops ideas from the sociological approaches of Pierre Bourdieu and Basil Bernstein' (Lamont & Maton, 2008, p. 270). It 'focuses on the basis of achievements within educational contexts' and 'views the practices and beliefs of agents as embodying messages as to what should be the dominant basis of achievement' (Lamont & Maton, 2010, p. 66). Maton (2014b) notes that, 'the framework of LCT comprises a multi-dimensional conceptual toolkit, where each dimension offers concepts for analysing a particular set of organising principles underlying practices as legitimation codes' (p. 36). One such dimension is semantics, which 'is underpinning research into achievement and knowledge-building in education' (Maton, 2014a, p. 1). The other dimensions 'or legitimation codes' of LCT are specialization, temporality, autonomy, and density (Maton, 2013b, p. 11). The semantic gravity is the dimension of LCT which is relevant to this study, because of its focus on 'cumulative learning as the goal of educational knowledge acquisition which could happen in different contexts' (Maton, 2009, p. 44), which will now be elaborated upon.

Maton expands on Bernstein's model as 'mapping relations between knowledge and its social and cultural contexts [by describing] forms of knowledge in terms of the degree to which meaning is dependent on its contexts, [which he termed semantic gravity]' (Maton, 2009, p. 46). Maton (2014) explains that,

> *semantic gravity* (SG) refers to the degree to which meaning relates to its context and may be stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic gravity (SG+), the more meaning is dependent on its context; the weaker the semantic gravity (SG–), the less dependent meaning is on its context. For example, the meaning of the name for a specific plant in Biology or a specific event in History embodies stronger semantic gravity than that for a species of plant or a kind of historical event, which in turn embodies stronger semantic gravity than processes such as photosynthesis or theories of historical causation. Semantic gravity thus traces a continuum of strengths with infinite capacity for gradation. One can also dynamize this continuum to analyse change over time in terms of: *weakening* semantic gravity (SG↓), such as moving from the concrete particulars of a specific case towards generalizations and abstractions; and *strengthening* semantic gravity (SG↑), such as moving from abstract or generalized ideas towards concrete and delimited cases. (p. A-36)

Maton's concept of semantic gravity brings knowledge and learning into the picture and introduces 'cumulative and segmented learning' along with the concepts of weak and strong gravity. On this, Maton (2009) further explicates that,

> different discourses and knowledge structures (as well as curriculum structures and forms of learning) can then be recast in a less dichotomous fashion as representing points on a continuum; that is, as realisations of different degrees of semantic gravity [drawing on figure 3.3 below]. Vertical discourse can be described as characterised by weaker semantic gravity than horizontal discourse. Within vertical discourse, hierarchical knowledge structures exhibit weaker semantic gravity than horizontal knowledge structures. Finally, cumulative learning depends on weaker semantic gravity and segmented learning is characterised by stronger semantic gravity constraining the transfer of meaning between contexts. Thus, one condition for building knowledge or understanding over time may be weaker semantic gravity (p. 46).

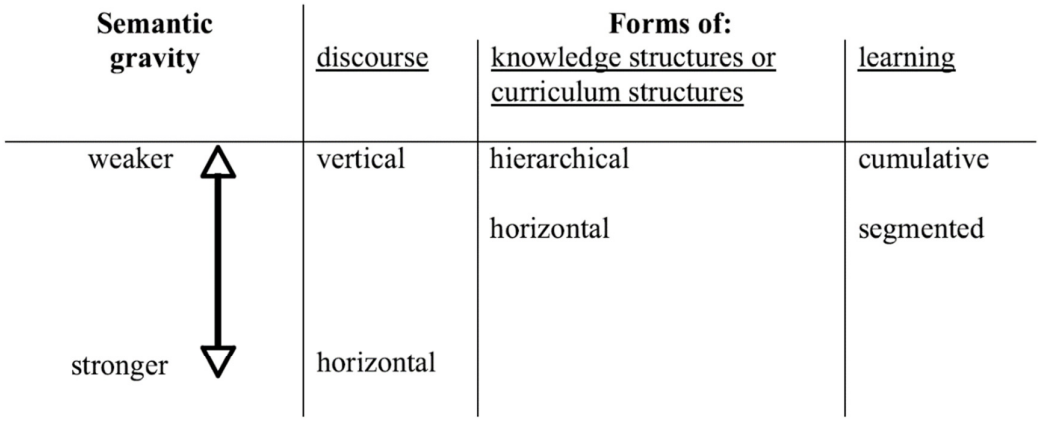


Figure 3.3: Semantic gravity and structuring of knowledge (Maton, 2009, p. 46).

In summary, Maton's argument is that cumulative learning is the goal of educational knowledge acquisition which could happen in different contexts. He emphasizes what cumulative learning is and how it is different from segmented learning.

> … for students to experience *cumulative learning*, where their understandings integrate and subsume previous knowledge, or *segmented learning*, where new ideas or skills are accumulated alongside rather than build on past knowledge. (Maton, 2009, p. 44)

> *cumulative learning*, where students are able to transfer knowledge across contexts and through time, and *segmented learning*, where such transfer is inhibited. (Maton, 2009, p. 45)

In summarising this section, the purpose served by this concept of semantic gravity and its relation to the quality of students' learning becomes valuable as a lens in helping to make sense of how teachers teaching Economics 1 understand this. More on the relevance of this is presented in chapter seven of this thesis.

3.5 The key ideas from this chapter

I have identified three conceptual lenses as relevant in helping me make sense of the data collected and analysed in the empirical chapters five and six. These

are: phenomenography, the four-context framework for teaching in higher education and Karl Maton's concept of semantic gravity in relation to the quality of learning. As earlier stated in the phenomenography section, teachers' ways of experiencing teaching Economics 1 at 'the University' or their 'conceptions of teaching Economics 1' in higher education is the unit of analysis. Since this study delimits teaching Economics 1 as occurring within higher education, the four-context framework for teaching in higher education brings out the different contexts involved in the whole system of teaching Economics 1 in higher education. These inter-related contexts within a higher education environment are identified as *disciplinary context*; the *pedagogical context*; the *social context* and the *official context*. The third conceptual framework refers to knowledge-building and student learning within Maton's concepts and cumulative and segmented learning along with the concepts of weak and strong semantic gravity.

CHAPTER FOUR
RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

The previous chapter described three conceptual frameworks for my study: phenomenography, the four-context framework for teaching in higher education and Maton's theory of semantic gravity and the quality of learning. In this chapter and the following two chapters, I will describe the design and execution of the empirical research and its results within the phenomenographic framework.

4.2 Phenomenography as research methodology

Phenomenography as a qualitative research approach has been extensively used in studies focusing on teaching and learning in higher education especially in Australia, China, Hong Kong, Sweden and in the United Kingdom. It opens up a number of ways in which a researcher can conduct a qualitative study and a number of ways in which a researcher can be creative in deciding how to generate data and analyse it. At the same time there is a rigour to the work, with the ultimate aim of achieving an outcome space of qualitative variation in the way a target population of people (e.g. economics teachers) understand or experience or conceptualise a particular phenomenon.

My master's dissertation, which was on internationalization of higher education, first brought me into contact with phenomenography through a Swedish doctoral thesis (Wihlborg, 2005) on a related topic. This led me to investigate phenomenographic literature on higher education and to adopt phenomenography as the methodological framework for my master's study. My interest was compounded when I was introduced to a group which had a joint South African-Swedish project called the 'Phenomenographic Horizons' with seminars and workshops on phenomenography. On the basis of this

background and my growing interest in economics education aimed at improving the situation for teachers and students, it became natural to turn to phenomenography as my methodological framework for a study on university teachers' conceptions of teaching economics.

In this chapter, I describe the different steps I have taken in conducting the phenomenographic research, within a framework of qualitative research methodology. The study's central question is, '*What are the qualitatively different ways in which lecturers and tutors at 'the University' conceive of and understand their teaching and tutoring roles*?' The sections that follow describe how I have selected my sample, collected data from the sample, organised and analysed the data.

4.3 The qualitative study

According to De Vos, Strydom, Fouché, and Delport (2011), 'there are two well-known and recognised approaches to research, namely the qualitative and the quantitative paradigms' (p. 63). Of these two paradigms, this study falls squarely into the qualitative paradigm as my research questions cannot be answered in the quantitative paradigm. Maxwell (2012) argues that, 'the strengths of qualitative research derive significantly from this process orientation toward the world, and the inductive approach, focusing on specific situations of people, and emphasis on description rather than numbers that this requires' (p. 30). The author (Maxwell, 2012, pp. 30-31) mentions five kinds of intellectual goals for which qualitative studies are especially suited as follows:

1. understanding the meaning which he called '*participants' perspectives'*, for participants in the study, of the events, situations, experiences and actions that they are involved with or engage in;

2. understanding the particular contexts within which the participants act, and the influence that this context has on their actions;
3. understanding the process by which events and actions take place;
4. identifying unanticipated phenomena and influences, and generating new, 'grounded' theories about the latter; and
5. developing causal explanations.

Phenomenography is predominantly tied to the first point in the list, though I will bring the second point into my discussion chapter. On this fifth intellectual goal, Maxwell argues that, 'the traditional view that only quantitative methods can be used to credibly draw causal conclusions has long been disputed by some qualitative researchers' (Maxwell, 2012, p.31).

Bless, Higson-Smith and Sithole (2013) summarise the qualitative research approach as 'research conducted using a range of methods which use qualifying words and descriptions to record and investigate aspects of social reality' (p. 394). In the case of this study, the method adopted within the qualitative research orientation is phenomenography and the aspect of social reality I am investigating is 'teaching economics in higher education'.

4.4 The research design

A research design is the reasoning that connects the data to be collected (and the deductions to be drawn) to the original question of a study (Yin, 1994). Three research questions of this doctoral study are at the centre of my research design. As stated in the first chapter, these are: (I) What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?; (II) What are the qualitatively different ways tutors at 'the University' understand teaching Economics 1?; and (III) What is/are the implication(s) for students' learning of teaching Economics 1 within the

current setting at 'the University' through the lenses of relevant theoretical frameworks? As Maxwell (2012) claims,

> the research questions are not the starting point or controlling piece of the [research] design, to which all other components must conform. Instead, they are at the centre of the design; they are the heart, or hub, of the model, the component that connects most directly to all of the other components. They not only have the most direct influence on the other components, but are also the component most directly affected by the others; they should inform, and be sensitive to, all of the other components (p. 4).

This section presents the outline that I have designed to empirically seek answers to the research questions. This is the structure of the research that holds all the elements of the research project together.

4.4.1 Sample selection

The focus of this doctoral research is on teaching Economics 1 at a South African university which I have called 'the University'. The research questions asked explored the experiences of those involved in doing this: *lecturers* and *tutors*. There were eight lecturers involved in teaching Economics 1 at this university during the 2012 academic year, three were female and five were male, all of whom were interviewed. All of these lecturers had experience teaching the course. As previously first-year students themselves, they had enrolled for and passed the Economics 1 course. Table 4.1 below summarises the lecturers' educational status. None had a PhD, though they had some experience in teaching Economics 1. With respect to their employment position at 'the University', none was either professor or senior lecturer. As depicted in the table below, I have used 'L' to denote 'lecturer' and 'L1 to L8' in sequence as the acronym for the eight lecturers.

Table 4.1: Profile of Lecturers Teaching Economics 1 at 'the University' in 2012

Acronyms	Educational Status	Experience lecturing Economics 1	Employment/ Position in the Department	Previous tutoring experience, if any
L1	Master's student in Economics at 'the University'	two years (2011,2012)	Associate Lecturer	At least one year as a tutor
L2	Master's student in Economics at 'the University'	two years (2011,2012)	Associate Lecturer	At least one year as a tutor
L3	Completed Master's in Economics	two years (2011,2012)	Associate Lecturer	At least one year as a tutor
L4	Master's student in Economics at 'the University'	three years (2010-2012)	Sessional Staff	At least one year as a tutor
L5	Master's student in Economics at 'the University'	two years (2011,2012)	Associate Lecturer	More than a year as a tutor; previously Tutor Coordinator
L6	Master's student in Economics at 'the University'	two years (2011,2012)	Associate Lecturer	More than a year as a tutor
L7	Completed Master's in Economics	five years (2008-2012)	Lecturer	More than a year as a tutor; Economics 1 Coordinator
L8	Ph.D. Student. Completed Master's in Economics at 'the University'	first year lecturing Economics 1	Sessional Staff	At least one year as a tutor

As for the tutors, a purposive sample was drawn with 'clear criteria for selecting the participants for the sample group to be studied' (Champion, 2002, p. 13). Of the total of 15 tutors involved in the course in 2013, seven were interviewed, three of whom were female and four were male, selected on the basis of a range of experience of tutoring. This is in line with the phenomenographic principle of purposively taking a 'theoretical sample', an even mix of tutoring experience and gender, ensuring that there is variation in the sample. The table below presents the tutors' educational status, experience in tutoring Economics 1 and previous tutoring experience, if any. In the same

manner as for lecturers above, I have used 'T' to denote 'tutor' and 'T1 to T7' in sequence as the acronym for the seven tutors.

Table 4.2: Profile of Tutors tutoring Economics 1 at 'the University' in 2012

Acronyms	Educational Status	Experience tutoring Economics 1	Previous tutoring experience, if any
T1	Honours BCom student in Economics	First year	None
T2	Honours BCom student in Economics	First year	None
T3	Honours BCom student in Economics	First year	None
T4	Honours BCom student in Economics	First year	None
T5	Honours BCom student in Economics	First year	None
T6	Honours BCom student in Financial Economics	First year	Tutor Coordinator
T7	Honours BCom student in Financial Economics	First year	None

A common characteristic of all the tutors who participated in this research was that they were all postgraduate students. Some were at an advanced stage of their honours degree in Economics, and others were starting with their honours degree programme. Of all the tutors interviewed, only one did not complete her first degree at 'the University'.

4.4.2 Data Collection

This section shows *what* and *how* I went about collecting the qualitative data for this doctoral study. Interviews, observations, and documents are the most common sources of qualitative data (Patton, 2002), 'none of which can be "crunched" easily by statistical software' (Suter, 2011, p. 344). According to Strydom and Bezuidenhout (2014, p. 188), 'interviews are a form of conversation, with the primary aim of obtaining information based on open-

ended questions'. Of the different interview types identified by different authors, the semi-structured interview is what I used for my data collection. It is the most common type of interview (Rowley, 2012) and the distinctness of the semi-structured interview is its flexible structure, unlike structured interviews (Mason, 2004). Semi-structured interviews 'take a variety of different forms, with varying numbers of questions, and varying degrees of adaption of questions and question order to accommodate the interviewee' (Rowley, 2012, p. 262). Mason (2004) further explains that,

> semi-structured interviewing is an overarching term used to describe a range of different forms of interviewing most commonly associated with qualitative research. The defining characteristic of semi-structured interviews is that they have a flexible and fluid structure, unlike structured interviews, which contain a structured sequence of questions to be asked in the same way of all interviewees. The structure of a semi-structured interview is usually organized around an aide memoire or interview guide. This contains topics, themes, or areas to be covered during the course of the interview, rather than a sequenced script of standardized questions. The aim is usually to ensure flexibility in how and in what sequence questions are asked, and in whether and how particular areas might be followed up and developed with different interviewees. This is so that the interview can be shaped by the interviewee's own understandings as well as the researcher's interest (p. 1).

Other different types of interviews are: 'informal, conversational interviews; general interview approach and standardised, open-ended interviews' (Strydom & Bezuidenhout, 2014, p.188-190). Marton and Booth (1997) note that,

> [for] phenomenographic studies in general, the researcher forms the interview according to the research question [...] [The] interviews [are] of a less structured kind, in which the interviewees [are] asked to reflect over what [a phenomenon] meant for them, often starting from no more than a direct question. [So, the] interview [is] the most common form of data collection, namely the relation between interviewer and interviewee in bringing the interview to a state of meta-awareness (p.132).

The data collection was in three phases: the first phase (August 2011); second phase (March 2012); and the third phase (August-September 2013). The preliminary data from this first phase was presented at the Sixth International Developments in Economics Education (DEE) Conference, London School of Economics and Political Science, London, United Kingdom:

6-7 September 2011. This presentation was later published as a book chapter in the Green Economics Institute Handbook (Ojo, 2012). In the first phase (Ojo, 2012), I conducted a pilot study, which van Teijlingen and Hundley (2001) describe as a 'mini version of a full-scale study (also called a feasibility study) as well as the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule' (van Teijlingen & Hundley, 2001, p. 1). Drawing on the insights by Maxwell (2012), I had designed and conducted the pilot as 'prior explanatory research' specifically to test my ideas and research method. The pilot study was very useful as it helped me to 'refine research instruments [interview schedules] and [find my way] through the "waves" of the field as one … navigating the somewhat more physically formidable waves of the ocean' (Sampson, 2004, p. 384).

In this first phase, I conducted two focus groups. A focus group is a 'group interview which consists of the meeting of a small group of people (usually between six and 12 people) and a facilitator, who is often also the researcher' (Strydom & Bezuidenhout, 2014, p. 182). Each focus group lasted between 45-60 minutes. The focus group had the advantage at this time because it was cost- and time-effective. In addition, it gave me the opportunity to explore and verify certain perspectives and experiences that came to light during the meetings (Strydom & Bezuidenhout, 2014). The first focus group was with all the first-year economics lecturers. At the time of the focus group discussion, there were nine lecturers. The second focus group was with selected first-year undergraduate students who were enrolled for the Economics 1 course at 'the University' and were randomly selected during this first phase. In total 15 first-year students were involved in the focus group. I was the facilitator of both focus groups during the first phase. Data collected during the piloting stage has not been considered at all in the body of the analysis that follows.

For both focus groups, I drew heavily on the work of Prosser, Trigwell and Taylor (1994) to put together the questions for lecturers. The questions asked focused on

> three areas of teachers' approach to teaching, their conceptions of learning and their conceptions of teaching [...]: (i) what do you mean by teaching (learning) Economics I to first-year students at this university?; (ii) how would you know if a student had learned something in this course?; and (iii) if I were to ask you what makes an effective teacher of Economics I at this university, what would you tell me? (Ojo, 2012, p. 135)

As for the first-year undergraduate students, the work of Bradbeer, Healey and Kneale (2004) and To (2003) were drawn upon to compile the questions asked, which focused on three areas: students' conception of learning in general, their conception of learning economics, and their conception of what makes an effective Economics university teacher. Specifically, the 'entry questions' that were asked were: (i) What do you think learning as a first-year student at this university is?; (ii) How do you know what you have learnt in Economics I?; and (iii) Assuming a friend of yours hasn't studied Economics so far and he/she would like to ask you what you studied in Economics, what will you tell him/her?' (Ojo, 2012, p. 135). The focus group discussions were audio-taped and transcribed verbatim, making the transcripts the focus of analysis for this first phase. This first phase offered me the opportunity to build rapport and collegiality with the lecturers, who later became the interviewees who I individually interviewed in the second phase. I will elaborate on this in later paragraphs in this section.

As earlier stated, the second phase of the data collection was conducted in March 2012, during which eight lecturers were interviewed individually. The three 'entry questions' asked in each in-depth, semi-structured interview which lasted between 45-60 minutes were: (i) What do you understand by teaching (learning) in the context of teaching Economics I students at this university?; (ii) How would you know if a student had learned something in this course?

and (iii) If I were to ask you what makes an effective teacher of Economics I at this university, what would you tell me?

Table 4.3: Summary of the three phases of the data collection for this doctoral study

Phase	Timeline	Activities	Outcomes
1	August 2011	Two focus groups: first focus group with nine Economics 1 lecturers involved in teaching Economics 1 at 'the University". The second focus group was with thirty first-year Economics 1 undergraduate students randomly selected. Three questions for each focus group.	This helped me in reviewing my research questions and refocused the research focus. This led me to planning stages 2 and 3, below, in which I refocused my doctoral thesis to focus on 'teaching in higher education' with focus on lecturers and tutors teaching Economics 1 at this South African university.
2	March 2012	In-depth, semi-structured interviews with eight lecturers; each interview lasted 45-60 minutes. Three sets of questions each with the two groups.	These were the two phases in which the actual data I analysed in writing up this thesis was collected. I focused specifically on teaching Economics 1 at a South African university and interviewed the lecturers and tutors involved in teaching/tutoring this. Each interview was audio-recorded and transcribed verbatim to give transcripts that formed the raw material for the data analysis stage.
3	August-September 2013	In-depth, semi-structured interviews with seven tutors involved in tutoring Economics 1; each interview lasted 45-60 minutes. Three sets of questions each with the two groups.	

In the third and the last phase which was in August-September 2013, I interviewed seven tutors involved in tutoring Economics 1 at 'the University'. The three 'entry questions' asked in each in-depth, semi-structured interview which lasted between 45-60 minutes were: (i) What do you understand by teaching (learning) in the context of teaching Economics I students at this university?; (ii) How would you know if a student had learned something in this course? and (iii) If I were to ask you what makes an effective teacher of

Economics I at this university, what would you tell me? Table 4.3 above summarises each of the steps of the data collection process for this doctoral study.

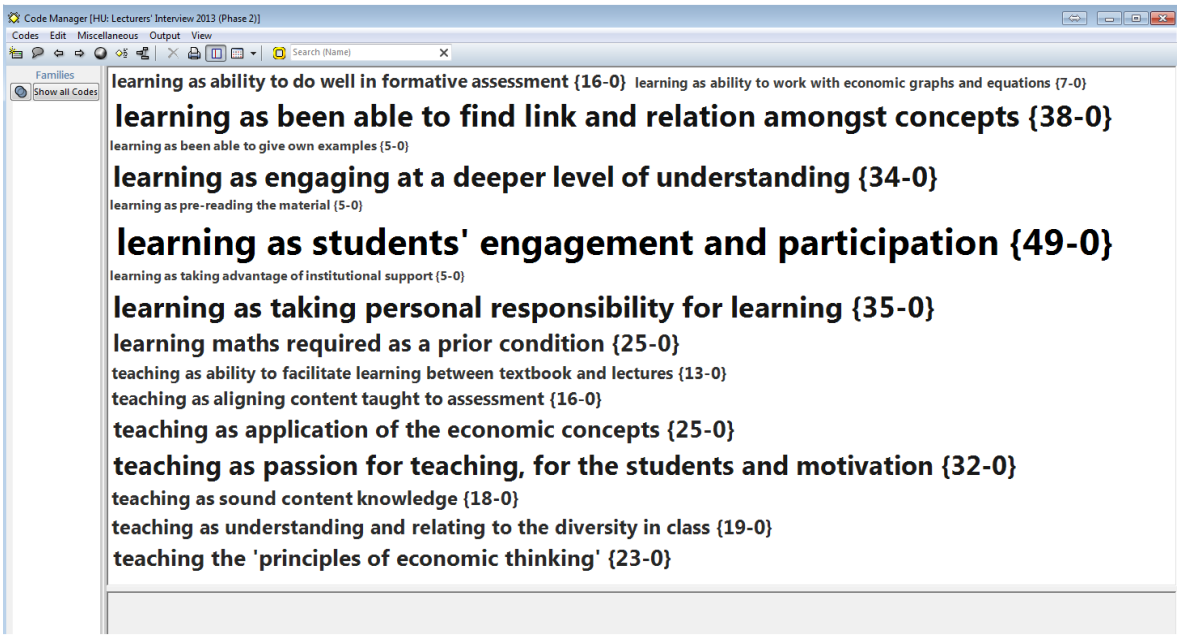
The data collection in all three phases followed a phenomenographic framework, in which the interview guide consisted of the three questions I had developed. This allowed for an in-depth, semi-structured discussion of the phenomenon (teaching Economics 1), varying the context for discussion of lecturers and then tutors, bringing out aspects of the phenomenon during the dialogues. The first question explored the lecturers' and tutors' understanding of teaching Economics 1 drawing upon their lived experiences. The second question focused on finding out what they do in lectures and tutorials that they consider enhanced their teaching experience and thus resulted in student learning. The third question sought to understand what in their experience makes an effective teacher of Economics I. Each interview was audio-recorded and transcribed verbatim to give transcripts that formed the raw material for the data analysis stage.

4.4.3 Data analysis

The raw qualitative data sets for this doctoral study were the fifteen interview audio files from phases 2 and 3 as presented in table 4.3: eight audio files and seven audio files from lecturers and tutors respectively. The process of data analysis from the transcription of these fifteen audio files to the emergence of the categories of description was in three phases: the interview transcription phase (September 2012/September 2013); data sorting phase using ATLAS.ti® (October 2013-December 2013); and in-depth data analysis phase (January 2014-March 2014).

In the first phase, the transcription of the audio files was outsourced to a professional transcriber. This transcription of the audio files for both the lecturers and tutors occurred during September 2012 and September 2013 respectively. Once the transcriptions were completed, the key phase of analysis began. The data set consisting of fifteen interview transcripts was loaded into ATLAS.ti® qualitative analysis software for further textual analysis. These interview transcripts were lecturers' and tutors' narratives of their teaching/tutoring roles, and were detailed, contextualised and personal accounts of teaching/tutoring Economics 1 at 'the University'. I read each of these fifteen interviews and listened to the audio files concurrently to recreate the interview experience and for the purpose of establishing the quality of each transcribed interview. Through the use of ATLAS.ti®, I was able to 'sort' the data set – comparing, contrasting and grouping, and for further in-depth textual analysis. The sorting of the data set was divided in two parts: first for the lecturers, and then for the tutors. In each part, I developed codes and marked-up specific sections of the transcripts related to these codes. At the initial stage, these codes were 'meanings' I made of the selected quotations across the transcripts depicting the lecturers' and tutors' understanding of teaching Economics 1 around sub-themes of teaching and learning. At this stage, there was an extensive iterative process of comparing and contrasting each of the codes, subthemes and the quotations to carefully make sense of each. As an example, Figure 4.1 below shows the 'code manage' of the preliminary coding across the two themes of teaching and learning which emerged from lecturers' data set.

Figure 4.1: Description of the coding through the lecturers' code manager at the preliminary stage using ATLAS.ti® focusing on two themes of teaching and learning



The output as presented in figure 4.1 with the different type sizes and styles is synonymous with the ATLAS.ti® standard output during data analysis and presentation. The output of the coded data was in the 'form of sets of quotations coded to different themes and categories, lists of numeric occurrences of individual codes, and matrixes and charts derived from numeric data about the codes' (Boon, Johnston & Webber, 2007, p. 213). Careful reading and re-reading of the transcripts continued as I compared the qualitative variation on the quotations aligned to the different codes to find out the essence of the meaning embedded in each quotation. Table 4.4, below, presents an excerpt of the final coding template.

Table 4.4: Excerpt of final coding template

Theme	Codes	Selected code with co-occurring codes
Teaching	• teaching as ability to facilitate learning between textbook and lectures • teaching as aligning content taught to assessment • teaching as application of the economic concepts • teaching as passion for teaching, for the students and motivation • **teaching as sound content knowledge** • teaching as understanding and relating to the diversity in class • teaching the 'principles of economic thinking'	**teaching as sound content knowledge {18-0} [8]** learning as ability to work with economic graphs and equations [1] 6:7 So I'm trying to avert that. O.. (57:57): learning as been able to find link and relation amongst concepts {38-0} [3] 6:7 So I'm trying to avert that. O.. (57:57): 6:28 So I tried to bring it in a sa.. (181:181): 8:21 the problem with Economics is .. (231:231): learning as engaging at a deeper level of understanding [3] 6:7 So I'm trying to avert that. O.. (57:57): 6:28 So I tried to bring it in a sa.. (181:181): 8:21 the problem with Economics is .. (231:231):
Learning	• learning as ability to do well in formative assessment • learning as ability to work with economic graphs and equations • learning as being able to find link and relation amongst concepts • learning as being able to give own examples • learning as engaging at a deeper level of understanding • learning as pre-reading the material • learning as students' engagement and participation • learning as taking advantage of institutional support • learning as taking personal responsibility for learning • **learning maths required as a prior condition**	**learning maths required as a prior condition {25-0} [5]** learning as ability to work with economic graphs and equations {7-0} [1] 3:16 But in first year there's basi.. (85:85): learning as been able to find link and relation amongst concepts {38-0} [6] 3:17 So I mean I just think that ab.. (87:87): 4:13 When you take a little bit fur.. (124:124): 4:15 Every single concept that need.. (134:134): 4:16 … they understand each on thei.. (138:138): 4:17 … they understand each on thei.. (138:138): 4:19 And I don't think that's just .. (140:140):

This in-depth, iterative process progressed as I continued to highlight quotations with my research questions as the backdrop of the reading. During this period, my meetings and discussions with my main supervisor, Professor Shirley Booth, were critical in making sense of the whole process as I continued to make presentations to her during the course of the data analysis. On 14 March 2014, I made a short presentation of my data analysis at the PhD Weekend of the School of Education, University of the Witwatersrand.

Through a 'cyclical process of repeatedly moving between analysis and readings of the data' (Boon et al., 2007, p. 213), I was able to come up with the categories of description for both lecturers and tutors which are presented in the next two chapters, five and six. Just as Boon et al. (2007, p. 214) claim, 'rigorous debate, close examination of specific results, and testing of identified categories were used to insure the reliability and validity of [my] findings'. In summary, this final phase of the data analysis was to *evaluate* and *re-evaluate* key excerpts (quotes) from each transcript (data set) without getting lost in the many superfluous utterances and exchanges in the conversations.

4.4.4 On ethical consideration, trustworthiness and quality of the study

This doctoral study involved human participants. Accordingly, ethics clearance approval was sought from the Ethics Committee of the School of Education, University of the Witwatersrand. Approval was granted on 14 December 2011 and the protocol number 2011ECE146C was assigned for the purpose of conducting this research. I have appended a copy of the ethics clearance to the thesis (see Appendix A2). The title of my thesis has changed from what was indicated on the ethics clearance approval letter as a result of a revision of my research questions after the initial pilot conducted in 2011. This has not changed the crux of my doctoral research which is still in understanding the teaching Economics 1 at 'the University', nor does it change the ethical relations between myself, my study and my respondents.

Voluntary consent from each of the interviewees was sought in a way that each participant understood and agreed to his or her participation without duress. As

part of the ethical principles of conducting this kind of research, the data from this research is confidential and as such, I have securely stored this remotely on a secure drive. The transcriber signed an indemnity form assuring me that electronic copies of the data were erased from the machine on which the transcription was carried out. None of the participants were identified in this study either by name, gender or race. A code, as was explained in the section on the criteria used in reporting the data, was assigned to each transcript associated with each interviewee for whom pseudonyms are used (Tables 4.1 and 4.2).

4.5 Reflections on data collection and analysis

As I reflected through the various stages involved in collecting and analysing my data using phenomenography as my research orientation, I had to continually 'bracket' my experience and what I thought interviewees were saying. Instead, I had to go back to the data frequently and rather document the respondents' experiences as a collective and not individualise their experiences. Many of the notes and comments that came from my main supervisor in the course of writing this thesis made me realise the discipline involved in conducting and interpreting phenomenographic research. There is a clear rigour involved in doing research like this from a second-order perspective, which is different from content analysis or thematic analysis. The interviewees, through semi-structured interviews, were the primary source of data. In interviewing them, there was the need to prompt them to discuss as much as possible on the phenomenon in question (teaching Economics 1, in this case). I also encouraged them to give as many examples of their experiences of the phenomenon as possible without putting words into their mouths or superimposing my ideas on them. The process of reiterative reading of the transcripts ('the data') itself is another rigorous process. Apart from helping to sort the data through *ATLAS.ti*®, the software itself does not help in generating the categories of description leading to the internal and the external horizons as is required for phenomenographic research. Instead, I as the researcher had to remove every needless comment carefully, statements and meanings not

relevant to the research questions. The process of drawing out precise quotes that perfectly fit the categories of description being explained in itself was quite difficult such that the reader would not have to second guess.

Phenomenographic research, like this study, requires discipline. That training can only come through practice and repetition such that one does not mix up a first-order perspective with a second-order perspective. I have made an attempt in the figure below to show the procedural moves I made through the entire data collection and analysis stages.

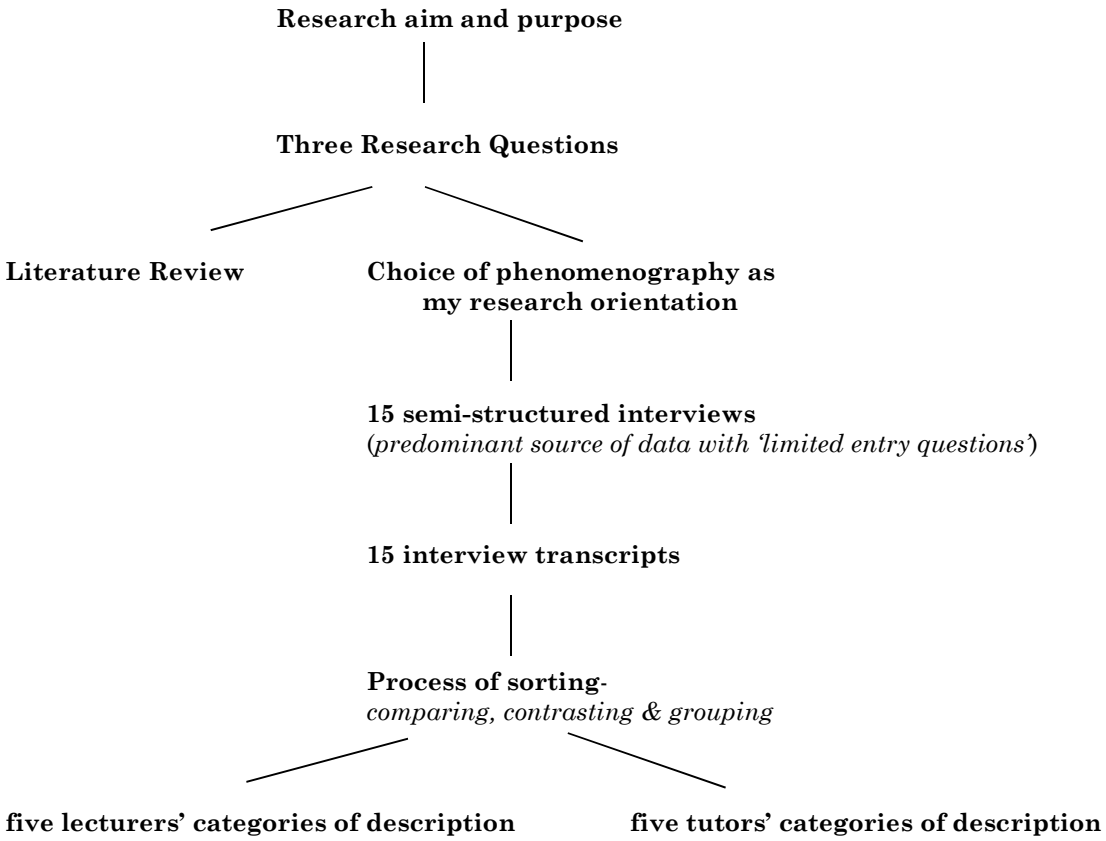


Figure 4.2: An illustration of the process of conducting this thesis' phenomenographic case study

4.6 Adjudicating the dependability of a phenomenographic study

This section outlines the methodological integrity in which this study is conducted, seeking to ensure the credibility of findings in relation to a phenomenographic research study. As such, concepts such as reliability and

validity which are generally associated with quantitative research are explored in this section. Booth (1992) delimits three aspects of validity as *content-related*, *methodological* and *communicative* validity, and further explains trustworthiness as validity and reliability as follows:

> the fundamental concept is that of validity, and to question that is to ask, what justification do you have for presenting the work you are presenting and making the claims you do? To question reliability is to ask, if another researcher repeated the research project you have just carried out, what is the probability that he or she would arrive at the same results, the same categories of descriptions and conceptions; in other words, to what extent can the results be relied upon and generalized? (p. 69).

The choice of phenomenography as a research orientation gives me the opportunity to compare my results with selected seminal works focusing on conceptions of teaching in higher education as presented in section 7.3 of the discussion chapter (chapter seven). Thus, the 'repeatability of the analysis' (Booth, 1992) tests reliability, which Sin (2010) considers as quality in phenomenographic research. The results emerging from this study are presented in the data chapters (chapters five and six) and discussed in chapter seven with respect to the conceptions of teaching in higher education.

4.7 Criteria for presenting extracts from interview transcripts in subsequent chapters

As stated above, chapters five and six are the results chapters of this thesis. These two chapters present the categories of descriptions for lecturers and tutors found in the analysis. The nomenclature used in giving interview extracts to illustrate each category identified lecturers and tutors separately. Lecturers are denoted as 'L' and tutors as 'T' when presenting extracts in the data chapters (see tables 4.1 and 4.2). There were eight lecturers and each has been identified as L1, L2…L8. The labels for the seven tutors have followed the same logic as: T1, T2…T7 (see tables 4.1 and 4.2). For instance, assuming an illustrative extract for a category of description of the fifth lecturer interviewed, this would be labelled with T5. The categories of description expressed by the lecturers and tutors in the data chapters are labelled as 'Lecturers' Category [LC]' and 'Tutors' Category [TC]' to differentiate between the categories of

description expressed by lecturers and tutors. For instance, the second category of description expressed by lecturers will be denoted as LC2.

The convention is a little different in the discussion chapter (chapter seven) in which the categories of description expressed in the data chapters will be called 'conceptions of teaching' and are merged to arrive at global university teachers' conceptions of teaching economics. For the seventh chapter the notations 'Lecturers' Conception [LC]' and 'Tutors' Conception [TC]' will be used to differentiate between the conceptions of teaching expressed by lecturers and tutors. For instance, the second conception of teaching expressed by tutors will be denoted as TC2.

CHAPTER FIVE

A PHENOMENOGRAPHIC ANALYSIS OF LECTURERS' WAYS OF EXPERIENCING TEACHING ECONOMICS 1

5.1 Introduction

Three research questions were asked in chapter one of this study. Of these three research questions, this chapter seeks to answer research question 1: '*What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?* ' This chapter presents the categories of description of ways of understanding teaching Economics 1 that emerged in the analysis of interviews from the course lecturers at 'the University'. The phrase 'categories of description' is used here and in the next chapter to represent the different meanings or ways of understanding teaching Economics 1 as experienced by lecturers and tutors. The 'categories of description' are not in one-to-one relationships with respondents. A respondent could have expressed more than one of them and the categories are made up of expressions from more than one respondent. This is an important feature of phenomenographic outcome space as earlier noted in section 3.2. The conceptions are of 'idealised' respondents rather than actual ones. In the seventh chapter, which is the discussion chapter, what is presented here and the next chapter as categories of description, will be called 'conceptions of teaching'. Subsequently in this chapter and the next, each category of description is explained and illustrated with extracts from the lecturers' interview transcripts. The lecturers' extracts to illustrate categories of description will be denoted with the letter 'L' to mean 'lecturer'. Each of the eight lecturers has been labelled as L1 to L8. After that, the outcome space is presented to show the referential and structural aspects of each category of description. The chapter concludes by emphasising the focal role of the Economics 1 curriculum across the five categories of description.

5.2 Lecturers' ways of understanding of teaching Economics 1 at 'the University'

As described in chapter four of this study, eight lecturers were interviewed, and they represent the 'population' of the academics involved in teaching first-year economics students at this university. They all have a varied background in terms of race, gender and experience in teaching Economics 1. As stated in chapter four, these lecturers have first-hand knowledge of the curriculum, as these lecturers were themselves former students of 'the University'. As earlier noted in chapter four, all the lecturers themselves as first-year students had themselves enrolled for and passed the Economics 1 course; consequently they have a rich experience and understanding of the learning context at this university. Within the phenomenographic tradition, three questions were asked in a semi-structured interview to each lecturer that lasted between 45-50 minutes, detailed in chapter four.

From the phenomenographic analysis carried out, five qualitatively different 'categories of description', ways in which lecturers understand and experience teaching Economics 1 at 'the University', emerged. These are:

I. Teaching Economics 1 as having a thorough knowledge of the content;
II. Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum;
III. Teaching Economics 1 as helping students learn key economics concepts and developing students' ability to use appropriate representations;
IV. Teaching Economics 1 as helping students acquire economic knowledge by making this relevant to students' own context and experience;
V. Teaching Economics 1 as helping students think like economists.

Each of these ways of understanding teaching economics is now explored, illustrated by, and validated with, extracts from lecturers' interviews.

Category I:
Teaching Economics 1 as having a thorough knowledge of the content.

At the heart of this category of description is the 'content' of the Economics 1 course, and the need for the lecturers to have an in-depth knowledge of this content is emphasized. Lecturers' ability to break down the theoretical

underpinnings within the content to first-year students is foregrounded by teachers' adequate preparation for lectures. Within this category, teaching depends on teacher's professional knowledge as an academic economist. Therefore this category of description is about the *teacher's identity as a knower*. 'Teaching as being a professional economist' is the referential aspect of this category. According to one of the lecturers,

> knowing your material is important as well as being well prepared for lectures. [L1].

From the extract above, the lecturer emphasised the importance of the 'material' as 'content' from the textbook and the need for an adequate preparation of the teacher to be able to present this content. Within this *teacher-centred* category since students take a passive role in how the lecturers express their understanding, lecturers understand their teaching as having adequate content knowledge to present these three traditions of teaching economics content (*words, equations and graphs*), without which students struggle to understand the material. Lecturers 'make the content theirs' as expressed in the quote below:

> So even if I don't read this book I know what is inside because the way in which I engaged the book was such that I was engaging it to find what the book is all about and understand it. But not only that, but ways in which I can also make the book mine by extending the examples. [L8]

This category of description is the least complete of the ways in which the lecturers experience teaching Economics 1. The lecturers' professional knowledge and identity as an economist is fundamental to this. The discipline of Economics, as it is linked to the Economics 1 curriculum, is emphasised here in this category.

Category II:
Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, students able to pass the exam according to the curriculum.

In this category, lecturers' experience of teaching Economics 1 focuses on transmitting the content of the prescribed Economics textbook and making sure assessment is administered correctly in order to help students pass. Thus, the

heart of this category of description is the Economics 1 textbook as linked to the curriculum earlier highlighted in the previous category. This way of understanding teaching Economics 1, like the previous category, is teacher-centred and focuses on transmitting the Economics textbook. The lecturer relates with the Economics textbook as an enabler for teaching the Economics curriculum. The course outline is related directly to the chapters of the prescribed textbook. The following extracts illustrate this position:

> You have to teach the textbook material. [L7]

> Currently as a lecturer we stand up, and we teach the material out of the book. We just deliver the content from the book. [L4]

> Someone who can deliver the interaction of those fundamental concepts in the most basic of ways and in that process of delivering them in the most basic of ways. … when it comes to the assessment you need to test that fundamental understanding of concept. And you need to test it within a context where students have to bring about a logical, theoretically sound and concise argument using those concepts. [L8]

To reinforce this *teacher-centred* category, the lecturers underscore the aspects of *assessment* and *students' ability to pass assessment* as vital *elements* in their teaching role of transmitting the content of the textbook:

> We take the material as it is presented … directly in the book and ask the students to then interpret what they've learned in order to answer correctly… [L4]

The association between this category and the previous one (Category I) is in the way lecturers see the ability to transmit the content of the textbook as building on their identity as lecturers (or, professional knowledge as economist) as a *knower*. Put differently, though Categories I and II are *teacher-centred*, a necessary prerequisite, to be able to teach Economics 1, is to be a *knower* without which the lecturer is unable to communicate the content of the textbook. The referential aspect of this category is 'teaching as transmitting economics', while the structural elements are: 'economics content' as the internal horizon and the 'economics curriculum within the university structures' as the external horizon.

Category III:
Teaching Economics 1 as helping students learn key Economics concepts, and developing students' ability to use appropriate representations.

This category is *student-centred*, *learning-focused,* unlike the two previous categories. It is about students making sense of knowledge constructs and developing skill in representing these constructs in Economics 1. While the first two categories of description are about the lecturer as a *knower* transmitting the *content* of the *economics textbook*, this third category shifts the focus from the lecturers to students' learning. The lecturers expressed their understanding of teaching Economics 1 as helping students identify economics' constructs through the use of appropriate representations (equations and graphs).

> I explain it in a word form for those who like words. And then for others who are not good in mathematics I put it in a graphical form. So if I can draw something I put it up. And then if I can formulate an equation for that I just put it mathematically as well. So I do three things per concept. And I guess I would have catered for everyone. [L5]

> I think the graphs and the equations. You know, going from the graph to the equation to words, you know. Going from one to another. That transition is quite difficult for some students. [L2]

These constructs are fundamental economics' concepts that present themselves as 'threshold concepts' which if students do not grasp properly develop into 'troublesome knowledge' as was discussed in chapter two.

> My job in the classroom is to help facilitate that understanding between the concepts and the textbook because … students will read, and they'll think that they understand. […]. So I start off with building up the basics (using equations and graphs) and then going to the model. I feel like that's my role as a lecturer, to facilitate that gap between the textbook and actual understanding. [L3]

Knowledge and *skill* constructs are characteristic of this category and a strong link to students' learning is emphasized. It is about the student's ability to develop the understanding of concepts through skills developed in solving equations and drawing graphs to illustrate the economic concepts being learned. Elaborating further on this, as I referred to in Category I in which economics content as *words*, *mathematical equations* and *graphs* are expressions of content, this category describes students' ability to make an

economic argument by making that link between *economic constructs* and appropriate *representations*.

> One of the most important things is, in Economics 1 is to put an up economic argument. If you know that definitely what the definition of demand is, I think it's equally important to know how to use that concept of demand in answering a more elaborate question [equations and graphs] than just looking for that meaning only. [L8]

Further extracts from the data to support and describe this category are below. L4 first relates economics in words to graphs; while L6 brings out the place of mathematics as helping students learn key economics concepts. The extract from L8 speaks about reasoning as an important aspect of learning economics concepts.

> You tell them something in words and ask them to represent that as a change on the diagram. [L4]

> And another challenge again, economics – some of the concepts – they are best explained mathematically. But with students who don't have a mathematics background, like the students from Arts, so now it is really like treading on a thin wire. But what I try to do is try to relate to everyone in the most basic form that I can. [L6]

> Learning economics concepts to me is as important as using them to reason out some case that we are presenting for you. For me it says that if you know that definitely what the definition of demand is, I think it's equally important to know how to use that concept of demand in answering a more elaborate question than just looking for that meaning only. [L8]

Unlike the first two categories, this category expressed a more advanced way of thinking of representations, where students make links and arguments. As such, this category is *student-centred*, *learning-focused.*

Category IV:
Teaching Economics 1 as helping students acquire economics knowledge by making this relevant to students' own context and experience.

This category of description considers teaching Economics 1 as helping students ground their understanding of economics knowledge through applying their understanding to their own real-life contexts. It grounds teaching in students' economic realities, enabling them to relate better to economics' knowledge. An example of this is the following extract:

> I try to bring in real life examples …to get the students involved as much as possible. [L1]

The lecturers' understanding of teaching Economics 1 in this category is that students gain awareness of economics phenomena not just by what they explain in the lectures, but through students making the connection to their own worldview. Invariably, lecturers' understanding of teaching of Economics 1 within this category of description is seen as helping students understand economic issues through development of their own meaning aligned to the disciplinary knowledge of economics. L4 illustrates this as follows:

> Trying to turn these concepts into real world experiences is a lot more difficult because they have such limited experience in the world. You have to try and take these concepts and make them into something that they are familiar with. [L4]

This category goes beyond ways of thinking of representations, where students make links and arguments to develop their understanding. It is about '*experience and relevance*', as the following extracts illustrate:

> Somebody who can decompose those concepts into everyday tangible things that students relate to. Make economics come to their own backyard. I think in that way you can really touch them. ... So if you can bring it to their experience and let them try to understand it in their own way, but as long as it is economically correct, it's fine. So you encourage that individual thought. [L6]

> Take that information that you now see in the news and … make the concepts alive, you know. And make their connections concrete. [L8]

> Well look, one thing is relating things to the real world and just, you know, explaining to people how things work in reality. Especially with Economics 1 it's very basic concepts that you're introducing. But, you know, in order to relate that you have to have examples from the real world, you know, and you say, 'But now ok look at this theory, let's think about this and this' you know. 'If this happens in the real world, then this happens, what would happen?' you know. And then people start thinking, you know. [L2]

The lecturers' way of understanding teaching Economics 1 is centred on making that connection with students' own experience irrespective of how limited or rich it is, making the content relevant to their world. The referential aspect of this category is 'teaching as making economics knowledge appropriate for students', while the structural elements are: 'economic knowledge' as the internal horizon and 'economics in the real world, students' related knowledge

from school, and students' experience of economic situations as the external horizon.

Category V:
Teaching Economics 1 as helping students think like economists.

Each category of description so far discussed includes the previous category. This fifth category of description describes teaching Economics 1 as developing students' economics thinking as expressed in the extracts below, and is thus learning-focused.

> Economics is a very different style. It's a different way of thinking [and it requires] a different mind-set. [L3]

> I've been working with a couple of people in the law department about a post-graduate economics course for lawyers. And one of the things they brought up was that economics teaches you a very different way of thinking and so because these students have never done economics before, this is… they've got to learn how to think in this way. And so often you've got to introduce them to it quite slowly. Economics teaches a very different way of thinking and so because these students have never done Economics before, they've got to learn how to think in this way. [L1]

Emerging from the four categories of description earlier presented, this category is about the '*being*' of the students through the teaching process. It is about helping them make that conceptual transformation from content to the real-life context and then to '*think*' like an economist.

> Look, I think that when you're doing law it's a different style. You know, like you for instance you know you get a whole lot of law cases or whatever the case is, and then you have to decide for, oh, what was the issue, what was the ruling, what was the precedent etc.? Then you get accounting where also it's a different style. I would say that the style is different from your other subjects. And, so the mind, your approach to that, so your mind-set to try and tackle these concepts should also change because it's a different style of learning... [...]...Economics is a very different style. Like it's a different way of thinking. [L3]

The student is placed at the centre, and active, unlike the passive role they were playing in the earlier categories I and II. So, this category is very *student-centred* and *learning-focused* as the following extract illustrates:

> It's a different kind of reasoning. When you are like an economist for example, you don't say, 'Ok, this is the current situation let's see what happens if you carry on'. You need to know: ok, no, that's where we need to be – how do we get the current situation to that point? You know, we're problem solvers. You have to think out the box. It's to me I see economics less as a science and more as a

> social science because you're dealing with people, you're dealing with things you can't always measure. But you're dealing with the consequences of behaviours. And you have to try and, you know, work with those to get to the ideal point. [L5]

This category of description as expressed by the lecturers is the most complete amongst the five that emerged from the phenomenographic analysis of the lecturers' transcripts. The referential aspect of this category is 'teaching as developing students' economics thinking', while the structural elements are 'conceptual understanding, economics knowledge, real-life examples' as the internal horizon and the 'economics in the real world; students' experience of economic situations' as the external horizon.

5.3 The structure of the outcome space

An analysis of these *categories of description* in terms of their *structural* and *referential* components is presented in Table 5.1. In presenting the outcome space, it is worth emphasizing again that category includes the previous one. This table highlights the nature of the logical ordering of the categories of description, from the least to the most complete category. In addition to presenting the *structural* and *referential* elements of the categories, there is a suggestion of a hierarchy. For example, *Category V* would not preclude teaching as having a thorough economic content knowledge, but would suggest that there is more to teaching Economics 1 than just the teacher's identity as a *knower*. Table 5.1 further presents details about the hierarchical ordering of the five categories of description on two planes. According to the table, Level 1 has *Categories I* and *II* as focusing on the *teacher* (*teacher-centred, content-oriented*). Level 2, on the other hand, comprises *Categories III*, *IV* and *V*. These categories are *student-centred, learning-oriented* with *Category V* as the most powerful of the ways in which lecturers at 'the University' understand teaching Economics 1.

In addition to ordering the categories, hierarchically, two levels of analysis are apparent from the five categories: '*focusing on teaching*' and '*focusing on teaching and learning*'. In the first two categories, Category I and II, the

emphasis is on the teaching of Economics 1, as the lecturers' understanding of their role in facilitating the Economics 1 curriculum. On the other hand, Categories III, IV and V go beyond just teaching Economics 1 and focus on students' learning of Economics 1. So the first level focuses on the lecturers and their teaching depends on their own professional knowledge as Economists. Their concern within the teaching roles is centred more on the issues of the curriculum and the formal requirements of this curriculum. Elaborating further on the second level, the lecturers' understanding goes beyond just teaching the Economics 1 curriculum, with emphasis on students' learning brought to the foreground of these categories. Accordingly, teaching Economics 1 curriculum supports students' knowledge of economics concepts and representation skills, which in turn relates the economics knowledge to their own experience and context, and finally supports students' thinking like economists.

Table 5.1: Categories of Description: Lecturers' ways of understanding teaching Economics 1

Category	*Referential Aspect*	*Structural Aspect*		Hierarchical Structure
		Internal Horizon	*External Horizon*	
Teaching Economics 1 as having a **thorough knowledge of the content**	teaching as being a professional economist	teacher's professional knowledge and identity as an economist	teaching as being a professional economist	**LEVEL 1:** <u>TEACHING ECONOMICS 1 FOCUSES ON THE TEACHER</u> **1A**: Teaching depends on the teacher's own professional knowledge as an Economist. **1B**: Teaching concerns the issues of the curriculum and the formal educational requirements.
Teaching Economics 1 as **transmitting the content of the textbook**, assessing correctly, and students being able to pass exam according to the curriculum	teaching as transmitting economics	economics curriculum content	teaching as transmitting economics	
Teaching Economics 1 as helping students **learn key Economics concepts**, and developing **students' ability to use appropriate representations (knowledge constructs and skill constructs of Economics 1)**	teaching as developing understanding of economics constructs	economics constructs; representations (graphs, equations)	teaching as developing understanding of economics constructs	**LEVEL 2:** <u>TEACHING FOCUSES ON STUDENTS' LEARNING</u> **2A**: Teaching supports students' knowledge of economics concepts and representational skills **2B**: Teaching supports students relate Economics knowledge to their own experience and context **2C**: Teaching supports students thinking like Economists, being Economists
Teaching Economics 1 as helping **students' acquire economic knowledge** by making this **relevant to students' own context and experience.**	teaching as making economics knowledge relevant for the students	economics knowledge, real-life examples	teaching as making economics knowledge relevant for the students	
Teaching Economics 1 as **helping students think like Economists.**	teaching as developing students' economics thinking	Conceptual understanding, economics knowledge, real-life examples	teaching as developing students' economics thinking	

5.4 Conclusion

Five categories of description emerged from the analysis of the lecturers' transcripts. These range from the least complete category of description, 'teaching as having a thorough knowledge of the content', to a more complete category, 'teaching as helping students think like economists'. A way of showing this completeness of the categories of description is by combining the characteristics of all of the categories into one as follows:

> Teaching as helping students think like economists, by acquiring economic knowledge relevant to students' own context and experience, in terms of learning key economics concepts and developing appropriate representations of these with the help of the text book and one's own thorough knowledge of the content as an academic economist.

The focus gradually shifts away from the lecturers' professional knowledge as economists, which is teacher-centred, to grounding the students as active participants in building on the learning requirements of the Economics 1 curriculum. The experience expressed started with an understanding that having a thorough knowledge of the content is important to the textbook grounded in the curriculum as the crux of the early categories. Progressively, the categories evolve such that they indicate the teachers' practice as supporting students in understanding concepts in Economics 1. Ultimately, relating students' learning to their real-life situation, their experience is about helping them become thinkers, '*thinking like Economists'*. The Economics 1 curriculum is a significant feature across the five categories of description. This drives the lecturers' experience of teaching Economics 1. In the next chapter, the structure and logic employed here will guide the presentation of the analysis of the data analysis from the tutors' interviews.

CHAPTER SIX

A PHENOMENOGRAPHIC ANALYSIS OF TUTORS' WAYS OF EXPERIENCING TUTORING ECONOMICS 1

6.1 Introduction

The objective of this chapter is to present the qualitatively different ways in which tutors involved in teaching Economics 1 at 'the University' experience tutoring Economics 1. As such, this chapter attempts to answer the research question 2, '*What are the qualitatively different ways in which tutors at 'the University' understand teaching Economics 1?*

This chapter is structured in three parts. The first part presents the categories of descriptions, describing, illustrating and discussing them with extracts from the tutors' interview transcripts to elaborate on each category. The tutors' extracts used to illustrate the five categories of description will be denoted with the letter 'T' to mean 'tutor'. Each of the seven tutors has been labelled as T1 to T7. Afterwards, an outcome space presents the referential and structural aspects of each of the categories. In the same way as I did with lecturers in chapter five, I conclude the chapter by emphasising the importance of the Economics 1 curriculum across the five categories of description.

6.2 Tutors' Ways of Understanding Tutoring Economics 1 at 'the University'

A phenomenographic analysis was carried out on the transcripts of the interviews of the seven tutors. Five qualitatively different ways of depicting how tutors conceive of and experience tutoring Economics 1 at 'the University' emerged. As stated in the previous chapter about lecturers' categories of description, the 'categories of description' are not in one-to-one relationships with respondents. This is an important feature of a phenomenographic outcome space and the respondent could have made statements typical of more than one category and the categories are

constituted of expressions from more than one respondent. The five qualitatively different ways which depict how tutors conceive of and experience tutoring Economics 1 at 'the University' are:

I. Tutoring Economics 1 as collaborating with the lecturers to implement the economics curriculum;
II. Tutoring Economics 1 as being adequately prepared with a thorough knowledge of the content;
III. Tutoring Economics 1 as helping students with appropriate assessment in Economics 1;
IV. Tutoring Economics 1 as helping students understand key economic concepts by identifying, linking and applying these constructs to facilitate learning;
V. Tutoring Economics 1 as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts.

Each of these ways of understanding is now explored, illustrated by and validated with extracts from tutors' interviews.

Category I:
Tutoring Economics 1 as collaborating with the lecturers to implement the economics curriculum.

This South African university's system of teaching Economics 1 involves both lecturers and tutors. Interestingly, this first category of description speaks to the relationship between them as symbiotic. The lecturers teach the content of the curriculum, while the tutors facilitate learning through the tutorial sessions. It is the least complete category, and is *tutor-lecturer centred,* and *curriculum-focused*. The following extract illustrates this:

> And like a tutor's role is not to teach, we're just here to facilitate whatever you understand or facilitate your learning. Well I believe that's what the lecturer's role is, to teach. Because when I think of the way that we, that we are trained or the, ja, I guess the way that we are trained as tutors is just, is just with the tutorials. We're just given the tutorials and we are told to understand the tutorials. So basically our mandate is just to understand tutorials and to explain that. [T3]

The essence of this category is the ability of the tutors and lecturers to work hand-in-hand within the Economics 1 curriculum, to supplement each other's role in the teaching-learning process. Within the university's system as described in the extracts below, there are weekly meetings

between tutors and lecturers as collaborators involved in teaching and tutoring of Economics 1. These weekly meetings track the progress made in teaching and tutoring the curriculum with the main objective of making sure what each party does aligns with what the other party does.

> Tutors are only there to help you. They are not there to teach you. That's the lecturer's job, you know. The reason why they hire us is for situations where you've read something, or you heard the lecturer say something that you do not understand, or you cannot make sense of. That's where we come in. [T2]

> We have meetings as tutors. We don't just administer tutorials without sitting down with lecturers, course co-ordinators, and other tutors to discuss the content of the material [the Economics 1 curriculum] and the way in which we should actually administer the content. We discuss the way we should actually answer, the way to tutor because there's a difference between teaching… and tutoring. [T6]

> The way he [the lecturer] does it is that in the first half, ok, there's 2 periods, it's a double period. In the first period he, he, it's a full-out lecture, he just lectures. In the second period he does the tut. ... Now at the time when the students are doing the tut, that's when they can ask us questions, that's when they can...raise up their hand, then we go to them and hear what the question [is] and then we try to help them there. [T4]

In the extract above, a distinction is made between teaching and tutoring. Tutors are not meant to repeat what the lecturers did in the lectures. Instead, the focus of the tutorial system is helping students make better sense of what the lecturers have taught in the weekly lectures. The approach used during the time I was interviewing the tutors is very problem-set oriented, to complement large undergraduate economics lectures. These problem sets are prepared by lecturers and given to the students to solve, and after attempting to solve the problem sets they can go to the tutors to seek further assistance. Tutors solve the problem sets with students, explaining economic concepts as a follow-up on lectures and their reading.

The essence of this category is 'collaborating and co-implementing the Economics 1 curriculum'. The category features the structural aspects of this category as 'Economics 1 curriculum; other academic staff' (internal

horizon) and the 'Economics 1 course; Economics curriculum' as the external horizon.

Category II:
Tutoring Economics 1 as being adequately prepared with a thorough knowledge of the content.

This category of description by its nature is *tutor-centred*. The emphasis is on tutors' preparedness with economics content knowledge.

> I mean obviously the first few tutorials are not the same as the tutorials that I run like now because obviously the more you go through the tutorials, the more you get used to the information, the more you get comfortable, and the more you can easily explain them to [the students]. [T7]

Within the depiction of the tutors' role, unlike lecturers, tutors do not lecture in large classes, but solve problem sets with students in smaller groups. This category speaks to this and features the importance of tutors' preparedness to do this effectively as illustrated by T1 below:

> Make sure that what you are explaining to them is what you yourself understand. Preparation as a tutor is very important. [T1]

The Economics 1 tutorial system is set up in such a way that these students come with these problem sets to be solved during the tutorial sessions. The tutors must be both available and prepared to assist students when they come to consult. Tutors can only assist the students if they are sufficiently prepared, as T5 implies:

> Concept [of being a tutor] is basically going behind the scenes such that, whatever question comes about content you can answer. [T5]

So, the tutors understand that they must be able to provide adequate support in solving these problems for students; being prepared with sufficient understanding of the content to do this is vital as T7 exaggeratedly explains:

> The main thing you need to know is you need to understand the main theories students are basing problems with, that as well. If you understand the main theory, then whenever you explain it, then you have to explain it in such a way that even a baby would understand, or even someone who has never done Economics would understand. [T7]

Within this category of description, the focus is solely on the tutor. The tutors' economic content knowledge is essential and sufficient preparation complements this. In terms of the structural aspects of this category, 'tutors' economic knowledge' is the internal horizon and the 'Economics 1 course; the prescribed book' is the external horizon.

Category III:
Tutoring Economics 1 as tutors' ability to help students with appropriate assessment in Economics 1.

This third category, unlike the first two categories, is *student-centred,* and *assessment-focused.* Assessment in Economics 1 is the essential feature of this category, explaining how tutors experience their role in Economics 1 tutoring. Two issues are clear from the tutors' extracts describing this category: the *what* and *how* of assessment in Economics 1. The *what* aspect identifies two predominant forms of assessment in Economics 1: *multiple-choice questions (MCQs)* and *essay writing*.

> Assessment in Economics 1 is mostly multiple choice questions and essay writing. So essay writing is just to see … how you are able to show that you know what you're doing, and you understand the work. [T2]

On the other hand, the *how* aspect deals with understanding the detail involved in eliminating incorrect answers in MCQs.

> The thing is with multiple choice questions it requires you to do this thing with eliminating the answers that are not correct … for you to be able to do that you need to know your theory, you need to know how to apply what you've learned because if you can't do that there's no way you can get the correct answer. [T2]

Discussing this category further, tutors understand their role helping students understand assessment in Economics 1.

> Like we as tutors what we try to do is try to put this compulsory tutorial session whereby we assess the level of understanding. We have online assessments so that we keep the students up to date. On a weekly basis we post like maybe a 3 page or 4 page extra reading material that is examinable. [T6]

> That's how it's supposed to be but them, um, they ask, well sometimes they ask specific questions like from past papers or from tutorials and then other times they do ask a specific section that they've done, they ask us to clarify certain things … in terms of, in terms of passing the course, yes it is, to do as many questions as possible. [T3]

This category is similar to the second category of the lecturers, who equally privileged their experience of teaching as helping students to pass assessments in the course. It is important to know how to deal with assessments in Economics 1. Students have to be able to make their arguments in economic essays, demonstrating that they understand the economic theories and that they can apply these correctly in assessments. The internal horizon of this category is 'assessments in economics', while 'Economics 1 as a course and how it is assessed within the Economics curriculum' is the external horizon.

Category IV:
Tutoring Economics 1 as helping students understand key economic concepts by identifying, linking and applying these constructs to facilitate learning.

The first three categories are less complete than this fourth category. As noted in chapter five when presenting the analysis of the lecturers' categories of description, each category of description so far discussed includes the previous category. The essence of this category is the facilitation of students' learning through making connections amongst economic concepts. Hence, this category is *student-centred* and *learning-focused.*

> The main … point is that [the students are] able to link concepts. Just because you are not studying one thing doesn't mean it's not important. You must be able to link concepts from past lessons. [T5]

A further aspect of this category is that it is about simplifying these concepts in the tutorial sessions such that students leave the tutorial session more skilled than when they came. Tutors' experience is of helping students learn how to identify, link and apply these economic concepts. The fundamental feature of this category is students' understanding of *economic concepts and constructs*. An example of one such economic construct that students must be able to identify and link with economic concepts is graphs.

> So far I think it would be the graphs ... on the graph he didn't understand or be able to interpret it, you know. And that's when we reminded him of

> the concepts you need to understand before you actually can run a graph. [T4]

Tutors' ability to help students make the relevant connections is key to helping them understand economics' concepts. Tutors must be able to explain the concepts to facilitate students' learning. This position can be seen in the following extracts below:

> You are to break down the concepts to the bare minimum. [T1]

> Well it's not that we just solve it for them, no, it's not like they'll come with the question and we'll just do it and like here's the answer, you know. We actually go through it with them. Like, ok the first step is you do this, and we'll make sure they understand each step of the thinking as to why we're doing certain steps. So I think it does help if you do it that way because, I mean, you're actually working through the problem with them and we kind of give them hints. [T3]

> They just don't know how to relate concepts. They just don't! It's almost as if they cram them and then when they are asked to apply what they know, that's where you can see that they really don't understand the work. [T2]

As presented in extracts from T2 above and T7 below, this category sees that students struggle with making sense of and connecting economic concepts, and how this is presented in the textbook from chapter to chapter. The T2 extract implies that there is the tendency of students to engage in rote learning, such that a problem set that requires a theoretical application exposes their lack of understanding.

> Economics is diverse, I mean it's global. It's like even in the textbook itself when you look at a textbook from chapter 1 to chapter 2 there might be a huge jump in the middle and you don't know why you're moving from chapter 1 to chapter 2, but at the end of the day you end up if you put that whole textbook in a nutshell it makes sense because you understand the concept, so you're dealing with a lot of things and you need to tie everything to the starting point. So in class what I do is I explain a concept, answer the question, and then after that I ask, 'Is everyone fine with this?' [T7]

A tutor's understanding of their tutoring role in this category is about helping students understand concepts and constructs step-by-step, working through the problem with them to relate these concepts. It is about helping the students know how to rightly apply these concepts, as in the mentioning of shifts in the economy as highlighted in the extract below. In addition, the category presents that unless learning is facilitated carefully

in making these connections, students will be thrown off-balance. Instead, they are helped to understand better and accurately solve the problem sets putting into use the skill of effectively relating economic concepts in each problem set.

> We go through it with them. We'll make sure they understand each step … as to why we're doing certain steps. You're actually working through the problem with them, and we kind of give them hints… understand why this shifts … causes certain shifts in the economy. [T3]

The internal horizon of this fourth category is 'economics concepts and constructs', while 'Economics 1 within the discipline of Economics' is the external horizon.

Category V:
Tutoring Economics 1 as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts.

Each category of description so far discussed includes the previous category. The crux of this category is making economic knowledge relevant to students' daily contexts and realities. This makes the category *student-centred* and *learning-focused* like the previous category. In this category, tutors conceive of their tutoring role as explaining the concepts in such a way that students can relate it to the real-life situation from the examples the tutors give. T7 puts it this way:

> Explain the concept based on something they can relate to. [T7]

Students' lived experience is recognised as essential to this category. In addition, tutors' role is making sure that they, the tutors, tap into this and help students ground their understanding of economics knowledge in real-life. The extracts below, in illustrating this characteristic of this category, allude to two kinds of possibilities when tutoring Economics 1: *citing examples from the textbook* and *giving real-life, everyday situations students can individually connect with.*

> Apply… real life situations in the course or in whatever tutorial questions that they have, and then I think they will be ok with it. [T1]

> He still didn't understand it when we used textbook references until we used real life normal situations. I mean we are surrounded by economic activity anyway so I think … it's actually more fun to relate it to what you're seeing …right now. [T4]

This way of understanding tutoring Economics 1 as illustrated by the extracts from the tutor interview is to help students by connecting the Economics 1 content beyond the examples in the textbook. This category is about students, through the support of tutors, making meaning of and finding relevance of various daily economic phenomena in their learning. It sees that it enhances student engagement with Economics 1 during the tutorial sessions and makes learning more exciting for them.

> I've tried to like, you know, make it a bit more exciting, you know, by applying real life issues because I've realised that for them it's not that they can't understand the work, but that they just need a little bit of encouragement to actually engage in the work. [T4]

The essential feature of this category is 'making economics knowledge relevant to students' experiences and context'. As for the structural aspect of this category, the internal horizon is 'economics knowledge; real life economic cases'. 'Economics 1 and its connections with students' real world, lived experience' is the external horizon.

6.3 The structure of the outcome space

Table 6.1 presents a summary of the findings with regard to the ways in which tutors understand the tutoring of Economics 1. In the first place, it highlights the structural and referential aspects of the five categories and shows the nature of the logical ordering of these categories, from the least complete to the most complete category. In addition, there is a suggestion of a hierarchy in tutors' ways of experiencing tutoring Economics 1. From the least complete category, that is, 'tutoring Economics 1 as collaborating with the lecturers to implement the economics curriculum', to a more complete category, 'tutoring Economics 1 as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts'. In the outcome space, the tutors' sense of a team, working in partnership with the lecturers, to implement the economics curriculum is the least complete category of description. Essentially, this category relates the tutoring role as integral to the teaching role of the lecturers. So within the teaching-tutoring system at this university, the functioning of lecturers

and tutors is harmonized towards students' acquisition of economic knowledge ultimately. As earlier stated, the first category (*tutoring Economics 1 as collaborating with the lecturers to implement the Economics curriculum*) is the *least complete* of the five categories, while Category V *(tutoring Economics 1 as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts)* is the most complete. A way of showing this completeness of the categories of description is by combining the characteristics of the five categories into one as follows:

> Tutoring Economics 1 as collaborating with the lecturers to implement the Economics curriculum, by being adequately prepared with a thorough knowledge of the content, helping students with appropriate assessment in Economics 1, helping students understand key economic concepts by identifying, linking and applying these constructs to facilitate learning; and as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts.

An important feature of Table 6.1 is the hierarchical ordering of the five categories of descriptions on two levels. The emphasis of the first plane clusters Categories I and II together as focusing on the tutors. This plane highlights tutors' collaboration with lecturers to implement the Economics 1 curriculum and their adequate preparation as vital. Beyond the first plane, Categories III, IV and V on the second plane focus on how tutors' experience is presented as helping students with assessments, facilitating students' understanding to connect economic concepts and ultimately, to engage the students in acquiring economic knowledge through making connections with daily economic realities. As shown in table 6.1, categories in the second plane conceive of the students as active participants in the teaching-tutoring-learning situation and as such are *student-centred* and *learning-focused*.

Table 6.1: Categories of Description: Tutors' ways of understanding tutoring Economics 1

Category	***Referential Aspect***	***Structural Aspect***		**Hierarchical Structure**
		Internal Horizon	*External Horizon*	
Tutoring Economics 1 **as collaborating with the lecturers to implement the Economics curriculum**	tutoring Economics 1 as collaborating and co-implementing the Economics 1 curriculum	economic curriculum; other academic staff	Economics 1 course; Economics curriculum	**LEVEL 1:** <u>TUTORING ECONOMICS 1 FOCUSES ON THE TUTORS</u> **1A**: Tutoring Economics 1 as focusing on the Economics 1 curriculum and the importance of tutors collaborating with lecturers to implement this. **1B**: Tutoring Economics 1 depends on the tutors' content knowledge and preparedness.
Tutoring Economics 1 as being adequately prepared with a **thorough knowledge of the content**	being prepared as a tutor who provides solutions to economic problem sets	tutors' economic knowledge	Economics 1 course; resources (prescribed textbook)	
Tutoring Economics 1 as **tutors helping students with appropriate assessment in Economics 1**	tutoring Economics 1 as helping students understand the *what* and *how* of assessments in Economics 1	assessments in economics	Economics 1 as a course and how it's assessed within the economics curriculum	**LEVEL 2:** <u>TUTORING FOCUSES ON STUDENTS' LEARNING</u> **2A**. Tutoring Economics 1 focuses on students' learning and helping students with understanding assessments. **2B**. Tutoring Economics 1 focuses on students' learning through tutoring economics concepts and helping them make the connections. **2C**. Tutoring Economics 1 focuses on students' learning and economics knowledge, especially making it relevant to their daily economic experience and contexts.
Tutoring Economics 1 as helping students **understand key economic concepts by identifying, linking and applying these constructs to facilitate learning.**	tutoring Economics 1 as helping students' understanding of economic concepts by showing the connections	Economics concepts and constructs	Economics 1 within the discipline of economics	
Tutoring Economics 1 as engaging **students** to **acquire economic knowledge** by making this **relevant to real-life economic contexts.**	tutoring Economics 1 as making economics knowledge relevant to students' experiences and context	Economics knowledge, real-life economic cases	Economics 1 and its connections with the real world	

6.4 Conclusion

Five categories of description of how tutors experience and understand tutoring Economics 1 have been presented in this chapter. Again, there is no one-to-one relation between the categories and the tutors, but rather the categories have emerged from one set of interviews. As the intention was at the beginning, the categories of description presented in this chapter answer research question 2. These categories of description start from the least complete category focusing on the 'team relationship' between tutors and lecturers. Beyond the first category, tutors' experience tutoring Economics 1 by supporting students to understand economic concepts and making the necessary associations between theory and real-life economic situations to enhance their learning of Economics 1 curriculum. The most complete category focuses on tutors' engagement of the students to make the link between their economic knowledge and real-life economic contexts in Economics 1.

CHAPTER SEVEN

DISCUSSION: FINDINGS IN THE LIGHT OF THE LITERATURE AND THE CONCEPTUAL FRAMEWORKS

7.1 Introduction

This thesis has so far described an investigation into the qualitatively different ways in which a team of teachers (lecturers and tutors) conceive of and understand teaching Economics 1 at a South African university, called 'the University'; it is not about categorising teachers as such but it focuses on the variation in ways in which teaching can be conceptualised across the team.

Three aims for the study were stated in chapter one: (I) to gain insights into the qualitatively different ways in which teachers teaching Economics 1 understand teaching, where 'teachers' includes both lecturers and tutors; (II) to investigate the teachers' conceptions of teaching Economics 1 through the lens of three conceptual frameworks; *and* (III) to examine the implications for students' learning of teaching Economics 1 at 'the University'. The three research questions asked were: (I) What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?; (II) What are the qualitatively different ways tutors at 'the University' understand teaching Economics 1?; and (III) What is/are the implication(s) for students' learning of teaching Economics 1 within the current setting at 'the University' through the lenses of relevant conceptual frameworks and the outcome of the empirical study?

For the purpose of this chapter, my goal is to examine and make sense of the findings of the preceding two chapters (chapters five and six) in the light of literature and the conceptual frameworks described in chapter three. Specifically in this chapter, three aims are set out. The first is to compare the two sets of conceptions of higher education teaching emerging from the lecturers and tutors.

Secondly, I compare the global conceptions of teaching in higher education emerging from the first aim of this chapter with three seminal works on conceptions of teaching in higher education, thereby contributing to the validity of my results. Thirdly, I illuminate the teachers' conceptions of teaching Economics 1 in the light of the conceptual frameworks.

7.2 Laying out the overall conceptions of teaching across the team

The outcome of the data analysis chapters (chapters five and six) were 'categories of description', shown in Tables 5.1 and 6.1. These categories of description focused on and represent the qualitatively different ways in which lecturers and tutors may conceptualise or understand teaching Economics 1 at 'the University'. There were five categories of description in each set, representing key aspects of the variation in meanings and experience. In these two outcome spaces there is a clear hierarchy, ranging in each case from least to most developed. As argued by Åkerlind (2008, p. 637), 'from a phenomenographic perspective, less sophisticated conceptions are regarded not so much as wrong, but as incomplete, lacking awareness of key aspects of the phenomenon that are focal in more sophisticated conceptions'.

As previously pointed out, 'conception, the basic unit of description in phenomenographic research, has been called various names, such as "ways of conceptualizing", "ways of experiencing", "ways of seeing", "ways of apprehending", "ways of understanding", and so on' (Marton & Pong, 2005, p. 336). Because this study focuses on ways of understanding or conceptualizing teaching, I will use the term 'conceptions of teaching' when referring to the categories of description that have emerged from the study.

In both sets of results, one for lecturers and the other for tutors, five conceptions of teaching have been established with the last conception of teaching in each set being the most developed. In the following discussion, the analysis is taken further by comparing the two sets of conceptions of teaching.

From two sets of conceptions to one

I have earlier referred to the lecturers and the tutors as a team, which can be justified by their joint enterprise of supporting students' learning in Economics 1. On a weekly basis, the lecturers and tutors met as a team to discuss progress made and to ascertain that their responsibilities and interactions were aligned with the curriculum. Further, the tutors' set of conceptions of teaching includes 'collaborating with the lecturers to implement the Economics 1 curriculum'.

	Lecturers' conceptions of teaching Economics 1	**Tutors' conceptions of teaching Economics 1**	**Overall team conceptions of teaching Economics 1**
I	-	Collaborating with the lecturers to implement the economics curriculum	Team collaboration to implement the economics curriculum
II	Having a thorough knowledge of the content	Being adequately prepared with a thorough knowledge of the content	Having a thorough knowledge of the content
III	Transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum	Helping students with appropriate assessment in Economics 1	Implementing the curriculum in order for students to pass assessment
IV	Helping students learn key economics concepts and developing students' ability to use appropriate representations	Helping students understand key economics concepts by identifying, linking and applying these constructs to facilitate learning	Helping students learn key economics concepts and representations to facilitate learning
V	Helping students acquire economics knowledge by making this relevant to students' own context and experience	Engaging students to acquire economics knowledge by making this relevant to real-life economic contexts	Engaging students through their real-life economics context to acquire economic knowledge
VI	Helping students think like economists	-	Helping students think like economists

Table 7.1. Overall team conceptions of teaching Economics 1

A closer consideration and internal comparison of the two sets of conceptions of teaching reveals that some commonalities are evident. To start with, each set of

conceptions can be mapped across the two dimensions of being teacher-centred or student-centred, from the perspective of whether their focus was on the teacher and his/her teaching or on the students and their learning. Referring back to tables 5.1 and 6.1 in the data analysis chapters (chapters five and six), the analysis of the outcome spaces in terms of referential aspects and structural aspects are very similar and the slight differences in some cases can probably be explained by the completeness of the lecturers' conceptions of teaching and their expertise as economists as compared to that of tutors. The first two columns of Table 7.1 show the lecturers' and the tutors' conceptions of teaching aligned according to this argument. The third column presents what I now see as the overall set of conceptions for the team of teachers, lecturers and tutors taken together.

Conceptions of teaching across the team

As with the original two sets of conceptions of teaching, one for lecturers and one for tutors, the set of overall team conceptions of teaching has two key dimensions: *teacher-centred orientation to teaching* and *student-centred orientation to teaching*, drawing from Samuelowicz and Bain (1992) and from the analysis of the two sets of conceptions in chapters five and six. These dimensions are also identified and argued for by other authors in examining university teachers' conceptions of teaching (Prosser & Trigwell, 1999; Prosser, Martin, Trigwell, Ramsden & Lueckenhausen, 2005). Teacher-centred teaching implies passivity of students in which their existing knowledge is taken for granted and teachers perceive themselves as simply being transmitters of knowledge (Cheng, Tang & Cheng, 2015). The converse holds for student-centred teaching which 'focuses more on the students' learning and their construction of knowledge, rather than on the teacher's teaching' (Cheng et al., 2015, p. 2).

The emphasis on the centrality of the Economics 1 curriculum in the earlier conceptions of teaching as compared to the later ones is another distinctive feature of this comparison, further strengthening the reference of the two dimensions mentioned above. This feature itself is the basis of the progression in

subsequent conceptions towards the completeness of the later conceptions of teaching. In other words, a thorough knowledge of the content grounded in the curriculum is very important when the two sets of conceptions of teaching are compared. The importance of the curriculum drives teachers' collaboration and thorough knowledge of the content that this builds on towards more complete conceptions.

A conceptual comparison between the two sets of conceptions to determine which is more developed or complete shows that lecturers' conceptions of teaching are more developed than the tutors'. While the last conception of teaching for tutors is about 'engaging students to acquire economic knowledge by making this relevant to real-life economic contexts', the most developed conception of teaching for lecturers is 'teaching Economics 1 as helping students think like economists'. What is considered as the most developed or complete tutors' conception of teaching Economics 1 is similar to the fourth lecturers' conception of teaching which is about 'helping students acquire economic knowledge by making this relevant to students' own context and experience'. Thus, lecturers' fifth conception of teaching completely described the key aspects of the variation of the collective experience that were shared by the lecturers and tutors. The most complete conception of teaching Economics 1 by lecturers, 'helping students think like economists' agrees with the claim in literature on economics education as the goal of teaching undergraduate economics (Siegfried et al., 1991).

7.3 Relating the conceptions of teaching proposed by other researchers and those presented in this study

After summarising the conceptions of teaching for lecturers and tutors in section 7.1, section 7.2 presented the overall conceptions of teaching across the team. Between these two sections, I have answered research questions 1 and 2 as set out at the beginning of this thesis. I will now compare my conceptions of teaching with other seminal work in the field of researching higher education conceptions of teaching from a phenomenographic perspective.

Seminal literature on relational research into university teachers' conceptions of teaching 'has been very little' (Prosser & Trigwell, 1999, p. 20) and came predominantly from Australia in the 1990s (Kember, 1997; 2009). Of the studies reviewed (Dall'Alba, 1991; Prosser, Trigwell, & Taylor, 1994; Samuelowicz & Bain, 1992; Trigwell & Prosser, 1996; Trigwell, Prosser, & Taylor, 1994; Trigwell, Prosser, & Waterhouse, 1999), three studies on the conceptions of teaching in different fields of higher education are most relevant to this thesis, namely Dall'Alba (1991), Samuelowicz and Bain (1992), and Trigwell and Prosser (1996). These are particularly relevant since they share the commonality of a phenomenographic research approach and they were conducted in the field of higher education research. Echoing Åkerlind (2003), their 'consensus is striking given the independent nature of the studies and the diverse range of […] institutions and academics sampled across the studies' (p. 376).

Dall'Alba (1991) studied university teachers in the fields of economics, English, medicine and physics in Australia, and arrived at an outcome space with eight categories. Samuelowicz and Bain (1992) conducted their studies with academic teachers in the fields of sciences and social sciences at two universities: one in the United Kingdom and the other in Australia, and arrived at five categories. Trigwell and Prosser (1996) studied university teachers teaching physics and chemistry courses in Australia, and their outcomes space had six categories. Of these three studies, Samuelowicz and Bain (1992) is the most directly relevant to my study. The authors' description of the distinction between student-centred and teacher-centred conceptions is in line with the distinction seen in my six conceptions of teaching.

A further study (Kember, 1997) which summarised a number of studies that investigated university teachers' conceptions and beliefs about teaching, arrived at an overall result of two major dimensions which he called 'two broad higher level orientations labelled [as] teacher-centred/content-oriented and student-centred/learning-oriented' (Kember, 1997, p. 264).

> The conceptions are placed under two broad orientations. The first orientation is teacher-centred and focuses upon the communication of defined bodies of content or knowledge. The second orientation is student-centred and hence focuses towards the students' learning. The latter orientation takes a developmental approach towards students and their conceptions of knowledge. It focuses upon their knowledge rather than the lecturers (Kember, 1997, p. 264)

The content-orientation vs. learning-orientation dimensions Kember (1997) brought into the discourse of conceptions of teaching gives an illumination that further helps to make the comparison in table 7.2.

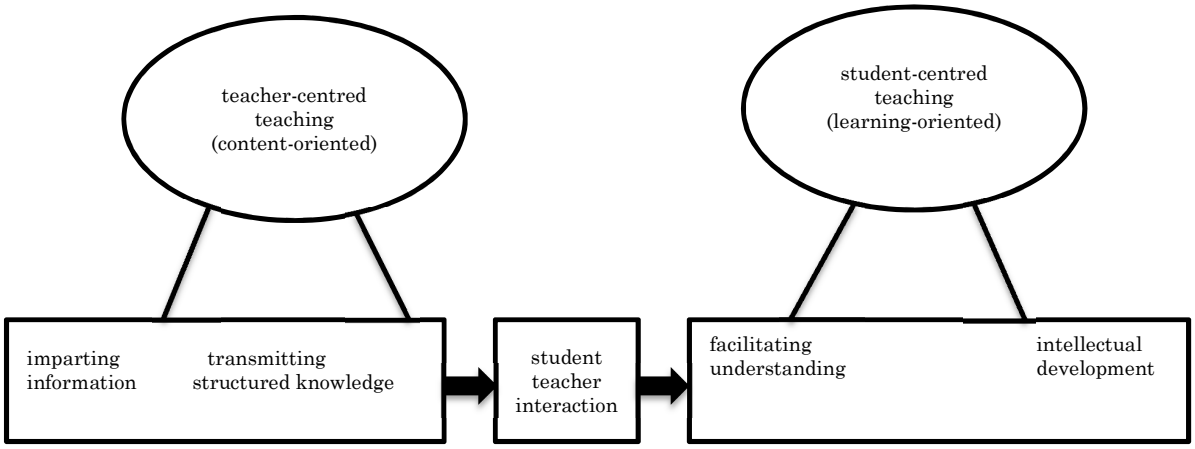


Figure 7.1: A multiple-level categorisation model of conceptions of teaching (adapted from Kember, 1997, p. 264).

In table 7.2 below, I integrate the ideas of Samuelowicz and Bain (1992) and Kember (1997) as dimensions to compare the three studies I have identified with my six conceptions of teaching. The content-orientation vs. learning-orientation dimensions Kember (1997) brought into the discourse of conceptions of teaching gives an illumination that further helps to make the comparison in table 7.2.

Dimensions (Kember, 1997)	Dall'Alba, G. (1991)	Samuelowicz, K., & Bain, J. D. (1992)	Trigwell, K., & Prosser, M. (1996)	This Study
Teacher-Centred Teaching/ Content-Oriented/	Imparting information	Teaching as transmission of knowledge and attitudes to knowledge within the framework of an academic discipline	Teaching as transmitting concepts of the syllabus	Team collaboration to implement the economics curriculum
	Transmitting information	Teaching as imparting information	Teaching as transmitting the teachers' knowledge	Having a thorough knowledge of the content
	Illustrating the application of theory to practice			Implementing the curriculum in order for students to pass assessment
Student-Centred Teaching/ Learning-Oriented	Developing concepts and their interrelations	Teaching as supporting student learning	Teaching as helping students to acquire concepts of the syllabus	Helping students learn key economics concepts and representations to facilitate learning
	Developing the capacity to be expert	Teaching as an activity aimed at changing students' conceptions or understanding of the world	Teaching as helping students to acquire teachers' knowledge	Engaging students through their real-life economics context to acquire economic knowledge
	Exploring ways of understanding from particular perspectives	Teaching as facilitating understanding	Teaching as helping students to change conceptions	
	Bringing about conceptual change		Teaching as helping students to develop conceptions	Helping students think like economists

Table 7.2: Summary of selected research on university conceptions of teaching from a relational perspective

Samuelowicz and Bain's (1992) claim is that, in line with general phenomenographic assumptions, 'there is a limited range of conceptions of teaching held by academic teachers' (1992, p. 105). Consequently,

> although the number of conceptions and their boundaries differ from author to author, in all schemes [...] teaching seen as presenting, imparting or transmitting information is classified as the lowest whereas teaching conceptualised as a process of bringing about conceptual change in students is classified as the highest (Samuelowicz & Bain, 1992, p. 105).

A similarity exists when the number of conceptions presented by Samuelowicz and Bain (1992) and those from this thesis are compared.

The two widely used dimensions of student-centred and teacher-centred orientations to teaching are argued for by Samuelowicz and Bain (2001), who write, 'the roles of teachers and students in the teaching/learning process would appear to be a major dimension' (p. 95). The most complete conceptions of teaching are student-centred teaching and imply an assumed active role of students in teaching. Elaborating further on the two descriptors of student-centred and teacher-centred distinctions between conceptions, Samuelowicz and Bain (1992) describe the difference between student-centred and teacher-centred teaching as follows:

> In student-centred teaching, students' existing conceptions are the starting point of an interactive teaching/learning process and students are helped by teachers' activities to construct their own knowledge, to make their own sense of reality, and adopt the conceptual framework in line with that shared by experts in the field.
>
> In teacher-centred teaching, students' existing conceptions are not taken into account, a teacher possesses the knowledge (gained or constructed) and transmits or imparts it to students, learning outcomes are expressed in quantitative rather than qualitative terms, the knowledge acquired by students is the knowledge transmitted/imparted by a teacher, and learning is subject oriented not reality oriented, and is often seen as preparation for higher level subjects (p. 104. Note that references to Samuelowicz and Bain's system of categories have been removed).

According to the three studies referred to earlier, (Dall'Alba, 1991; Samuelowicz & Bain, 2001; and Trigwell & Prosser, 1996), student-centred conceptions of teaching are more powerful, learning-oriented and they better enable students' learning than teacher-centred conceptions of teaching do. Prosser and Trigwell (1999) state this clearly,

> university teachers who focus on their students and their students' learning tend to have students who focus on meaning and understanding in their studies, while university teachers who focus on themselves and what they are doing tend to have students who focus on reproduction. (Prosser & Trigwell, 1999, p. 144)

The 'participation metaphor' that Kember (1997) claims is used to describe the assumed active role of students in teaching, which is evident in the three most developed, 'student-centred teaching/learning oriented' conceptions of teaching. When this happens, '…learning a subject is now conceived as a process of becoming a member of a certain community, […] entails the ability to communicate in the language of this community and act according to its particular norms' (Sfard, 1998, p. 6). Again, the three more complete conceptions of teaching from this thesis give credence to the participation metaphor in which the teachers conceive of their role as helping the students think like economists, thereby inducting them into a community of economics thinkers. The converse of a participation metaphor is an acquisition metaphor (Sfard, 1998) which aligns more to the teacher-centred orientation to teaching. The emphasis of the acquisition metaphor is that of a 'provider, facilitator or mediator' which is central to teachers' understanding of their roles in the three earlier conceptions of teaching, which are teacher-centred and oriented towards the content.

To conclude this section, the relevance and comparison with previous studies which my results afford me gives credence to my study in terms of its validity. The analysis presented in this section featured two dimensions of teacher-centred teaching/acquisition metaphors and student-centred teaching/participation metaphors as helping to relate the different studies paralleled at two levels. The later conceptions of teaching are more established, more complete and complex than earlier conceptions. In addition, the later conceptions are increasingly inclusive of earlier conceptions. The more developed conceptions of teaching are more realistic to help students learn and so make that conceptual leap (or intellectual development) in their understanding of the strong disciplinary context of economics as an undergraduate course at the university. Beyond this, a particular contribution of my thesis to this body of work is going to be explored in sections 7.4 and 7.5. In those sections, I move

beyond the literature to discuss the meaning of the overall six conceptions of teaching through the lenses of the two conceptual frameworks discussed in chapter three.

7.4 Making sense of the six conceptions of teaching in higher education in the light of the 'four-context conceptual framework'

The conceptual framework earlier described in chapter three presented a four-context framework for teaching in higher education. The goal of this section is to present a conceptual analysis of how this interfaces with the six conceptions of teaching emerging from this study. Within this conceptual analysis, three arguments evolve when this four-context relationship within higher education is used as a lens on the phenomenographic results from this study. These will be presented in this section.

The four contexts illustrated in chapter three, figure 3.2 are summarised as: (I) the *disciplinary context* of Economics 1 in which the curriculum (neoclassical economic theory grounded in strong quantitative reasoning) is taught, learned and assessed; (II) the *pedagogical context* of the shared work of the lecturers and tutors to teach the academic subject Economics 1; (III) the *social context* in which the team of lecturers and tutors and their students relate as a collective, sharing and shaping their teaching and learning experiences within the Economics 1 course; and (IV) the *official context* of the different South African national higher education bodies that regulate and provide the necessary institutional framework to higher education, providing the overall framework within which the three aforementioned contexts are operationalised and validated. Figure 7.2 below presents a simplified illustration of the four-context framework for teaching in higher education.

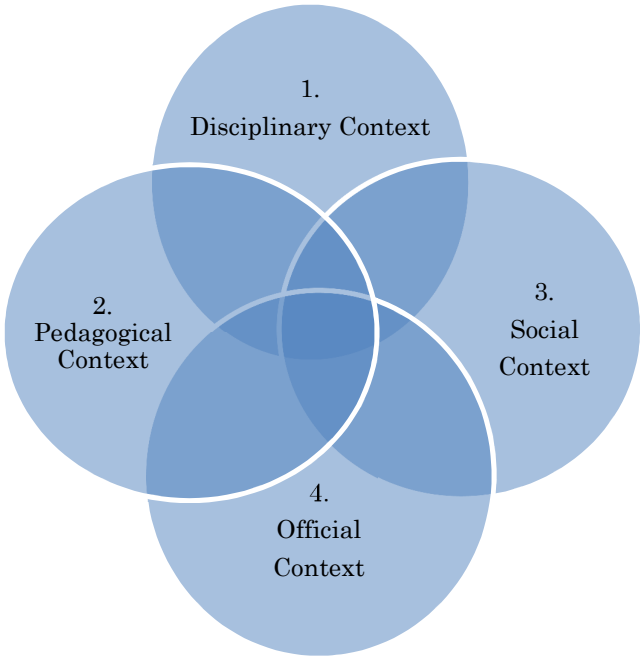


Figure 7.2: A simplified visualisation of the 'four-context framework for teaching Economics 1 in higher education'

The first argument is that when the overall six conceptions of teaching are mapped across the four-context framework, teachers' ways of experiencing teaching in higher education show a strong inclination towards the pedagogical context deeply rooted in the disciplinary context of economics. In other words, the six overall conceptions of teaching in higher education are predominantly represented in two main contexts: the pedagogical and disciplinary contexts. All six conceptions have the curriculum at their heart which is strongly inclined towards the pedagogical context (institutional curriculum - which is also the official, teaching and assessment; academic production and reproduction; and collaboration between teachers (lecturers and tutors).

To further explain this, the first conception of teaching is about team collaboration to implement the economics curriculum (see table 7.1). Evolving from this conception towards the most developed conception is the teachers' experience as grounded in the curriculum (which is part of the official context) and intrinsically represented across all the conceptions. What drives the most

developed conception, helping students think like economists, is a very strong emphasis on the neoclassical theory with emphasis on mastering quantitative reasoning and technique (disciplinary context) infused into the team collaboration between teachers (lecturers and tutors) during teaching and assessment (pedagogical context). Thus, there is a very strong connection between the pedagogical and disciplinary contexts in relation to the six conceptions of teaching in higher education emerging from this analysis.

Linked to the first argument presented above is a balanced role of the intersubjective relations between individuals (social context) within this four-context framework. This is about how teachers and students make sense of their experience together within a context. A stronger social context exists amongst teachers (lecturers and tutors) as a team in the three earlier conceptions of teaching as compared to students. The converse holds when considering the later conceptions of teaching, which bring out the students as active players in these conceptions. Put differently, the social context is balanced between both lecturers and tutors on one hand, and teachers and the students on the other hand in these later conceptions. In the three earlier conceptions of teaching, the focus is on what teachers and tutors do essentially around understanding and implementing the curriculum, while the three later conceptions of teaching focus on the students and their learning experience as the essence of these conceptions.

The third and last claim from this analysis is the importance of the official context. Though there is no direct mention of it in the narratives during the interviews, this context is represented in two conceptions, II and III. This official context brings into play the content and implementation of the Economics 1 curriculum for assessment practice. This is guided by the regulatory roles of South African national higher education. A major example is the Department of Higher Education and Training (DHET), which regulates university's institutional vision, mission & policy around university curricula (Department of Education (DoE), 1997).

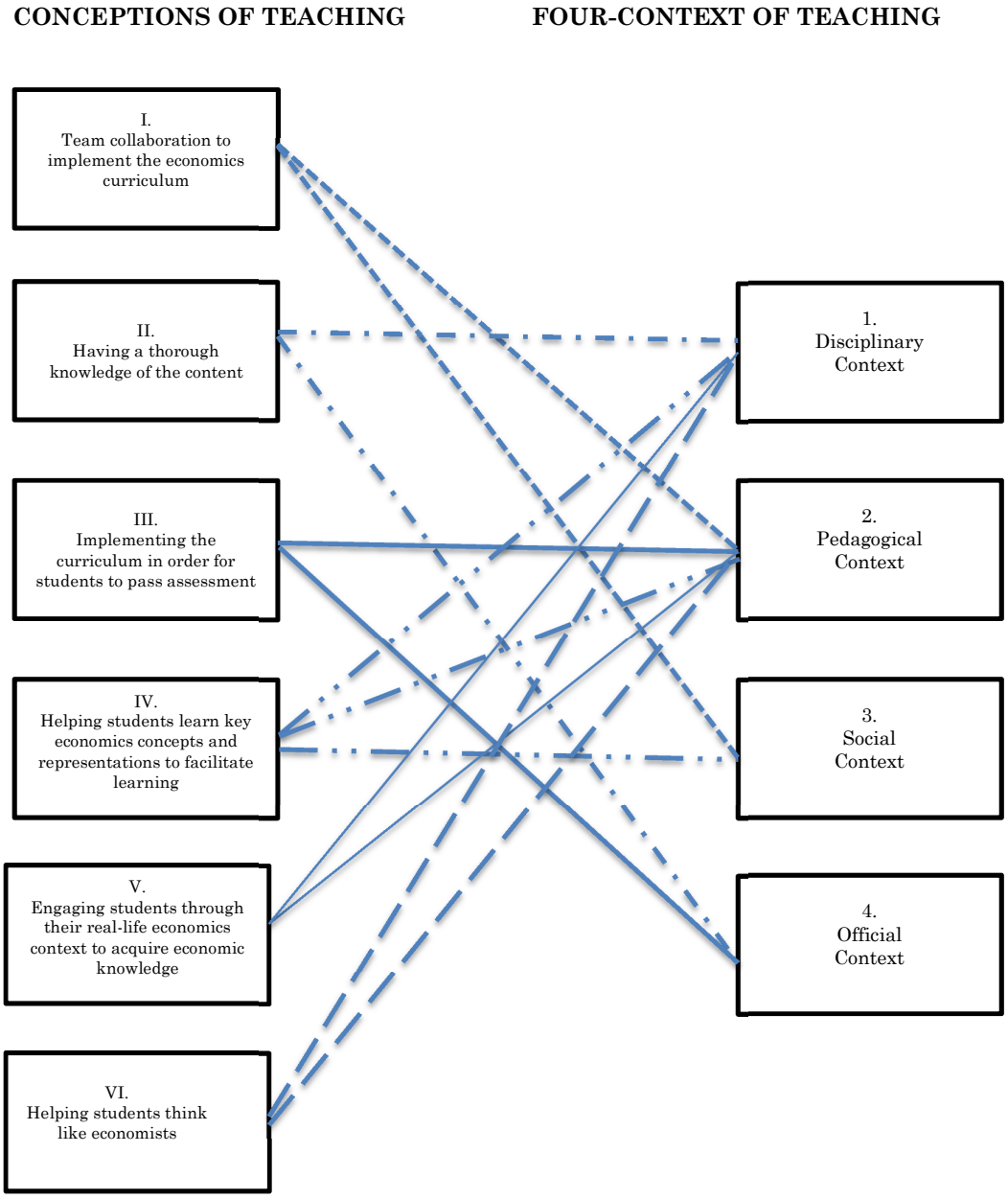


Figure 7.3: Summary of correlation conceptions of teaching and the 'four-context framework for teaching Economics 1 in higher education'

To conclude this section, in some sense and to different extents, all four contexts are relevant for all six conceptions of teaching, but some are more focal than others. Figure 7.3, below, presents the linear association conceptions of teaching and the 'four-context framework for teaching Economics 1 in higher education':

Conception I focuses primarily on the pedagogical and curricular work in progress and work ahead that is in focus, which is located in the pedagogical context (2), and a social context of team collaboration (3). However the discipline of economics as such and the official guidelines given by the curriculum and government decree as such are in the background.

Conception II holds the discipline (context 1) strongly in focus together with the official guidelines from the department and the institution that determines the curriculum (context 4), while the pedagogical context and the social context disappear.

Conception III, focusing on the implementation of curriculum, brings the pedagogical context of assessment and examination (context 2) strongly into the picture along with the official curriculum guidelines (context 4), with the discipline (context 1) in the background.

Conception IV, which focuses on supporting learning of key economics concepts and representation returns focus to the discipline (context 1), and the pedagogical context (context 2) while the social context can be seen to come to the fore with greater reference to the students (social context, 3).

In Conceptions V and VI, as with Conception IV, it is economics that is the main focus, backed up by curriculum and pedagogy, but a new feature has entered the picture, which does not explicitly come into any of the contexts; it is the real world of economics experiences and economics thinking about those experiences, in Conceptions V and VI respectively.

Though figure 7.3 above presented the linear association between conceptions and the four-context framework for teaching Economics 1 in higher education, the reality is that there is an overlap in the four contexts presented. Figure 7.4, below, illustrates this overlap, showing the relation between the four contexts and the categories found in the phenomenographic study.

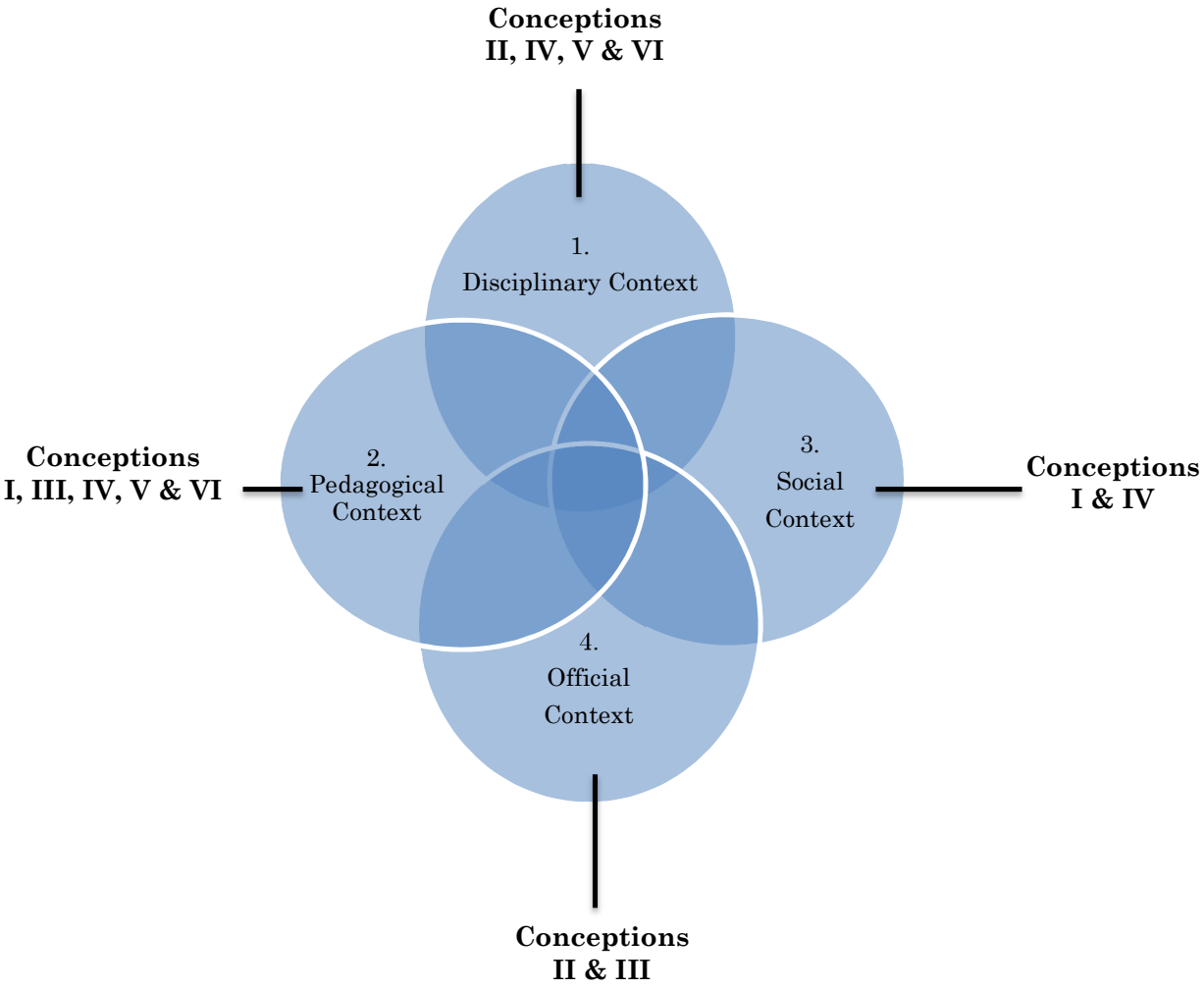


Figure 7.4: Mapping the different conceptions of teaching across the overlapping 'four-context framework for teaching Economics 1 in higher education'

In the next chapter (chapter eight), this will be revisited. In the chapter, I will relate this to the need for pedagogical development to take place within the team.

7.5 Making sense of the six conceptions of teaching in higher education in the light of Maton's sociological concept of Semantic Gravity

The concept of semantic gravity is taken from Maton's work in the sociology of knowledge, and is related to his concepts of cumulative and segmented learning. As described more thoroughly in chapter three, segmented learning is where students learn new ideas and skills bit by bit in different contexts without the

opportunity to build on earlier knowledge or integrate it. Cumulative learning, on the other hand, is characterized by integrating knowledge and subsuming it under previous knowledge. There is a continuity between segmented and cumulative knowledge, and semantic gravity can be seen as the pull to one way or another, weak gravity pulling to cumulative learning, while strong gravity pulls towards segmented learning.

Applying this lens to the phenomenographic results introduces the idea of forms of knowledge and the question arises as to what forms of knowledge are associated with the six conceptions. There is a strong argument that higher education teaching should be aimed at supporting cumulative learning, with its more integrated and world-related knowledge, rather than the fragmented knowledge that can be the outcome of segmented learning (Maton, 2009). The question then becomes, in what ways and to what extent do the conceptions expressed across the team of teachers of Economics 1 reflect the notions of cumulative and segmented learning, and of semantic gravity?

Conception I focuses on the collaboration between team members – focused most strongly by the tutors but in fact also involving the lecturers – and there is no direct reference to knowledge at all, or of ways in which the curriculum or the pedagogy of the course will be implemented. They are far in the background of the conceptions, even if they are in fact present in the discussions held in collaboration. Both Conceptions II and III focus strongly on the disciplinary content of the course and the curriculum that organizes it, and as such are more likely to tend to the strong semantic gravity and hence segmented learning. In Conception II, focus is on the economics knowledge itself, as represented by the lecturers' and the tutors' own economics knowledge and expertise. Conception III brings that knowledge to bear on the curriculum, as in the reference of the lecturers to transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum, and the tutors' reference to helping students with appropriate assessment. The learning is assumed to be closely tied to the context of the course, and the forms of

knowledge are given by the discipline and the curriculum. Semantic gravity is strong and a segmented learning would be thereby supported.

Conception IV is characterised by teaching students to grasp key economic concepts and the mathematical representative tools of economics. As in Conceptions II and III, this conception of teaching economics is closely tied to the curriculum and the discipline of economics, and again semantic gravity is rather strong, and with it segmented learning is still favoured.

It is first in Conceptions V and VI that the semantic gravity shows signs of weakening, with cumulative learning becoming a more probable outcome of teaching, when teachers mention relating economics concepts to the world outside the university. Conception V for both lecturers and tutors involves relating students' real life experiences, or potential experiences, to what is being taught and learned, and in Conception VI there is a look to the future in expressing the aim of getting students to think like economists, looking to a future professional life. The form of knowledge emanating from Conceptions V and VI with its weaker semantic gravity is better integrated and world-related.

In the earlier sections, I drew heavily on the distinction between teacher-centred and student-centred orientations to teaching, where Conceptions I, II and III reflected a teacher-centred orientation and Conceptions IV, V and VI reflected more of a student-centred orientation. Other researchers have pointed to the latter set of student-centred conceptions as being also learning-oriented (e.g. Trigwell & Prosser, 1996; Kember, 1997). That dichotomy does not exactly fit with the analysis according to the framework grounded in the work of Maton (2009). In this analysis, the split comes between Conceptions IV and V, those before having a strong semantic gravity and those after having a weaker semantic gravity. Table 7.3 below presents a summary of this analysis, relating the six conceptions with the two dimensions (Kember, 1997) and Maton's (2009) semantic gravity. I will return to this in chapter eight, to consider the implications for supporting student learning. This is an important observation to

make, since it indicates that the fourth conception (conception IV), 'helping students learn key economic concepts and representations to facilitate learning', appears from the phenomenographic literature to fall into the more advanced set of student-oriented conceptions of teaching, while we see from Maton's work that it would tend to support predominantly segmented learning.

<table>
<tr><th>Conceptions of Teaching (this study)</th><th>Dimensions (Kember, 1997)</th><th>Semantic Gravity (Maton, 2009)</th><th>Kind of Learning (knowledge) (Maton, 2009)</th></tr>
<tr><td>I</td><td rowspan="3">teacher-centered</td><td rowspan="6">stronger
↕
Weaker</td><td rowspan="4">segmented learning (fragmented knowledge)</td></tr>
<tr><td>II</td></tr>
<tr><td>III</td></tr>
<tr><td>IV</td><td rowspan="3">student-centered</td></tr>
<tr><td>V</td><td rowspan="2">cumulative learning (integrated and world-related knowledge)</td></tr>
<tr><td>VI</td></tr>
</table>

Table 7.3: Classifying the conceptions of teaching according to Maton's (2009) semantic gravity

This is an important result in relation to the general assumptions of much research – that a student orientation is also learning-oriented. While conception IV indicates strong semantic gravity less strongly than the earlier ones, it still points to segmented learning

7.6 On the validity of my study

Although validity was touched upon in chapters four and earlier in this chapter, I will bring out the essential analysis based on the notions of external and internal validity (Brock-Utne, 1996). External validity is claimed on the basis that the study has been conducted in such a way that the data collected is

representative of a wider field to which the study is relevant. The case study of teachers of economics at 'the University' complies with this in that they cover a range of experience of the discipline and teaching the discipline, in a situation that is typical of economics education. As presented in chapter one, it is evident from global and South African literature that the Economics 1 course, the context for the study, was very much in line with undergraduate economics education globally: it was reliant on the lecture method as the traditional method of teaching; its content was highly technical and often mathematical in nature with strong disciplinary context of its curriculum; and it involved large class sizes. A further aspect of external validity, ecological validity, refers to the research results, which are in line with international research on teachers' conceptions of teaching in higher education, as shown in table 7.2. That the study has internal validity is confirmed by the use of rigorous research methodology, described in chapters three and four, and by examination in chapter seven of the results obtained (1) in relation to other relevant research, (2) in the broader four-context framework for higher education and (3) in the learning focused on Maton's conceptual framework relating conceptions of teaching to affordance for student learning.

7.7 Conclusion

Three aims were set out at the beginning of this chapter as presented in section 7.1. In this chapter I have shown that there is one set of six conceptions of teaching which covers the whole team of lecturers and tutors on the Economics 1 course at the South African university. These six conceptions of teaching across these teams are summarised in the third column of table 7.1. These are in accord with results of earlier phenomenographic research on conceptions of teaching in other subject areas, and show a dimension that divides a teacher-centred orientation and a student-centred orientation to teaching, with three conceptions in each. Figure 7.1 adapts Kember (1997) and illustrates these teacher-centred / student-centred orientations, while table 7.2 summarizes the comparison of my study with this selected literature.

A substantial part of this chapter illuminates the empirical data in the light of the two conceptual frameworks: four-context framework of teaching in higher education and Maton's semantic gravity. When these six conceptions of teaching are related to the four-context model of teaching in higher education, it is seen that it is the pedagogical context with strong roots in the disciplinary context that dominate the conceptions, with the social context embracing teachers and students in the later conceptions and teachers only in the first conception. The official context only enters the picture as background in the curriculum guidelines that are influenced by the institution and the national standards, as set out by the Department of Higher Education and Training (DHET). The analysis is mapped in figure 7.3, while figure 7.4 shows the overlap in the contexts with the six conceptions of teaching superimposed on the four contexts.

When the six conceptions are related to Maton's conceptual framework in which a strong semantic gravity is related to segmented learning and weak semantic gravity is related to cumulative learning, integrated and world-related knowledge which is more in line with the aims of higher education, an anomaly is seen. Table 7.3 presents this anomaly, showing the six conceptions across a continuum of stronger/weaker semantic gravity and the corresponding kind of learning. The anomaly is seen coming in the fourth conception, which refers to supporting learning of key economics concepts and representations, but indicates a rather strong semantic gravity though student-centred and therefore, according to Maton's conceptual framework, still tends to support segmented learning rather than the more desirable cumulative learning. The last two conceptions as shown in table 7.3 are those which support cumulative learning which is the most inclined to result in students thinking like economists. As pointed out in chapter two, enabling students to think like an economist is the overarching goal of economics education (Siegfried et al., 1991).

The next chapter, chapter eight, considers the results of the research in a broader context. This concluding chapter presents how improving teaching in Economics 1 can better support student learning, and ways in which the research can be continued and furthered.

CHAPTER EIGHT

CONCLUSIONS

8.1 Introduction

In this chapter, I will summarize and present what I consider as the value of my doctoral thesis to the body of work on undergraduate economics education and the field of higher education research more broadly. I present insights my doctoral thesis has revealed in relation to the body of work on teaching in higher education, since how university economics students are taught '…has much wider implications for society than is commonly imagined' (Ward-Perkins & Earle, 2013, p. 1), as pointed out in chapter one. In the context of undergraduate economics education and the implications of its teaching for improved grades, throughput and students' learning, this study sets out to investigate the variation in ways teachers teaching Economics 1 at a particular South African university conceptualize their teaching across the team. Within this thesis, I have defined this team as lecturers and tutors (teachers) teaching Economics 1.

In section 8.2, I revisit the three research questions asked in chapter one of this thesis. In addition to this, I make the link amongst each of the eight chapters of the thesis in this same section. I pull together the empirical findings emerging from this study in section 8.3, and summarize the contributions of this research to the body of knowledge in section 8.4. In section 8.5, I reflect on my study, discuss its limitations and highlight areas for further study.

8.2 Re-examining the research questions and making the link across the different chapters presented in this thesis

Three research questions guided every step of this doctoral study. These are:

(I) What are the qualitatively different ways in which lecturers at 'the University' understand teaching Economics 1?;

(II) What are the qualitatively different ways tutors at 'the University' understand teaching Economics 1?; and

(III) What is/are the implication(s) for students' learning of teaching Economics 1 within the current setting at 'the University' through the lenses of relevant conceptual frameworks and the outcome of the empirical study?

After re-stating these research questions, I present below how each of the eight chapters has contributed to answering the research questions. By so doing, I attempt to present the interconnection across the chapters, which I consider essential to make sense of the logic behind the structure of my doctoral thesis.

After introducing the problem statement, research questions and aims of the study in chapter one, the second aim of this doctoral study, which is about understanding students' learning as informed by teaching Economics 1 within the current setting at 'the University' through the lenses of the conceptual frameworks, was foregrounded in the literature review chapter. The body of work mainly on economics education and teaching in higher education was presented in the literature review chapter (chapter two). The three conceptual frameworks: phenomenography, the 'four-context framework for teaching in higher education' and the concept of semantic gravity and its relation to cumulative learning, were presented and discussed in chapter three. These conceptual frameworks were applied to the data for further analysis and by so doing, achieved the second aim of this study. The research orientation used in collecting and analysing the data – phenomenography – has been discussed in the research methodology and design chapter (chapter four). The first two research questions were answered in the empirical chapters (chapters five and six) in which I presented my data, illustrating my claims therein with extracts from the lecturers' and tutors' interview extracts. The results from this analysis have been presented in chapter seven (the discussion chapter). The third research question as well as the third aim of the study which is about the implications for students' learning of teaching Economics 1 is taken up in this chapter (chapter eight) under the theoretical contributions of this study in section 8.4. The next section, section 8.3, presents the empirical findings from the thesis. The purpose of this chapter is to conclude the thesis and answer its research questions.

8.3 Pulling together the empirical findings

Before discussing the contributions made by this study in section 8.4, it is useful to start with a brief summary of the key issues addressed in the thesis' previous chapters. This thesis is about higher education teaching, an aspect of higher education research. This form of research has become important in higher education as a result of dwindling resources (Teferra & Altbach, 2004); throughput, attrition and drop-out (Letseka & Maile, 2008); and diversity in students' need and profile across the globe (Ramsden, 1992). Currently in South African higher education, with particular reference to undergraduate economics teaching, there is a dearth of research which provides insights into conceptions of teaching using phenomenography as a research approach. Thus, my thesis adds to the body of knowledge in this field.

Lecturers' five categories of description:

I. Teaching Economics 1 as having a thorough knowledge of the content;
II. Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum;
III. Teaching Economics 1 as helping students learn key economics concepts and developing students' ability to use appropriate representations;
IV. Teaching Economics 1 as helping students acquire economic knowledge by making this relevant to students' own context and experience;
V. Teaching Economics 1 as helping students think like economists.

Tutors' five categories of description:

I. Tutoring Economics 1 as collaborating with the lecturers to implement the economics curriculum;
II. Tutoring Economics 1 as being adequately prepared with a thorough knowledge of the content;
III. Tutoring Economics 1 as helping students with appropriate assessment in Economics 1;
IV. Tutoring Economics 1 as helping students understand key economic concepts by identifying, linking and applying these constructs to facilitate learning;
V. Tutoring Economics 1 as engaging students to acquire economic knowledge by making this relevant to real-life economic contexts.

Table 8.1: Summary of the empirical results from the data chapters (chapters five and six)

As earlier stated, the empirical findings which emerged from this study directly provided answers to research questions one and two, and were described in

chapters five and six. So, what are these empirical findings? These are two sets of categories of description earlier summarised in table 7.1. These two sets of conceptions of teaching were repeated in table 8.1.

The sets of categories presented in the table represent the variation in the ways in which lecturers and tutors may conceive teaching Economics 1 at 'the University'. This follows the idea that a 'conception [as] the basic unit of description in phenomenographic research, has been called various names, such as "ways of conceptualizing", "ways of experiencing", "ways of seeing", "ways of apprehending", "ways of understanding", and so on' (Marton & Pong, 2005, p. 336).

I have considered these teachers (the lecturers and tutors) as a team, since they share the responsibility of teaching Economics 1 at 'the University' and in facilitating the students' learning of that subject. A careful, comparative analysis of the two sets of conceptions of teaching, as set out in table 8.1 and as discussed in chapter seven, led to an overall six conceptions of teaching in higher education as follows (see table 7.1):

I. Team collaboration to implement the economics curriculum;
II. Having a thorough knowledge of the content;
III. Implementing the curriculum in order for students to pass assessment;
IV. Helping students learn key economics concepts and representations to facilitate learning;
V. Engaging students through their real-life economics context to acquire economic knowledge; *and*
VI. Helping students think like economists.

These six conceptions of teaching are comparable with studies conducted previously in the field of teaching in higher education as discussed in chapter seven. As acknowledged in that chapter, three studies on the conceptions of teaching in different fields of higher education are most relevant to my study: Dall'Alba, 1991; Samuelowicz and Bain, 2001; Trigwell and Prosser, 1996. A similar methodology (phenomenography) used in these studies make mine comparable with theirs. Other factors that strengthened the comparability of

these studies are the independent nature of the studies, and the diverse range of institutions and academics sampled across these studies. Table 7.2, as illustrated in chapter seven, presented this comparison.

The analysis I presented in chapter seven goes beyond a mere comparison of my empirical results with other literature. What I have done is to show that the six overall conceptions presented above have different relationships to the four-contexts framework for teaching Economics 1 in higher education and that they favour cumulative learning to different degrees. While all four contexts - the official, the social, the pedagogical and the disciplinary - are relevant to all six conceptions of teaching and do overlap, the study shows a stronger inclination towards the disciplinary and pedagogical contexts, with the social context featuring weakly only in two conceptions and the official context backgrounding and overlapping all six categories.

The varying degree of semantic gravity across the six conceptions in relation to Maton (2009), thereby affording a different quality of learning, is an important insight from this study. The results using Maton's (2009) analytical framework stretch the general assumption of phenomenographic research – that a student-centred orientation is learning-oriented. My study questions this assumption and takes the analysis to another level through Maton's work to show that though category IV (helping students learn key economics concepts and representations to facilitate learning) is student-oriented, it still points to segmented learning because it is associated with strong semantic gravity. Only the last two conceptions, with weaker semantic gravity, afford cumulative learning for students.

Beyond the empirical results, three important lessons, which are major contributions of my thesis to the body of knowledge, are presented in the next section, section 8.5. These have implications for students' learning, the improvement of undergraduate economics education nationally and globally, and higher education in general.

8.4 Implications for enhancing teaching

Teachers in higher education do not teach for the sake of teaching; the essence of teaching in higher education is to help students learn. So, how can my work be used as a basis for improving economics education? What educational implications can be made from my thesis? To answer these questions, I have drawn out three lessons as follows, in their order of importance: (1) the need to make the economics curriculum aligned with real-life contexts of undergraduate students; (2) the need to rethink the economics curriculum in light of the current global debates within the discipline of economics; and (3) the need to bring pedagogical development into the team. Each of these will be discussed in separate sub-sections below.

8.4.1 The role of student experience in enhancing teaching: Using real-life world examples to teach economics

A more complete conception of teaching as indicated from my phenomenographic results promotes students' learning. In support of this, Trigwell and Prosser (1996) argue that lower conceptions of teaching limit learning. According to them, without the ability of teachers to conceive of teaching as being more than a process of a 'quantitative increase in knowledge, or memorizing, students will have extreme difficulty in adopting practices that lead to high quality learning' (1996, p. 276). In economics teaching as grounded in my empirical work in this thesis, using real-life world examples affords teachers the opportunity to help students avoid memorization and adopt practices that lead to learning. Making careful deductions from the phenomenographic results, real-life contexts appear in the last two conceptions and these are the ones that are associated with weak semantic gravity and cumulative learning.

Engaging students through examples of real-life economics contexts, as indicated by my analysis, is a necessary condition to afford students cumulative learning. This is the kind of learning which integrates knowledge, subsuming it under previous knowledge and makes the learning more world-related. This first lesson

comes out of my results directly and is illustrated in the extracts of the teachers' interview data presented in chapters five and six. There are many statements in the interview data across the team that point directly to these, including:

> I try to bring in real life examples …to get the students involved as much as possible. [L1]
>
> He still didn't understand it when we used textbook references until we used real life normal situations. I mean we are surrounded by economic activity anyway so I think … it's actually more fun to relate it to what you're seeing …right now. [T4]
>
> Take that information that you now see in the news and […] make the concepts alive, you know. And make their connections concrete. [L8]

These selected extracts demonstrate the significance of bringing to the foreground students' experience and relate this to real world cases of economics phenomena. As pointed out in extract L1 above, bringing in real-life examples engages the students better, and helps them make connections in the economics concepts more concretely (extract L8). This could be done through relevant textbook examples as well. Since economic activity is a daily reality for students, university economics teachers should relate economics to students' daily realities as pointed out in extract T4 above.

A positive development in the light of this lesson is that at the same time I collected my data, a new textbook was introduced for the Economics 1 curriculum, written within the Southern African context with numerous real-life examples. Though this is indeed a positive point and needs to be acknowledged, more needs to be done to enable economics teaching to foster students' cumulative learning.

8.4.2 The role of the curriculum in enhancing teaching: Revisiting the economics curriculum in the light of recent developments

The curriculum is considered vital to the teaching of Economics 1 at 'the University'. This is evident from the literature review and the analysis of the four-context conceptual framework discussed in chapter seven. While the place of the curriculum underlines the strong disciplinary context within the four-context framework of higher education teaching as presented in the discussion chapter,

Maton (2009) further strengthens the place of the curriculum. He argues that, 'curriculum structures play a role in creating conditions for students to experience cumulative learning' (Maton, 2009, p. 44). So, the curriculum has to be made relevant to current economic context and issues. It is the relevance of the economics curriculum in the light of recent developments that my second contribution is about.

The knowledge field of economics in relation to today's economic realities is currently being challenged, though my empirical data shows a strong disciplinary context. A mainstream neoclassical paradigm currently drives the Economics 1 curriculum. This has been argued as treating economics as a hard science driven by quantitative models, instead of treating economics as a social science. As argued by Inman (2013),

> few mainstream economists predicted the global financial crash of 2008 and academics have been accused of acting as cheerleaders for the often labyrinthine financial models behind the crisis. Now a growing band of university students are plotting a quiet revolution against orthodox free-market teaching, arguing that alternative ways of thinking have been pushed to the margins. (p.1)

This is a very related argument by Chakrabortty (2013) in an article in *The Guardian* that,

> something similar is going on at Manchester University, where as my colleague Phillip Inman reported last week, economics undergraduates are petitioning their tutors for a syllabus that acknowledges there are other ways to view the world than as a series of algebraic problem sets. (Chakrabortty, 2013, p. 1)

So, my second point is on the basis of the recent developments in the global context of teaching undergraduate economics and this is not presently reflected in the curriculum as taught in many universities (Chakrabortty, 2013; Inman, 2013).

As I highlighted in chapter two, the definition of economics which I adopted from the recommended textbook for this South African university, defined economics as a 'social science that studies the choices that individuals, businesses, governments, and entire societies make as they cope with scarcity and the incentives that influence and reconcile those choices' (Parkin et al., 2010, p. 2).

Yet, the empirical data shows that there is a strong disciplinary context rooted in mathematical models, which does not necessarily consider the discipline as the social science it claims to be.

The analysis of my data as a whole points to the importance of 'engaging students through real-life economics contexts to acquire economic knowledge' (conception V) as enabling cumulative learning which relates to Maton (2009). As it stands, revisiting the economics curriculum to look at the world as it is rather than through economics models will be valuable to make these real-life contexts which are theoretically likely to lead to students' cumulative learning. Inequality is an example of an economics phenomenon, which strongly reveals economics as a social science. It is currently a topical issue in South Africa. Professor Thomas Piketty, French economist and expert on wealth and inequality, was recently in South Africa to argue that rich people in the country are too rich as compared to international standards. The work of the 2015 winner of the Nobel Prize in Economics, Professor Angus Deaton, is another example of looking at the world as it is. His work complements that of Professor Thomas Piketty focusing on wealth and income inequality. These are two contemporary economists whose work focuses on real-life economics phenomena which is relevant to undergraduate economics students in South Africa, and elsewhere.

Thus, the curriculum has to be made relevant to current economic context and issues. This would enable higher education teaching in general to respond with appropriate higher education curricula to strengthen knowledge production and development. Specifically, contextualizing this within university economics education, the undergraduate economics curriculum needs to align with the trend in global economic contexts. Explanatory theories other than mainstream neo-classical economics as it is currently taught would reflect the true social science it is defined to be.

8.4.3 The role of the teachers in enhancing teaching: Significance of the pedagogical development of the team

The third and most important lesson arising from my study is the need to bring pedagogical development into the team. The idea of a team is based on the claim by Benjamin (2000) that, 'teachers are […] to have a knowledge of teaching and learning in the discipline and be student focused […] required to work effectively and collaboratively with their colleagues in teaching-teams' (2000, p. 191). This notion from the literature is supported by my empirical data as 'team collaboration to implement the economics curriculum' (conception I).

Building on the evidence from the literature, empirical data and conceptual frameworks, there is the need for the team (lecturers and tutors) to be pedagogically-oriented and not be primarily inclined towards the disciplinary and social contexts in their teaching. The teachers, who are predominantly academic economists, need more than just the strong disciplinary understanding to teach. According to Benjamin (2000), 'collaborative efforts by members of organisations are essential to solve the complexities of a constantly changing environment' (p. 192).

Benjamin (2000) has studied the ways in which teams of teachers in higher education organise and reflect on their work, leading to a 5-dimensional model of potential collaboration and scholarly team work, with different pedagogical potential. There are many ways in which such teams can organise themselves, with different limitations and goals. The model has elements of being informed on teaching; reflection in and on teaching; communication; collaboration and teamwork; and conceptions of teaching. The last of these, conceptions of teaching, she describes in the same way as my results, being student-centred or teacher-centred. One such team is described thus: 'These teachers see the teaching-team as an organisational way of sharing a workload. There is a job to be done' (p. 196), which does not necessarily involve any of the elements of her model of scholarly team work. Another is described thus: 'There is a sense of cooperation amongst the team members with a reliance on conversations rather

than meetings to discuss issues related to the teaching of the subject. The purpose of these is usually related to content and organisational issues' (p. 197), which involves reflection on teaching but not necessarily other elements of the model. A third is described, in contrast, as having

> an educational philosophy of how students learn [that] informs the teaching in this subject. That philosophy is explored and developed at an annual workshop programme which involves all staff, including new tutors, which runs for several days. With the philosophy as a framework individual team members are encouraged to explore what works for them and for their students. (Benjamin, 2000, p. 200)

This last example is ideal for pedagogical development of the team of teachers, involving all elements of the model, and would support the shift from teacher-centred assumptions to the student-centred and learning-centred conceptions.

Grounding my claim on the importance of the team which has been argued for in literature and shown in my empirical work, beyond revisiting the economics curriculum, there is the need to strengthen the pedagogical context as much as the currently strong disciplinary context (referring to the four-context of teaching in higher education) to move conceptions towards the most complete and thereby afford students cumulative learning. The teachers as a team need to be exposed to educational theory in higher education to help them to see teaching Economics 1 beyond just assessments and improving throughput. An inherent understanding of learning by non-educationalists is that when students can pass examinations, learning has occurred. Not to deny that passing examinations is important, learning and passing examinations are not the same. Learning goes beyond just passing examinations. So guiding the teachers in the direction of academic development through a qualification in higher education teaching helps strengthen the pedagogical context. This should deepen teachers' understanding of their practice and help facilitate students' learning towards cumulative learning.

In summarising the major contributions of my study, the first necessary prerequisite for teaching in higher education with references to economics education that leads to the development of integrated and world-related

knowledge in students is when university teachers align with students' real-life experience and make it relevant to the teaching context. Yet as argued in current debates noted above, students' real-life experience can only be adequately explored when the economics curriculum considers economics as it is in the world rather than its current economics models, strongly aligned with the mainstream neoclassical curriculum. Lastly, the place of pedagogical development in teams is necessary to strengthen the pedagogical context and attempt a balanced disciplinary-pedagogical context as previously explained in the discussion around the four-context conceptual framework. On the basis of these three lessons from the thesis which I have presented here, I conclude this section by presenting my recommendations in the paragraphs below.

8.5 Practical recommendations

Two recommendations now stem from my doctoral thesis, related to my three earlier contributions. The first is about the need to reconsider the current economics curriculum as it is taught. This is grounded in my first two contributions about using real-life examples to teach economics and revisiting the economics curriculum in the light of recent developments. The second is connected to the third lesson about the significance of pedagogical development of the team.

In view of the strong critique of the economics curriculum that mainstream economics is in denial that the world has changed (Chakrabortty, 2013; Inman, 2013), I recommend the need to reconsider the current curriculum. My recommendation on the basis of my evidence supports the argument by Peterson and McGoldrick (2009) for the need for pluralism in economics education in which multiple paradigms other than mainstream economics is taught. My position in positing this recommendation is further supported by Cohen and Watson (2014), academics at the University of Manchester's Post-Crash Economics Society, who argue that the contents of economics syllabuses should be rethought in the light of the financial crisis (Cohen & Watson, 2014). A

perspective such as bringing different debates into the economics curriculum better reflects economics as a social science and might offer a robust experience through relevant, real-life examples that foster non-segmented learning. The likelihood exists that other relevant paradigms where teachers and students work hand-in-hand to engage in knowledge that is world-related enables cumulative learning.

The second and last recommendation is about the need for pedagogical discussions and development in the team teaching Economics 1. This is grounded in the work of Benjamin (2000), and her empirical analysis. Emerging from the four-context framework of teaching in higher education is seen a strong disciplinary context to teaching among the lecturers and tutors of the team, stronger than the pedagogical context. The beginning conception of teaching emerging from this thesis is about team collaboration and is supported by Benjamin's (2000) claim that, university teachers,

> …are also required to work effectively and collaboratively with their colleagues in teaching-teams. Increasingly, university teachers are expected to practise a 'scholarship of teaching' and to teach in a scholarly way (p. 191).

A very strong disciplinary inclination to teaching, though a required condition in university teaching, is not sufficient in the light my thesis' argument. University economics' teachers 'should move away from lectures and embrace active learning exercises [which] lie at the heart of pedagogical discussions' (Peterson & McGoldrick 2009, p. 72). In other words, in order to offer to students the kind of learning benefits associated with the most complete conception of teaching (helping students think like economists) requires sound pedagogical development of teachers. Every academic economist should strive for a better understanding of student's learning and how this is fostered by teaching and the context of teaching, and should pursue an appropriate qualification such as a post graduate diploma in higher education – which increasingly is being offered by tertiary institutions in South Africa. For example, the information online of one such institution promotes a postgraduate qualification that 'aims to assist academics to reflect on and enhance their roles as teachers/lecturers, course designers and

assessors, and to deepen their engagement with the university as a rapidly changing site of research and scholarship'. Such a programme exposes university teachers to strong pedagogically-oriented practices to enhance, strengthen and sustain their teaching practice as university teachers.

8.6 Concluding reflections

A summary of my thesis' contribution to knowledge goes beyond a descriptive level of the results presented in chapters five and six. I have illustrated a conceptual understanding of the field by comparing my results with selected studies in the field that have used a similar methodology (phenomenography). I have negotiated my way in this methodological terrain bearing in mind that there is not just one way of looking at things, by taking the analysis of my phenomenographic results (the six conceptions of teaching in higher education) to another, new level through the conceptual frameworks. I have extended a general assumption of phenomenographic research that the dimension of student-orientation of conceptions of teaching implies students' learning, to identify whether the quality of learning is segmented or cumulative learning.

What I have not done at all in this study is consider students' voices and appraise how different their voices are from the teachers. However, I believe taking a teaching-orientation as I have done in this thesis helps first to understand their roles in the teaching-learning process. As I conclude this thesis, I present below what I consider its limitations and the possibilities for further research. I present some recommendations which I consider useful to any reader interested in teaching in higher education.

Limitations and further research

This study examined a single case of a South African university. Even though I have made an argument for a level of generalization based on the similarity in content and structure of this case with other universities nationally and globally,

it would be useful to replicate this study in some other South African universities which offer a similar course as Economics 1. This would be interesting to do and to find out if the results from different universities agree or not with those of this study.

One possibility I consider for further research originating from this study is to find out first-year students' experience of Economics 1 at South African universities offering a similar first-year undergraduate economics course. This could be carried out as a survey using the 'Student Course Experience Questionnaire' (SCEQ) (The University of Sydney, 2015) instrument developed by the Institute for Teaching and Learning, the University of Sydney, Australia. This survey investigates learning in first year and could become very useful in understanding how learning relates to my six conceptions of teaching in higher education.

The experience of undertaking this doctoral thesis has afforded me the opportunity to reflect on teaching in higher education, especially about my own practice as a teacher at my university. Every step of the way - from developing the research agenda to collecting and analysing the data, and interpreting the data in the light of the conceptual frameworks – is a deep contemplative process for me. I have gone back and forth to my research questions many times, rethinking the data in the light of the aims I set forth at the beginning of the thesis. I have chosen to focus on the teachers teaching economics not just because this is what I teach. I have undertaken this project knowing full well that it has implications for academic development for whoever chooses to read this thesis for insights into undergraduate economics education. It has been a very long but rewarding process investigating this and contributing to knowledge.

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Appendices

APPENDIX A:
GAINING ACCESS TO CONDUCTING THE STUDY

Appendix A1:

APPLICATION TO THE HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL) FOR CLEARANCE OF RESEARCH INVOLVING HUMAN SUBJECTS

HREC (2005)
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

APPLICATION TO THE HUMAN RESEARCH ETHICS COMMITTEE (WITS SCHOOL OF EDUCATION) UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG, FOR CLEARANCE OF RESEARCH INVOLVING HUMAN PARTICIPANTS

Please complete this checklist and attach it to the **FRONT** of your application form. Incomplete applications will be returned. **Submit THREE copies to the Ethics Office.** Applications are most often turned down because basic instructions and hints have not been followed. Please carefully read pages 6-8 of this form as the list of common errors and hints will assist in completing the application. Please ensure that all your documents look professional, i.e. check for language and spellings errors. A copy of the GDE Application Form to conduct research in government schools is generally obtainable from your supervisor or from the GDE website.

If the application form is completed in detail, no research proposal needs to accompany the application. However, if the committee feels there is insufficient information provided in the application then a copy of the research proposal may be requested. This could lead to a delay of several months for clearance to be granted).

	FORMAT OF APPLICATION	TICK or N/A
1	Have you completed the HREC (Education) 2011 application form?	✓
2	Has the application been signed by the supervisor?	✓
	INSTITUTIONAL CONSENT	
3	If research is at a GDE School has application for consent been applied for/given? A copy of the application/letter of permission must accompany this application	N/A
4	If research is at WITS has consent been given by the authority in question?	N/A
5	If research is at independent school has consent from school been obtained?	N/A
6	If research is outside SA has consent been obtained from relevant Ministry?	N/A
	PARTICIPANT INFORMATION SHEET (do not refer to participants as subjects)	
7	Are interviewees assured that their role is voluntary?	✓
8	Is there a guarantee of anonymity or confidentiality?	✓
9	Are there rights of withdrawal with no fear of consequences?	✓
10	Are the participants under 18? Information and consent letters for parents and minors?	N/A
11	Does the consent form have sufficient information for the participant to know what it involves?	✓
	RESEARCH DETAILS	
12	Is there adequate information about who and when interviews will happen?	✓
13	If interviewees are vulnerable what can be done to protect them?	N/A

14	**How will confidentiality be preserved?**	✓
AUDIO AND VIDEO TAPING		
15	**If there is to be audio or video taping is there adequate justification?**	**N/A**
16	**If there is to be video taping is there a separate consent letter?**	**N/A**
POST RESEARCH INFORMATION		
17	**Will the data be kept safely and securely?**	✓
18	**Will the information be destroyed after 3/5 years? How?**	✓
ISSUES OF PROFESSIONALISM		
19	**Have you carefully checked for spelling and grammatical errors in all documents?**	✓
MORE COMPLEX ETHICAL ISSUES		
20	**Is there a conflict of interests - how will this be dealt with?**	**N/A**
21	**Do any of the participants stand to be severely prejudiced or placed at risk? Are there measures to protect them?**	**N/A**
22	**Does the research topic particularly deal with invasive issues? Are there measures to deal with this?**	**N/A**
23	**Is this a high risk application?**	**N/A**
24	**Are there any legal implications?**	**N/A**

APPLICATION TO THE HUMAN RESEARCH ETHICS COMMITTEE (WITS SCHOOL OF EDUCATION) UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG,
FOR CLEARANCE OF RESEARCH INVOLVING HUMAN PARTICIPANTS

Unless applications are received by the 15th of the month, they will be carried forward to the following month for consideration. Please note incomplete applications will NOT be considered at all.

PROTOCOL NUMBER (for office use only):

_____

This application must be electronically completed and three hardcopies of the application and ALL appendices submitted to the Committee Secretary.

NAME : Prof/Dr/Mr/Mrs/Ms/Miss	Mr. Emmanuel Ojo
STUDENT NO.	0516720Y
DEPARTMENT/INSTITUTION	Social and Economic Sciences (SES)
FULL TIME OR PART-TIME	Part-time (PhD)
TELEPHONE NO. AND EXTENSION	X73017
E-MAIL	Emmanuel.Ojo@wits.ac.za
POSTAL ADDRESS	Wits School of Education
	University of the Witwatersrand

Johannesburg 2050

Name and Tel number of Supervisor Dr. Jane Skinner

TITLE OF RESEARCH PROJECT

An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education

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Is this research for degree purposes? If so, for what degree, and has it been approved by the relevant higher degrees committee or other relevant unit?

Yes it is. It is for my PhD research and the proposal is currently being reviewed.

WHERE WILL THE RESEARCH BE CARRIED OUT?

'The University'_____

OBJECTIVES OF THE RESEARCH (Please list)

The doctoral research aims at understanding pedagogical and learning practices of lecturers and undergraduate students on the Bachelor of Commerce (BCom) programme at 'the University', which will only be referred to throughout as "one of the eleven traditional universities in South Africa". How lecturers teach and how students learn the economic concepts presented in introductory microeconomics and macroeconomics courses in the first year of undergraduate programme is at the heart of this study.

The three research questions that will help to examine the research aim of the proposed research are:

I. What are the pedagogical understanding and practices of lecturers teaching first-year economics courses on the Bachelor of Commerce programme at a 'traditional' South African university?;

II. What system of learning and its understanding are evident amongst undergraduate students taking first-year economics courses on the Bachelor of Commerce programme at this university?; and

III.How do the pedagogical practices of lecturers and learning practices of undergraduate students taking first-year economics courses align and help to explain the academic achievement, or lack of it, in the BCom programme at this university?

WHO WILL CONDUCT THE RESEARCH AND WHO WILL SUPERVISE THE PROJECT?

I am conducting the research and Dr. Jane Skinner & Professor Ruksana Osman, who are my co-supervisors will be supervising the project.

Protocols submitted to the Committee must have the information that will enable it to judge the safety of procedures or confidentiality of information for research. The following questions have been designed for this purpose and should therefore be answered as fully as possible.

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1. Give a brief outline of the proposed research including a definition of procedures.

As earlier stated, this research focuses on how lecturers teach and how students learn the economic concepts presented in introductory microeconomics and macroeconomics courses in the first year of undergraduate programme (Economics 1). After the institutional and ethics' clearance approvals have been granted, fieldwork for data collection will start in February 2012, over the two semesters of the 2012 academic session. Initial data analysis will only start at the end of the first semester of 2012. The entire research is planned to be completed by mid-2013.

This research uses mixed research methods (both qualitative and quantitative). For the qualitative part, lecturers teaching Economics 1 to first-year students and selected first-year undergraduate students taking the Economics 1 course will be interviewed.

To measure statistically similar questions asked in the students' focus-group interviews, a questionnaire through an electronic response system will be administered to the entire first-year students (about 1700 students) to elicit responses on the same kind of questions asked in the qualitative data collection stage. This will constitute the quantitative element of the study and a likert scale will be used to collect data which will be statistically examined. The essence of the quantitative element is to probe into the general population (aim to get a 70-80% response rate) to make sense of the data from the interviews (i.e. the qualitative data) and help to reinforce qualitative data from the interviews or refute it.

2. What type of information is to be gathered? (*When a scale, questionnaire or interview schedule will be used, please attach a copy.)*

The questionnaire tests broadly the three questions asked in the students' focus-group interviews. This questionnaire will be administered through an electronic response system to the all first-year undergraduates (about 1700 students in the current academic year).

Students will respond to this questionnaire through an electronic feedback system which the Department of Economics uses. The Department of Economics consistently use this approach to elicit responses from students on different issues during the course of the academic year.

See pages 8-10 of the supporting document for the questionnaire titled, "*Teaching and Learning Strategies Questionnaire for First-Year Students*".

3. If you intend videotaping participants, please provide a full motivation why such a procedure is considered necessary. Letters of consent should also indicate the necessity of using a videotape, with a clear stipulation of how the will be used.
Not applicable (N/A) to this research.

4. How will informed consent be obtained? (Please attach participants' information sheet, informed consent form or forms.)

I have attached the participants' information sheet and informed consent form to this application. Please, see the attached.

5. Who will the participants be?

Lecturers and students involved in first-year Economics 1 courses at 'the University'.

5.1 What is the age range of the participants?

Between 30-45 years and 18-22 years for lecturers and students respectively.

5.2 How will the participants be selected and exactly what will they be told when asked to participate in the research?

The participants in this doctoral research are all the lecturers teaching Economics I and thirty (30) first-year students taking this course (Economics I) respectively. At present, there are nine lecturers involved with first-year teaching of Economics I and they will all be involved in the research.

As for the 30 first-year students, some of the key parameters that would be used in the purposeful sample selection are: gender (male and female), race (Africans and non-Africans), first language, high school educational background (private and public), and socio-economic status. It will be ensured that none of the students are under 18 years and therefore that none fall into the 'vulnerable' category on account of age.

5.3 Are the participants considered to be vulnerable individuals (for example: pregnant women, orphans, children under the age of 18 etc.)?

In my understanding, I would say no. Neither the lecturers not the students that will be involved in this research are vulnerable.

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6. Will the research be of any direct benefit to the participants?

YES. The result from this doctoral research is likely to provide key insights into the low-pass rates traditionally achieved in first-year economics classes.

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7. **Are there any risks involved for the participants? (For example – legal, psychological, financial or physical risks) If "yes", please identify them and explain how they will be minimized.**
   NO.

8. **How is confidentiality to be guaranteed?**
   Data will be reported in an anonymous and confidential manner. This means that no name will be mentioned in the research findings. In addition, the name of the university will not be mentioned in the report any article that would be generated from this research.

9. **What is to be done with the raw research data after completion of the project?** (Specify the end-use of audio tapes and/or video-tapes as well.)

   The data shall be safely locked in WSoE Archives and destroyed after five years.

10. **Has permission been obtained from the relevant authorities: e.g. Gauteng Dept of Education or other appropriate governing body?** (Please attach copy).

    This research will be conducted within 'the University'. Attached to this application is a formal letter written to the Head of School of 'the University' seeking permission to conduct the research. I will be personally sending her this letter after approval for the research has been granted by the Ethics Committee.

11. **How will the end results be reported and to whom?**

    To disseminate the final research findings, articles in local and international peer-reviewed journals (e.g. Journal of Economic Education and International Review of Economics Education) will be published as well as press releases: for instance, in the Mail & Guardian (M&G). In addition to these avenues, a book on Economics Education is envisaged and there is a high possibility of giving seminars or lectures locally and internationally.

In signing this form, I, the supervisor of this project, undertake to ensure that any amendments to this project that are required by the Human Research Ethics Committee are made before the project commences.

Please print name: DR JANE SKINNER
DATE: 10 November 2011 **SUPERVISOR'S SIGNATURE:**

DATE: 10 November 2011 **APPLICANT'S SIGNATURE:**

Revised September 2011

Appendix A2:
FORMAL LETTER OF APPROVAL BY THE HUMAN RESEARCH ETHICS COMMITTEE TO CONDUCT THE STUDY

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 • Private Bag 3, Wits 2050, South Africa Tel: +27 11 717-3064 • Fax: +27 11 717-3100 • E-mail: enquiries@educ.wits.ac.za • Website: www.wits.ac.za

Student number: 0516720Y
2011ECE146**C**

14 December 2011

Mr. Emmanuel Ojo
Emmanuel.Ojo@wits.ac.za

Dear Mr. Ojo

Re: Application for Ethics: Doctor Of Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate has considered your application for ethics clearance for your proposal entitled:

An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education.

The committee recently met and I am pleased to inform you that clearance was granted. The committee was delighted about the ways in which you have taken care of and given consideration to the ethical dimensions of your research project. Congratulations to you and your supervisor!

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

We look forward to receiving your resubmission.

Yours sincerely

M Mabeta

Matsie Mabeta
Wits School of Education

(011) 717 3416

Cc Supervisor: Dr. J Skinner (via email)

Appendix A3:
LETTER TO THE HEAD OF SCHOOL

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
WITS SCHOOL OF EDUCATION

Division of Social and Economic Sciences (SES)
Wits School of Education
Faculty of Humanities, Parktown.

10 November 2011

The Head of School
'The University'

Dear Professor (names withheld),

REQUEST FOR INSTITUTIONAL CONSENT TO CONDUCT A RESEARCH IN YOUR SCHOOL

My name is Mr. Emmanuel Ojo, a PhD student at the Wits School of Education, University of the Witwatersrand. I wish to request your permission to use your faculty to collect data on my proposed research. The topic is "*An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education*".

If my request is granted, I would be conducting *individual* and *focus group interviews* with all the lecturers teaching Economics I and thirty (30) first-year students taking this course (Economics I) respectively. At present, there are nine lecturers involved with first-year teaching of Economics I. They have provisionally all agreed to participate in the research. As for the 30 first-year students, I will be working with colleagues at the African Microeconomic Research Umbrella (AMERU) to select these based on purposeful sampling. Some of the key parameters that would be used in the purposeful sample selection are: gender (male and female), race (Africans and non-Africans), first language, high school educational background (private and public), and socio-economic status. Each individual interview session for lecturers will last between 45-60 minutes. As for the focus group interviews, there will be five (5) sets of focus groups consisting of six (6) first-year students per group. Each of the focus group interviews will last for approximately 60 minutes. In both cases of interviewing lecturers and students, words used which required further clarification will be further questioned. In other words, the interviewer will make each of the questions clearer if asked by the interviewee.

Both lecturers and students will be given a participants' information and informed consent sheets (see the attached). This research is for the purpose of my doctoral research. Data will be reported in an anonymous and confidential manner. The name of the Faculty and University will also be withheld – referring to the institution simply as 'the University 'and the department as 'the Department of Economics'.

Thank you

Yours faithfully

Mr. Emmanuel Ojo
Student No. 0516720Y

APPENDIX B:
RESEARCH INSTRUMENTS

Appendix B1:
CONSENT & INFORMATION SHEET FOR PARTICIPANTS

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF EDUCATION

LECTURERS' INFORMATION LEAFLET AND INFORMED CONSENT

10 November 2011

Dear Prof/Dr/Mr/Mrs/Ms/Miss……,

My name is Mr. Emmanuel Ojo, a PhD student at the Wits School of Education, University of the Witwatersrand. I wish to request your permission to use your faculty to collect data on my proposed research. The topic is "*An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education*".

As an esteemed member of the university, I wish to invite you to help participate in this research. As a lecturer teaching Economics 1, I intend interviewing you for about 60 minutes to seek your understanding of the teaching and learning situation of first-year economics' undergraduate students at 'the University' . Your participation in this study is voluntary and you can decline to participate at any point. Responses could take a maximum of 75 minutes of your time. You will not be paid to participate in this study neither will any other participant. All information obtained during the course of this study will be kept strictly confidential. Data that may be reported in the research report or any journal will not include any information that identifies you as a participant.

Your participation in this study will contribute to literature on undergraduate economics education in South Africa. I will be very willing to share the result of the research with you at your request.

Thank you.

Mr. Emmanuel Ojo
PhD Student/Researcher
Work: 011 717 3017
Mobile: 083 330 7052

Appendix B2:
CONSENT & INFORMATION SHEET FOR PARTICIPANTS

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF EDUCATION

TUTORS' INFORMATION LEAFLET AND INFORMED CONSENT

10 November 2011

Dear Prof/Dr/Mr/Mrs/Ms/Miss……,

My name is Mr. Emmanuel Ojo, a PhD student at the Wits School of Education, University of the Witwatersrand. I wish to request your permission to use your faculty to collect data on my proposed research. The topic is "*An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education*".

As an esteemed member of the university, I wish to invite you to help participate in this research. As a tutor tutoring Economics 1, I intend interviewing you for about 60 minutes to seek your understanding of the teaching and learning situation of first-year economics' undergraduate students at 'the University'. Your participation in this study is voluntary and you can decline to participate at any point. Responses could take a maximum of 75 minutes of your time. You will not be paid to participate in this study neither will any other participant. All information obtained during the course of this study will be kept strictly confidential. Data that may be reported in the research report or any journal will not include any information that identifies you as a participant.

Your participation in this study will contribute to literature on undergraduate economics education in South Africa. I will be very willing to share the result of the research with you at your request.

Thank you.

Mr. Emmanuel Ojo
PhD Student/Researcher
Work: 011 717 3017
Mobile: 083 330 7052

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF EDUCATION

PARTICIPANTS' INFORMED CONSENT

Research Topic **An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education**

1. I hereby confirm that I have been informed by the researcher, Mr. Emmanuel Ojo, about the nature of the study.

2. I have also received, read and understood the Information and Consent sheets regarding the educational study.

3. I am aware that the information I give regarding my race, first-language, sex, and age will be anonymously processed in this study.

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

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

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

.....

Printed Name Signature Date and time

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF EDUCATION

AUDIO RECORDING CONSENT FORM

Research Topic **An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education**

This study involves the audio recording of your interview with the researcher. Neither your name nor any other identifying information will be associated with the audio or audio recording or the transcript. Only the research team will be able to listen to the recordings.

The tapes will be transcribed by the researcher and erased once the transcriptions are checked for accuracy. Transcripts of your interview may be reproduced in whole or in part for use in presentations or written products that result from this study. Neither your name nor any other identifying information (such as your voice or picture) will be used in presentations or in written products resulting from the study.

By signing this form, I am allowing the researcher to audio tape me as part of this research. I also understand that this consent for recording is effective from the signed date below until the doctoral research is completed, after which the tapes will be destroyed.

.....

Printed Name Signature Date and time

Appendix B3:

LECTURERS' AND TUTORS' INTERVIEW SCHEDULE

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF EDUCATION

Research Topic: An Investigation into Teaching and Learning Strategies within South African First-Year Undergraduate Economics Education

QUESTIONS GUIDE FOR THE SEMI-STRUCTURED INTERVIEWS (PROBES)

The in-depth, semi-structured interviews will focus on three key areas: *teachers' approach to teaching*, *their conceptions of learning* and *their conceptions of teaching*. Specifically, the 'entry questions' the lecturers will be asked following a phenomenographic framework are:

1. What do you understand by teaching (learning) in the context of teaching Economics I students at this university?

2. How would you know if a student had learned something in this course? and

3. If I were to ask you what makes an effective teacher of Economics I at this university, what would you tell me?