Learning Teaching & Teaching Learning:

An Exploratory Study on Conceptions of Teaching Held by Academic Staff Members in a New Zealand Polytechnic.

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Abstract

This research aimed to identify conceptions of teaching held by lecturers in a school within a New Zealand polytechnic. It also identified factors which influence conceptions of teaching, in particular factors which might affect a transition from a knowledge transmission conception of teaching (Theory 1) to a learning facilitation (Theory 3) conception (Ramsden, 1992). Data on academic staff members' conceptions of teaching was sought from a sample of academic staff at different stages in their career within one School of a polytechnic. A questionnaire was used to identify temporal and departmental trends in conceptions of teaching and experiences of learning about teaching. Qualitative data was gathered from interviews with academic staff and their managers on the nature of the transition over time at different points in a teachers career. This data was subjected to a critical analysis in order to identify factors which enhance or constrain the transition. The results are expected to be of interest to tertiary teachers, particularly staff developers and those directly responsible or accountable for improving the quality of teaching in tertiary education institutions.

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Chapter 1 : Introduction

This chapter will identify a theoretical framework for understanding teaching in tertiary education, outline the political policy context of the changes to the funding and provision of polytechnic teacher education, and present the shape of this thesis.

1.1 Aims and Significance

The purpose of this research is to explore the conceptions of teaching held by academic staff members within a school of a New Zealand polytechnic, against a theoretical framework proposed by Paul Ramsden. The aim of the exploration is to find out whether these conceptions of teaching are applicable in a New Zealand context; to confirm, or not, whether they are hierarchical in this context; and to provide a basis, from the findings, for improving the quality of teacher development. This research further aims to explore the relationship between conceptions of teaching and years of teaching experience and to identify factors which are perceived to influence the development of conceptions of teaching.

The framework identifies three distinct conceptions of teaching, transmission of knowledge, organising student activity, and making learning possible. These theories are hierarchical and normative.

This research identifies conceptions of teaching evident amongst lecturers in a polytechnic School of Health Sciences and identifies influences on the development of those conceptions.

1.2 Background

The nineteen nineties has been a period of significant change in the funding and organisation of tertiary education in New Zealand. The Education Amendment Act changed the designation of Polytechnic Principals to Chief Executives managing independent businesses intended to compete with other polytechnics. The Act also established the New Zealand Qualifications Authority which placed new requirements on the organisation and assessment of learning

activities within polytechnics. NZQA has brought additional changes to polytechnic teacher workloads with the addition of many new administrative responsibilities (Viskovic, 1994).

Qualitative aspects of teaching are of interest to New Zealand tertiary teachers evidenced by professional and public discussion on issues such as the accreditation of university teaching and options for possible divisions of funding for research and teaching. (Association of University Staff, 1997 Bibliography). The 1994 Annual Conference of the Association of Staff in Tertiary Education, (ASTE), representing academic staff of polytechnics and colleges of education, identified concerns over how questions of effective teaching (performance) have been raised and addressed in a variety of ways within institutions since the State Sector Act 1990 and Education Amendment Act 1991 (ASTE, 1994).

For contemporary educators, caught in the changing policy context of the tension between fiscal restraint and delivery of quality teaching which enhances student learning, the present study offers an alternative positive response for exploration. This research will identify aspects of how polytechnic lecturers learn to teach in order to teach to learn.

1.3 Thesis Outline

This thesis is shaped to move from an investigation of the literature on teachers' conceptions of teaching into the case study and its findings. These are analysed against the literature review and conclusions drawn.

Specifically, the literature on conceptions of teaching and learning in tertiary education will be reviewed in the next chapter. Some conclusions from New Zealand research on the impact of changed funding policies on polytechnic teacher training are outlined.

The research findings are presented in three chapters, with each chapter presenting results from different sources of data. Chapter 4 outlines results from the document analysis and material from interviews with managers. These results provide a contextual background from sources other than the lecturers themselves. Chapter 5 presents results from a questionnaire administered to all teaching staff in the School of Health Sciences. Chapter 6 reports the findings from interviews with a sample of lecturers in the School, selected to provide an equal number of lecturers at three different career points and to represent the different subject disciplines taught within the School, and Chapter 7 discusses these results in relation to the literature review and offer, concluding remarks.

It is intended that this research contributes to a better understanding of what constitutes good teaching based on the experience of teachers in a New Zealand context.

Chapter 2 : Literature Review

This chapter will explore the literature on different ways of understanding teaching in tertiary education, with particular emphasis on the theories proposed by Paul Ramsden. The qualities which identify the learning advocated by his recommended conception of teaching as "making learning possible," will be identified through reference to studies from Gothenberg University in Sweden, Lancaster University in Britain and Georgia Southern College in the United States. These first two studies investigated the nature of student learning by interviewing students in tertiary education in Sweden and Britain during the 1970s. The American research posits an inclusive curriculum which explicitly includes different qualitative levels of student learning. This research has particular relevance to the health professions. A brief overview of a model which introduces the notion of experience as a dimension of learning professional expertise will be presented.

Research into the possibility of relationships between teachers' conceptions of teaching and the quality of student learning undertaken in Australian universities will be identified. A New Zealand context for discussion of Ramsden's framework for understanding teaching will be identified.

2.1 Ramsden's Theories Of Teaching In Tertiary Institutions

Ramsden's work *Learning to Teach in Higher Education* (1992) addresses the contemporary problem of best practice in the improvement and evaluation of teaching in tertiary education within a context of rising accountability. His work speaks directly to lecturers practising in tertiary education and is built on the direct experience of lecturers and students. Ramsden argues that better teaching occurs not through looking first for solutions to problems in teaching, but rather by lecturers changing their understanding of teaching so that they can conceptualise the problems of teaching differently. His theories of teaching are developed from research with lecturers in universities and polytechnics in Australia and the United Kingdom which identify that there are distinct and

qualitatively different approaches to teaching evident among teachers in tertiary education and that conceptions of teaching held by teachers influence approaches to teaching and possibly the quality of student learning.

Paul Ramsden has proposed three theories of teaching which identify qualitative differences in teaching practice within tertiary education. In short, these are:

Theory 1 Teaching as telling or transmission.
Theory 2 Teaching as organising student activity.
Theory 3 Making learning possible.

These theories are hierarchical and normative (Ramsden, 1992). They form a framework of understanding which can provide a basis for action in the development of educational environments which value and support good teaching practice, which in turn promotes high quality student learning.

Theory 1 conceptualises teaching as telling or the transmission of knowledge. The task of teaching is seen as the teacher imparting content knowledge or demonstrating procedures with expertise, with the aim that the student repeat the knowledge or task with a degree of accuracy that aspires to the teacher's performance. Difficulties perceived by teachers holding this view tend to be related to how to teach more content, with more speed and can be resolved with the application of technical solutions. Teaching is regarded as an unproblematic activity. Any problems with learning are attributed to a fault in the student and not associated with the teacher or the teaching process. There is a belief that failure to learn can be attributed to limitations of student ability or personality and that these are not affected by the teaching process. Theory 1, as Ramsden describes it, is the same conception of teaching that Freire critiqued as the "banking concept of education in which the scope of action allowed to the students extends only as far as receiving, filing and storing the deposits." (Freire, 1970,46). This earlier economic metaphor, like Ramsden's Theory 1

perspective, views the learner as the passive recipient of the all powerful teacher's wisdom and knowledge. No distinction is made for the nature of the knowledge or individual learners construction, interpretation or understanding. The knowledge of the teacher is expected to be received virtually unchanged by the learner.

Theory 2 conceptualises teaching as organising student activity. Teaching is seen as the skilled application of a range of techniques which will ensure that students learn. The teacher is focused on the problems of student learning, and how to translate the ideals of course objectives, such as critical thinking or independent learning, into action. The acquisition of a wide repertoire of teaching techniques which are designed to bring about particular forms of student activity that conform with educational ideals, becomes the focus of quality in teaching. Techniques for promoting discussion in class, and processes which require students to link theoretical knowledge with their experience, such as forms of experiential learning, become the focus of the teachers intention and activity. If students are active they are thought to be learning. Theory 2 does not require a change in the lecturer's understanding. There is more emphasis on how a subject is taught than in the previous theory. This arises from a belief that it is possible to create conditions which will guarantee learning. If learning does not occur there may be something wrong with the learner but there may also be something wrong with the way in which the teacher organised the learning experience. There is a belief that problems in student learning will ultimately be addressed when the teacher has acquired a sufficient range of teaching techniques to meet all the challenges students can offer. Learning is still viewed as an additive process and perceived as being of a different quality relative to the level of learning. For example the way in which a first year undergraduate student would learn would be different in kind from the way a postgraduate student in the same subject might learn new material. Ramsden notes that this is probably the level at which many attempts to innovate in higher education are presented and the level at which much staff development takes place. This

perspective is sometimes a transitional stage where the focus has moved from the teacher as subject, as in Theory 1, to the students.

Theory 3 conceptualises teaching as making learning possible. It is epistemologically different from the other two theories. The conception of the role of the teacher is different. Theory 3 recognises that knowledge of the subject content is actively constituted by the learner, and that this process of constituting reality is similar at any level of learning a particular subject. All knowledge is new the first time it is encountered by a learner. The nature of obtaining knowledge does not differ in relation to the level of knowledge. Learning is an active process of applying and modifying one's own ideas and experiences. It is something the student does rather than something that is done to the student (Ibid).

Theory 3 represents progress from the two former theories in acknowledging that content knowledge, clear communication, focus on students and the utilisation of appropriate teaching techniques are all part of good teaching. However, these techniques do not in themselves guarantee effective teaching. Theory 3 does not refute the earlier theories but incorporates and builds upon them. Teaching is understood as a process of working co-operatively with learners to help them change their understanding. Teaching involves finding out about student mis-understandings and making interventions to change them, and creating a context for learning which encourages students to actively engage with the subject matter. This theory is concerned as much with the content of *what* students learn, as it is with the process of *how* they learn. A teacher who has this conception of teaching will recognise and focus especially on the key issues which seem to represent critical barriers to student learning in a particular subject. A combination of the content to be taught and the students problems with learning it, are determinants of the method the lecturer will use to teach.

Ramsden describes a developmental sequence in the structure of these theories in the following way:

"Each higher theory expresses a twofold and seemingly contradictory development - towards an increasingly relativistic and problematic understanding of the relations between teaching and learning, on the one hand; and towards recognising the unity between what the lecturer does and what the student learns, on the other. It is as if the development itself denotes an acceptance of the restless tension of opposites in education." (Ramsden, 1992, p.117)

Understanding of student learning associated with a Theory 3 conceptualisation of teaching has developed from earlier work reported in *Understanding Student Learning* (Entwistle and Ramsden, 1983). Further earlier research into student learning carried out in the University of Gothenberg, Sweden, and Lancaster University, Britain, which supports the Theory 3 conceptualisation of teaching is reported in *The Experience of Learning* (Marton, Hounsell and Entwistte, 1984). The research reported in this work coincided in time with a turning point in the philosophical underpinning of educational research in general and in particular with research into student learning.

The Gothenberg and Lancaster studies were interpretive studies which sought students' perspectives on their own learning using interview techniques. They broke a positivist tradition where research had been undertaken through tests performed on students with the aim of discovering truths about student learning from the results of their tests.

Marton's original, and subsequent related research later became known as phenomenography. It is classified within educational psychology as an experiential theory (Entwistle, 1987). Experiential learning theory, was part of a progressive chain of learning theories developed by educational psychologists.

Behavioural theory which aimed to predict learning on the basis of results of experiments on animals, was predominant during the 1950s. Eventually, the perception of the uniqueness of human beings led educational psychologists to develop theories based on research involving students. A range of theories emerged which explained different learning outcomes between students by identifying individual differences between students, such as personality (Eysenck, 1965), learning styles (Pask, 1976), intelligence (Gardner, 1984), and motivation (Kozeki, 1985). Cognitive theorists such as Ausubel (1968), and Bruner (1983) developed theories on the processing of information which distinguished rote and meaningful learning based on information retreival from memory and thought processes. Marton's experiential theories investigated learning from the student's point of view, and identified the importance of students' intentions when approaching a learning task. His constuctivist approach to student learning, which recognised learning as the construction of meaning resulting from students' intentions and actions, represented a further development from the information processing theories.

Ramsden's theories of teaching are experiential theories and were developed from principles which arise from lecturers' own experience of reflection on their teaching practice (Ramsden, 1992). In addition they offer insights into the earlier research into student learning.

2.2 The Nature Of Student Learning

A Theory 3 conception of teaching sees the primary role of the teacher as one which makes learning possible. From this perspective it becomes necessary to clarify the nature of learning that the teacher seeks to bring about and to identify the distinguishing factors of the conception of learning advocated by a theory 3 perspective on teaching. Such a perspective demands consideration of the quality of learning and an understanding of student learning as a process of change in the student's construction of reality. The following review of research into student learning will identify connections between a conception of learning

as changed understanding, differential outcomes of learning and their relationship to approaches to learning, and the importance of context.

2.2.1 Qualitative Differences in Student Learning

Two similar educational research projects undertaken during the 1970's, one in Lancaster, Britain and the other at the University of Gothenberg in Sweden, were at the forefront of interpretive education research. These studies used interviews of students and lecturers to determine qualitative differences in learning outcomes and factors which influenced them. The experiments and investigations of these two bodies of research sought information on learning primarily from the student's perspectives.

A series of qualitative experiments which required students to read a text and then answer questions on both what they remembered of the content and how they tackled the task of reading, was conducted with students at Gothenberg University (Marton and Saljo, 1976a). Students were asked to read short texts and were asked to summarise the author's intentions. Different levels of outcome were identified in relation to each text. The range of categories of levels of understanding of the authors intention was referred to as "outcome space" for the text concerned (Dahlgren, 1984, 26.). Each student's learning outcome or level of understanding of the author's intention could be matched with a level on a hierarchy representing the structural categories within the outcome space for a particular text. A four level taxonomy which related to different levels of meaning, which could be understood from the text used in the original experiment, was developed to identify the range of outcomes or outcome space.

Different levels of outcome were influenced by a range of factors including student interest in the material, the effect of the context on student lerning, their approach to the task and their perceptions of the task based on previous experience of similar situations. A further interview study asked a group of

adults what they understood by learning. An analysis of responses produced five qualitatively different conceptions of learning:

1. Learning as a quantitative increase in knowledge. Learning is acquiring information or 'knowing a lot'.

2. Learning as memorising. Learning is storing information that can be reproduced.

3. Learning as acquiring facts. skills, and methods that can be retained and used as necessary.

4. Learning as making sense or abstracting meaning. Learning involves relating parts of the subject matter to each other and to the real world.

5. Learning as interpreting and understanding reality in a different way. Learning involves comprehending the world by reinterpreting knowledge (Saljo, 1979).

While these responses describe levels of understanding of *what* learning is, there are relationships between the categories which refer to *how* learning might occurr. For example, a quantitative increase in knowledge (conception 1) can be achieved by memorizing (conception 2), and improvement in understanding reality (conception 5) can be achieved by abstracting meaning from perceptions (conception 4) (Marton and Saljo, 1984). This indicates the relationship between conceptions of learning and approaches to learning as well as clear range of qualitatively different conceptions of learning amongst adult learners.

2.2.2 Curriculum Development and Differential Learning Outcomes

Similar developments in the perception of the nature of student learning in health sciences curricula emerged in the United States in a movement called the curriculum revolution during the 1980s. A nurse education theorist, Em Bevis (1988), criticised earlier curriculum development models on the basis that they failed to distinguish between education and training and that legitimate curricula in nursing education programmes which were sanctioned by approval and accreditation bodies, focused on technical, training aspects of learning which could be made to fit behavioural objectives in curriculum documents. This, Bevis asserted, occurred to the exclusion of qualitatively higher levels of learning which, while they occurred, were not legitimised through curricula. From an investigation of nursing education programmes in the United States she identified three curriculum domains which constituted the experience of students of nursing, the legitimate curriculum, the illegitimate curriculum and the hidden curriculum (Bevis, 1988,37). The major limitation of the legitimate curriculum was considered as the exclusion of recognition of the qualitatively different aspects of learning that were, infact, taking place. The illegitimate curriculum, recognised by educators and students, consisted of insights, patterns, creativity, strategies and understanding that did not fit with behavioural objectives of the legitimate curriculum model. The hidden curriculum was identified as a form of unconcious socialisation, of teaching students how to think like nurses which occurred through setting priorities, selection of teaching methods and modes of interpersonal interaction. (Bevis, 1988).

On the basis of a review of curriculum literature on learning associated with education and training, Bevis developed a six level taxonomy which provided a guide for differentiating between training and professional education and for distinguishing between levels of professional education. The first three levels of the taxonomy, Bevis asserts, aid in training and are a focus in technical programmes of education only. Levels 4, 5 and 6 differentiate professional education programmes, which will still include some aspects of training, given

that there will still be some content which must be memorised and rules and underlying rationales for particular skills which must still be learned. It is the proportion of different types of learning that changes with higher level education programmes (Bevis, 1988, 42).

Types of Learning

1. *Item Learning:* separate pieces of information, individual factors and simple relationships such as lists, procedures, using tools and equipment. It is mechanical and ritualistic.

2. *Directive Learning:* rules, injunctions, and exceptions; "do's" and "don'ts" regarding tasks. It is assembling tasks into a *safe* system of directions.

3. *Rational Learning:* uses theory to buttress or inform practice. Addresses why one nursing intervention is better than another. It is characterised by logical arrangements of the items and directions, addresses the logical use of *formal* properties and theories and enables learners to relate information, feelings, ideas, and plans to skills. It exerts influence on judgement and decision making, and enables the learner to apply research to practice.

4. *Syntactical Learning:* seeing meaningful wholes, relationships and patterns; departure from rule driven care; providing individualised, unique client care with care models that are grounded in practice-supporting personal guides and paradigms; addresses the lived moment and the relationships that ideas, concepts and theories have with each other; consequential reasoning and substantive views of relationships; having insights and finding meanings. This type enables people to make

intuitive leaps and to trust them, and helps weld together theory and practice to support praxis.

5. *Contextual Learning:* culturality; the mores, folkways, rites, rituals and accepted ways of being a nurse; the language and other symbols of nursing; political values, aesthetics, ethics and philosophy. This type influences nurses' transactions with clients and with colleagues so that these transactions are caring, compassionate and positive.

6. *Inquiry Learning:* creativity; investigation, theorising, strategising, identifying, clarifying and categorising problems and approaches to solving them. It is idea generating; leaping to new dimensions; posing questions, formulating positions, fantasising new ways, alterations that improve things and systems; projecting, futuring, predicting from knowns to unknowns using both data and intuition; visualising possible realities. It is seeing assumptions that are behind positions and questioning their validity; seeing beyond words to their implications and applications and enjoying the quest as much as the success (Bevis, 1988,40).

There is a similar distinction between received and constructed knowledge, identified between the first and second three levels of Bevis' taxonomy in which she identifies professional education as different from training, as between the first three and last two categories of qualitative difference in student learning identified by Saljo (1979). In addition to identifying qualitative differences in what students learned, this taxonomy, like Saljo's qualitative categories, addresses the issue of how students learn.

2.2.3 Approaches To Learning

Two slightly different outcomes emerged during the Gothenberg experiments. Marton and Saljo found that differences in learning outcome could be explained

by the students approach to the task. In seeking the reason for students arriving at qualitatively different ways of understanding a text they discovered that students who did not "get the point" of a text failed to do so because they were not looking for it. Differences in the level of outcome or understanding of a text depended on whether the students focused on the text itself or on the author's intention, the main point(s) and the conclusion(s) to be drawn. Those who focused on the text were able to reproduce some aspects of what was covered and were only able to achieve lower level outcomes, Marton identified this as a surface approach to learning. Students who focussed on the meaning of the text were identified as utilising a deep approach (Marton and Saljo, 1976, a).

Svensson (1984) used a different form of analysis in the Gothenberg experiments, seeking answers to the same question as Marton, an explanation of the differences in learning outcome. He too, arrived at different approaches to learning which he called holistic and atomistic. While both sets of research arrived at the idea of different approaches to learning explaining different outcomes, there are distinctions to be made between the two findings. Marton's research concentrated on process before examining relationships with outcome. The deep/surface dichotomy emphasised the referential aspects of students' experience, or their search for meaning (or not). Svensson wanted evidence of both process and outcome within his initial analysis. The holistic/atomistic dichotomy which he arrived at emphasised organisational aspects or the way in which students organised the informational content they were reading (Marton and Saljo, 1984, p.44).

These approaches to learning were identified through the use of controlled experiments but they can be applied to most learners in most learning situations. It is recognised that an individual's approach to learning may vary in different contexts. Factors such as student interest and experience, assessment practices, aspects of course design and teaching strategies all have an influence on a student's approach to learning (Ramsden, 1984) Evidence from interviews with

students suggests that a surface learning approach is likely to occur when a subject is perceived as confusing, uninteresting or irrelevant. Similarly, too much assessment, overloading of educational programmes with factual content, and negative perceptions by students of assessment tasks, are likely to induce surface approaches Ibid, p.149). While there is clear research evidence of factors which generally encourage surface approaches, the development of a deep approach remains a complex challenge.

2.2.4 The Context Of Learning

Students construct meaning from the environment at a number of levels, including the institution, the department and individual courses. The perception of what is required or valued within these contexts will influence students' approaches to learning and outcomes of learning. Ramsden and Entwistle (1981), reported varying student perceptions of teacher expectations of student behaviour between different disciplines. Marked distinctions were drawn between arts and science departments with arts being perceived as having teachers who endorsed flexible and individualistic teaching methods while science teachers were perceived as more likely to prefer more formal, structured approaches to teaching and assessment (Ramsden, 1984, p.155). Students reported perceptions of a similar distinction in learning tasks between arts and sciences. Arts and social science learning tasks were perceived as requiring interpretation, comparison and generalisation and to be associated more with a comprehension learning style which prefers wholist strategies and the use of analogies and illustrations to develop an overall picture. Science learning tasks were perceived as hierarchical, logical, heterogenous, and rule and procedure governed. There was a perception that these areas required an operation learning style, with a preference for serialist strategies and concentration on details and logical analysis (Ramsden, 1984).

There was evidence from student interviews that while a student may demonstrate deep and surface approaches on different occasions, they also show

a general orientation to studying (Ramsden and Entwistle, 1981; Entwistle and Ramsden, 1983). Two of these orientations, a meaning orientation and a reproducing orientation are conceptually similar to deep and surface approaches to learning. A third, strategic orientation (Ramsden, 1984), is characterised by the use of whatever approach is perceived to lead to success in terms of the assessment requirements or other motivational factor. Students general orientation to study may change over time, however it is likely to be influenced by contextual factors such as teaching and assessment practices and the nature of the subject they are studying.

2.3 The Acquisition Of Knowledge About Teaching

The notion that practical knowledge or skill acquisition develops over time was proposed in a study of airline pilots responses to emergency situations (Dreyfus and Dreyfus, 1980). The model developed from this study was later applied to the acquisition of practical/clinical knowledge in nursing (Benner, 1984). Teaching, like nursing, is made up of theoretical and practical knowledge which is learned over time. The model proposes that practitioners move through five levels of proficiency, novice, advanced beginner, competent, proficient and expert.

In the transition through these levels from novice to expert, Benner describes changes in three general aspects of skilled performance. The first is movement from reliance on abstract principles to the use of past concrete experience as a framework for action. Second is a change in perception of the situation which becomes seen less as a collection of equally relevant parts and more as a complete whole in which only certain parts are relevant. The final transition is from detached observer to involved performer, who no longer stands outside the situation but is engaged in the situation (Benner, 1984, 13). These changes involve the transformation of the beginning practitioner reliant on rule governed behaviour in a series of unfamiliar situations to the expert who is able to make informed professional judgements in a range of complex situations seemingly

effortlessly. Such transitions only occur with experience. Experience is more than the passage of time, it is "the refinement of preconceived notions and theory through encounters with many actual practical situations that add nuances or shades of difference to theory" (Benner, 1984, 36). Theory, in this context, is viewed as a powerful tool, useful for explaining and predicting, which shapes questions and makes the systematic examination of events possible.

2.3.1 Principles of Effective Teaching in Higher Education

Good teaching is difficult to define. Teaching is a practical activity: its relativistic nature means that no two teaching sessions will ever be the same (Ramsden, 1992). Descriptions of good teaching will vary according to the teaching purpose, the context, which includes the subject matter and the discipline from which it arises; the people present; and the experiences they bring with them. Accepting these difficulties, it is helpful to both teachers and students if some form of generalisable standards exist which can be used to distinguish good teaching from bad. The basis of Ramsden's theories has arisen from both the results of prior qualitative research into students' perceptions of their own learning and teachers' perceptions of their teaching. This interpretive research base supports the practical interests of teaching and contributes to a framework which can improve both understanding about teaching and the quality of teaching in tertiary education.

Ramsden has identified findings from research into lecturers' and students' perspectives on effective teaching, and distilled them into six key principles of effective teaching in higher education (Ramsden, 1992). These principles provide a guide for reflection and action for individual teachers working from the perspective of making learning possible and for groups of teachers or academic departments working collaboratively in designing, teaching or evaluating academic programmes. The principles emphasise the interrelatedness of teacher attitudes and actions, student activity and learning and subject matter.

Principle 1: Interest and explanation recognises that human beings are generally willing to work hard when their interest is aroused and there is a sense that the information or skills will have some relevance for them in the future. Adherence to this principle reinforces the reality that learning new and/or complex material does not need to be an unpleasant experience.

Principle 2: Concern and respect for students and student learning is a set of qualities endemic to all good teaching. This is described as a sense of generosity towards students and an honest attitude to potential difficulties in learning a subject. An interest and enjoyment in the ways people learn and accessibility to students for discussion of academic matters are exemplifications of this principle.

Principle 3: Appropriate assessment and feedback is perceived by students as one of the key determinants of good teaching A review of the literature on student evaluation of teaching cites the quality of assessment as one of the key features of good teaching from the students' perspective Marsh, 1987) Students' experiences of assessment have been shown to have an influence on their interest levels, attitudes and approaches to learning (Ramsden, 1984).

Principle 4: Clear goals and intellectual challenge: This principle recognises the relationship between academic expectations and student performance. It also takes account of stages in all learning which move from a stage of "absorbing, discursive, romantic discovery, through a stage of precision, to a stage of generalisation and application, where again initiative and enquiry dominate," (Ramsden, 1992, p,100). Ramsden refers to the "rhythmic claims" of freedom and discipline within these stages of learning and suggests that good teaching will recognise these and work to maintain a dynamic equilibrium between them as learning proceeds.

Principle 5: Independence, control and active engagement: The quality of student learning is enhanced when students perceive a sense of choice about how they will learn subject matter and what content areas to focus on. There is a recognition that individual students learn differently and that the quality of learning will improve when students experience a sense of control which allows them to actively engage with the subject. Not only do students learn more effectively in environments which encourage independence but they enjoy learning to a greater extent.

Principle 6: Learning from students : The understanding of this principle and practice based upon it, is of more importance than any of the previous principles. If all other principles were lost they could be regained by a disposition to learn from students. It recognises the problematic and uncertain nature of the relationship between teaching and learning and the necessity for constant change in teaching practice in response to noticing and reflecting on the effects of teaching on students.

2.4 Recent Related Research

There have been several recent Australian studies investigating teachers' understanding of teaching and learning in tertiary education. In a review of Australian research (Martin, Prosser, Benjamin, Trigwell, Ramsden, 1995), three types of related studies were identified. In a study with a general focus, Samuelowicz and Bain (1992) interviewed thirteen academics, in science and social science at a distance university in the UK and a traditional university in Australia, about their conceptions of teaching. Five distinct conceptions of teaching were identified. The researchers then used the developed coding system to define concepts of student centred and teacher centred approaches to teaching (Samuelowicz and Bain, 1992).

Further research into Australian academics conceptions of science learning and teaching uncovered several qualitatively different conceptions of teaching,

ranging from knowledge transmission to facilitating conceptual change in teaching, and knowledge accumulation to conceptual change in learning (Prosser, Trigwell and Taylor, 1994). In a further Australian study using pre and post observation interviews around an observed teaching session, researchers uncovered subtle variations in what teachers said about what and how they taught, their approaches to teaching and teaching strategies, in a team teaching situation where no variation had been thought to exist prior to the investigation (Martin, Prosser, Benjamin, Trigwell, Ramsden, 1995).

2.5 The New Zealand Context

These related research projects have taken place in Australian universities. It is not known what conceptions of teaching are held by teachers in New Zealand polytechnics nor how teachers develop or change their conceptions of teaching. For instance it is not known whether lecturers who hold a 'Theory 3' type conception of teaching began their teaching career with such a conception or whether there is some relationship with years of teaching experience and the development of conceptions of teaching.

A changing environment of teacher education and professional development in the New Zealand tertiary education sector provides the context for examining teachers' conceptions of teaching. In a study on the effects of funding policy changes on polytechnic tutor training in New Zealand Viskovic (1994) concluded the development of unequal access to initial teacher education for new lecturers in New Zealand polytechnics had occurred as a result of he implementation of the 1990 education reforms. Factors which increased the inequity of access were attributable to the funding changes associated with the move to bulk funding of individual polytechnics, resulting from *Learning for Life* and the Education Amendment Act (1990), and the 1990 Tutor Training Policy's removal of direct central funding for polytechnic lecturers to attend regional tutor training centres (Viskovic, 1994, 90). Aspects determining the degree of access polytechnic lecturers have to initial teacher education include

location and size of the institution, institutional history, values and organisation, and the philosophy and practice of an institution's staff development unit.

Further research recommended by Viskovic includes a call for " a substantial qualitative study of factors affecting tutor training, such as: tutors' and managers' conceptions of learning and teaching; conceptions of staff training, professional development and on-going education; tutors' preconceptions of polytechnic teaching compared with their perceptions during probation and initial training, and later reflections when more experienced." (Viskovic, 1994, p.97) This thesis addresses these issues, by utilising an existing theoretical framework of conceptions of teaching to explore the conceptions of teaching held by lecturers from a faculty within a polytechnic at three different career points.

Chapter 3 : Methodology

This chapter identifies the research problem and the questions which address it. This is followed by an overview of the theory underpinning the research design and an explanation of the choice and nature of the method and techniques used to elicit the findings. An outline of the research approach will be followed by a discussion of the selection of method and techniques used to address the research questions.

3.1 Research Problem

Recent decisions which could potentially affect the quality of teaching in New Zealand polytechnics, such as the withdrawal of targeted funding for inital teacher education for potytechnic lecturers, have arisen out of political and economic initiatives. At the same time it is not known what conceptions of teaching are held by lecturers in New Zealand polytechnics. Such conceptions have not been made explicit. In a climate of political and economic change in the New Zealand tertiary education sector it is timely to make teachers conceptions of teaching explicit and to identify factors which influence such conceptions. Such elucidation, based in educational theory, can inform future decisions and actions related to the improvement of the quality of teaching in the New Zealand polytechnic environment.

The purpose of the current research is to identify the conceptions of teaching evident among polytechnic lecturers in a particular instance of a single administration involving a range of subject disciplines, from the perspective of the lecturers own perceptions of their teaching experience. The examination of an instance, which is typical of many around New Zealand, can help to inform the quality of responses of education administrators, and lecturers themselves, to a rapidly changing environment.

3.2 Research Questions

The research questions designed to address the research problem are:

1. *What conceptions of teaching are held by teachers in the Health Sciences School of a New Zealand Polytechnic?*

   The New Zealand polytechnic environment was selected because previous research on lecturers' conceptions of teaching had occurred elsewhere. The selection is further supported by a recommendation for research into the conceptions of teaching held by lecturers and managers in New Zealand polytechnics (Viskovic, 1994).

   The School of Health Sciences was selected because of the range of disciplines, natural and social sciences, taught under a single administration. It was considered likely that a range of conceptions of teaching might be evident amongst such a range of disciplines (Ramsden, 1984) and that other variables would be reduced by focusing on a single administration.

2. *How are these conceptions related to years of teaching experience?*

   The notion that understanding of practical knowledge in professional expertise develops over time was proposed in a study of airline pilots, (Dreyfus and Dreyfus, 1980) and later in the nursing literature (Benner, 1984). These models of professional skill acquisition indicated that experience within a designated discipline was a key factor which influenced the development of higher level understandings of professional practice. This led to the question of whether changes in conceptions of teaching, as a different body of professional knowledge, occured over time, when considering time as an element of experience. Consequently, length of teaching experience was posed as a significant influence in the acquisition of higher level conceptions of teaching and was addressed by the stratification of participants into three categories of

experience, through which questionnaire, interview data and some documents were analysed.

This question was further supported in New Zealand research by a recommendation which called for research on polytechnic academics' understanding of teaching at different career points, during initial training and probation, later reflections when they were more experienced and conceptions of staff training, professional development and on going education (Viskovic, 1994).

3. *What factors are perceived to affect the development of conceptions of teaching?*

The question of identification of factors which enhance or constrain the development of different conceptions of teaching is a relevant to developing initiatives to support the quality of teaching. Lecturers' experience of learning about teaching in a changing context can inform future action.

The questions addressed the research problem by allowing for exploration of the conceptions of teaching evident within a sample of tertiary teachers in the New Zealand context. The theoretical framework proposed by Ramdsen provided a conceptual basis to address the question of New Zealand teachers' understandings of teaching. Case study, as a methodological approach, provided a boundedness to contextual factors which might influence teachers conceptions of teaching. The selection of an organisational structure which contained a range of disciplines under a single administration allowed for in depth focus on factors which might influence teachers' conceptions at the same time as providing contextual limitation on the potential number of influencing factors.

3.3 Theoretical Framework

The development of different approaches in social science research generally and education research in particular has been noted by several researchers. Parlett and Hamilton (1972) described the frameworks of educational research as falling within two distinct paradigms each with its own methodologies, techniques and assumptions. Mishler distinguished two paradigms, one grounded in the natural sciences and based on "quantitative methods, reliability of measures, analysis of components and outcomes" while the alternative phenomenological approach emphasised "qualitative methods, holistic analysis and process" (Mishler, 1979, p 10). Similarly, Stenhouse distinguished a psycho-statistical and a naturalistic paradigm. The former treats human and social behaviour as understandable in broadly the same terms as natural phenomena. Methods of observation and experiment used in the natural sciences are equally applicable to human phenomena in the quest for predictive generalisations which might contribute to the explanation of human and social phenomena in terms of grand theory or laws. In contrast, the naturalistic paradigm is evident in the interpretive case study approach which is concerned with the experience of participation in education and aims to "strengthen judgement and develop prudence" (Stenhouse, 1981, p.33).

Entwistle (1984) argued that quantitative methods and positivist philosophical orientation of early educational research in the traditional paradigm implied reductionism and the use of formal or mechanical models which embodied assumptions about chains of causality. These are exemplified in methods or approaches from the natural sciences which claim objectivity and seek to make predictions (Entwistle, 1984). Entwistle's own research using interviews with students in order to gain greater understanding of student learning moved beyond the positivism of early education research into an interpretive framework.

An interpretive approach is required to address the open-ended research questions of this study. The aim is to describe, interpret and encourage participants' description of the phenomena under study, within a specific context. Research techniques include interviewing, questionnaires and document analysis. The key philosophical underpinning is therefore the interpretative framework which allows an in depth examination of these research questions.

3.4 Research Method

The case study method uses an interpretive approach. It is a research method which is process oriented, flexible and adaptable to changes in circumstances (Anderson, 1990). Case study involves a variety of perspectives and participants, and can accommodate a variety of data gathering techniques.

The single site study presented the possibility of providing data which can be built upon by further research at a later date (Ebbutt, 1988). Case study has been defined as "an empirical inquiry that:

a) investigates a contemporary phenomenon within its real life context when
b) the boundaries between phenomenon and context are not clearly evident and in which
c) multiple sources of evidence are used" (Yin, 1981, p23).

External validity is a potential problem with the case study. The results of a single case study are not always readily generalisable to other instances. However, the primary purpose (of interpretive research) is not the production of generalisable ideas, rather it is to provide a rich picture of a particular instance in order to understand how and why things happen (Anderson, 1990). Advocates of the case study argue that case studies "provide a 'natural' basis for generalisation because they are in harmony with the readers own experience,"

(Adelman, Jenkins, and Kemmis, 1976). Taking this strength of the case study approach one step further, supporters claim that the method presents research data in a more publicly accessible form than many other kinds of research. It is capable of reaching multiple audiences. For these reasons it is suggested that "case study may contribute towards the 'democratisation' of decision making (and of knowledge itself). At its best, case study allows the reader to judge the implications of a study for him or herself," (Ibid, p.7). These elements identify strengths of the case study approach in addressing the questions posed in this research.

A perceived limitation of the case study method is the problem of reliability in that another researcher in the same situation may reach different conclusions. The method recognises and addresses this problem by requiring that the case study data base is made up of data collected from multiple sources. The technique of triangulation is used to take account of the different perspectives and sources of information evident in any one instance. One view sees triangulation as a technique which provides the means to interpret converging evidence and lead towards a conclusion. Conclusions suggested by different data sources are considered to be as reliable as the same conclusion being reached by different researchers. The chain of evidence developed as a result of this process supports internal validity (Anderson, 1990).

This view of triangulation, puts limits on the purpose and potential outcomes of research by assuming evidence from multiple sources will converge. This may be adequate within a positivist paradigm which seeks technical explanation of empirical data, but is inadequate in interpretive research because the assumption of convergence limits the possibility of inconsistency or contradictory results being produced from different data sources. In advocating a broader conception of triangulation, one appropriate for interpretive research, Mathison (1988) describes triangulation as a strategy which "provides a rich and complex picture of some social phenomenon being studied, but rarely does it provide a clear path

to a singular view of what is the case. The value of triangulation is not as a technological solution to a data collection and analysis problem, it is a technique which provides more and better evidence from which researchers can construct meaningful propositions about the social world" (Mathison, 1988, p.15).

The form of triangulation used in this case study was data triangulation (Mathison, 1988). The mix of research techniques, questionnaire, interviews and document analysis, have all contributed a different perspective on the context in which the research took place and also different accounts of teachers conceptions and experiences of teaching.

A potential disadvantage of the outsider perspective, in this instance, was lack of access to participant - observation techniques. The use of participant observation would have provided another data source for teachers' conceptions of teaching and a different context for consideration of the research questions. This is compensated for by the likelihood of free and open discussion in interviews, where lecturers are less constrained in expression by potential consequences of their statements than they might if the researcher was a staff member of the polytechnic. Open communication was encouraged by attention to ethical issues such as individual confidentiality and may have been enhanced by the outsider status of the researcher.

Robert Stake identified three types of case study, intrinsic, instrumental and collective. The distinctions between each type are related to the purpose of the research (Stake, 1994). The second type is the instrumental case study where a particular case is examined to provide insight into another issue. The case itself is of secondary interest in support of illuminating understanding of something else. The case may be representative of a class of cases or it may not, but it is selected as an instance to advance understanding or examination of something else. Examples of instrumental case study cited by Stake (1994) include *Boys in White: Student Culture in Medical School* (Becker, Geer, Hughes, & Strauss,

1961) and *A Bright and Shining Lie: John Vann and America in Vietnam* (Sheehan, 1988). This research is in the category of instrumental case study.

This case study investigates the case of a school of Health Sciences in a New Zealand polytechnic. The conceptions of teaching and factors which influence those conceptions are investigated as a particular instance. However the purpose of the study is to illuminate conceptions of teaching and the identification of influencing factors which may be applicable to other instances in New Zealand polytechnics where a staff teaching natural sciences work under a single administration alogside academic staff teaching social sciences.

3.5 Research Design

3.5.1 The Case

The study polytechnic was selected because of its relatively large size and diversity of academic disciplines within school groupings. The School of Health Sciences (a pseudonym to protect the anonymity of the institution), within the polytechnic was selected because the mix of natural and social sciences taught there suggested the possibility of a range of conceptions of teaching being evident within a single administrative context. The likelihood of such a mix was indicated in the literature by the marked distinctions in students perceptions of teacher expectations between arts and science departments Ramsden, 1984) While the school which was the subject of this case study did not contain any arts departments, it was possible that similar distinctions might be evident between the natural and social sciences.

In addition, a significant proportion of the staff were involved in post graduate study as part of a strategy to upgrade the qualifications of staff teaching new degree programmes. It was thought that lecturers who were themselves engaged in research, would be more willing to participate.

3.6 Ethical Considerations

Approval of the polytechnic's Academic Board and Ethics Committee was secured before the study could proceed. While the polytechnic recognised that the research was occurring as part of a university Masters programme and that the proposal had already been evaluated, it requested that the proposal be tabled at the polytechnic's internal Research Committee, as a measure consistent with policy for research taking place within the polytechnic, by a researcher from outside the polytechnic.

Initial contact was made with the Polytechnic's Head of the Staff Development Department, who sponsored the research proposal through the processes of the Polytechnic's Academic Board and Ethics Committee. This committee was a relatively new institutional committee with heavy demands from within the polytechnic being made upon it. The process took several months as many other issues took priority on the agenda of the Research Committee.

Access to the teachers in the school of health sciences, for the activities outlined in the research proposal, was granted subject to several conditions. These were first, that the identity of the institution not be revealed in the reporting of the research. The reason for this condition was given by the chairperson of the polytechnic's Research Committee based on the opinion that if the institution was to be identified then the identity of the participants would not be unduly difficult to determine. Agreement to this condition provided a further check on confidentiality for participants, and focused primary interest on potential generalisation from the case rather than the details of the case itself.

Departments within the School of Health Sciences were ascribed letters A, B, C and D in the reporting of the research to reduce the possibility that individuals could be identified through specific identification of their teaching subject. Department A offered subjects predominantly from the social sciences while departments B, C and D offered subjects from the natural sciences. Department

A (social sciences) and Department B (natural sciences) were both teaching degree level courses. Departments C and D, both teaching different ranges of subjects aligned with natural sciences, were not teaching degree level courses.

Further conditions based on ethical considerations of participant confidentiality, right of withdrawal from the research and informed consent were outlined. The memorandum stating conditions of access required that informed consent was gained not only from the lecturer research participants but also from their managers and that the process of finalising the access negotiations be overseen by a member of the polytechnic staff.

An advisory group, which had been mooted in the initial research proposal, was established but did not meet due mainly to workload and difficulty in co-ordinating meeting times. However, informal contact was maintained with some members of the group and discussions on the research progress did take place from time to time. The group consisted of a representative from the Staff Development Department, a manager from School and department level within the polytechnic and a staff union representative.

3.7 Data Collection

Three specific research techniques were used, a survey questionnaire, interviews with two different sub populations, (academic teaching staff and their managers) and document analysis. The survey questionnaire which was administered to all academic teaching staff aimed to identify differences in teachers' conceptions of teaching, teacher education and staff development experiences. Interviews with teacher participants selected by purposive random sampling provided a fuller account of selected participants conceptions and experiences. Interviews with managers who had management responsibilities for staff in the School and content analysis of documents which were directly related to courses discussed in the teacher interview provided background information on the context in which the teachers developed their conceptions of teaching.

3.7.1 Teacher Questionnaire

A survey questionnaire (Appendix 1) was distributed to 70 full time teaching staff in a school of health sciences in order to obtain information on their teacher training and development experience and approaches to teaching.

A questionnaire survey was selected as the most suitable technique to gather information on several topics from all the teaching staff within the School (De Vaus, 1991). It provided a broad background of teacher perceptions of their experiences of learning about teaching and their conceptions of teaching. This background provided a context and a starting point for the individual teacher interviews which would go into more depth. The survey method seemed the least obtrusive way of accessing participation from a broad range of the population.

i Sampling

The aim of the questionnaire was to reach the full time teaching staff within the School. Names of lecturers were obtained from the internal telephone directory and validated as teaching staff who were still employed at the time of the survey, by one of the managers.

ii Questionnaire Construction

The questionnaire was set out in two sections. The first section addressed teaching experience with a particular focus on learning about teaching and development of teaching practice. Lecturers were asked to identify the amount of time they had been teaching in a tertiary institution. this question was used to explore the relationship between time in teaching and aspects of teacher development which could lead to a deeper understanding of teaching practice.

Section one of the questionnaire also sought background contextual information which could assist description of the nature of the

educational climate in the School of Health Sciences. The contextual background was sought by identifying the range of experience, opinions and attitudes towards teacher education and development, and aspects of teaching and learning. Several questions asking lecturers to rate the value they thought they had gained from experiences of learning about teaching were included in this section. A question on the recency of lecturers' perceived most valuable experience of learning about teaching was an attempt to identify whether learning about teaching was experienced as an ongoing process, part of teaching itself, which would be more indicative of a Theory 3 conception of teaching, or whether there was a tendency to identify a particular event in the past which may indicate something else. When framing this question, it was considered that if people selected more recent time frames they were potentially more actively engaged in learning about teaching.

This section of the questionnaire provided descriptive data on the context from which a sample of participants would later be invited for interview. It provided specific data on the nature of teacher education experiences and indications of which experiences they valued. It also provided descriptive data of lecturer perceptions of some aspects of how their immediate working environment supported their teaching practice. This included a series of questions on Professional Development Time which was a relatively new condition of employment introduced into the last National Collective Employment Contract in 1991. It had subsequently been incorporated in site collective employment contracts. Teacher perceptions of this condition and the way in which it is used was considered a dimension of polytechnic academic life was worthy of research for two reasons: first because it represented a block of time aligned with professional practice which the individual had some control over, and second because it was a new condition which had not been researched extensively.

The second section of the questionnaire investigated influences on teaching and teachers' approaches to teaching using a standardised instrument, the Academic Staff Survey, which was developed and being piloted by a team of Australian researchers, including Paul Ramsden, (Trigwell, Ramsden, Martin and Prosser, 1995). Part B of the Australian document was used as Section 2 of the questionnaire. This consisted of a combination of two inventories each containing several scales. The influences on teaching inventory contained scales on teaching control, class size, student characteristics and time pressure. The approaches to teaching inventory contained scales on teacher focus strategy, student focus strategy, conceptual change intention and information transmission intention. Aggregated data provided teachers views on influences on their teaching and approaches to teaching.

iii Questionnaire Pilot.

Part one and two of the draft questionnaire were pilot tested with lecturers in a similar faculty at another Polytechnic. The pilot sample included people in the three categories of experience required for the research, lecturers within their first two years of tertiary teaching experience, (new lecturers), a group with between two and five years of tertiary teaching experience, (post probationary lecturers) and a group with more than five years experience (experienced lecturers). Lecturers in the first two categories had no difficulty responding to the questionnaire. However, there was consistent feedback from the experienced lecturers that the two questions concerned with responses to encountering problems in teaching lacked specificity. This issue was addressed by the insertion of the word "generally" at the beginning of the two questions which referred to problems in teaching. This was to focus the respondent on day to day problems as opposed to critical incidents. The pilot test highlighted limitations of multi choice questions eliciting data on the nature of lecturers most valuable experiences of

learning about teaching. An open question (question 7) was added in order to provide descriptive data. Another new question asked respondents to identify their gender group to ensure that the sample selected reflected the composition of the school. Gender had not been included in the draft questionnaire because of concerns that males might be individually identifiable as individuals due to their small proportion in the population. Another new question which asked respondents how they identify their current occupation on forms such as the electoral roll was added to the questionnaire. This was added as a result of discussions with experienced lecturers who had participated in the pilot test. There was a suggestion that occupational identity changes over time and that there might be a relationship between identifying as a teacher and the theoretical perspective on teaching.

After these additions and alterations the revised questionnaire was pilot tested with a smaller sample of three experienced lecturers from different faculties at the Polytechnic where the research was to take place.

An original Section two of the questionnaire was discarded and replaced with a standardised instrument. It was not piloted due to time pressure with the end of the year approaching. This was not thought to be a major problem at the time given that it was in itself an instrument that had been tested in an Australian university. However a problem did emerge with questions that mentioned examinations as a form of assessment. Some lecturers in this School did not use examinations as a form of summative assessment and therefore failed to respond to the three items referring to examinations. Two respondents wrote comments to this effect in the space provided for general comment that they had difficulty with these questions.

iv Administration Of Questionnaire

Ethical considerations were outlined for participants in a letter attached to the questionnaire. This provided a description of the research, a statement of ethics, confidentiality, right to withdraw and informed consent to proceed with a follow up interview (See Appendix 1). The questionnaire could be completed anonymously by people who did not want to be interviewed. Respondents willing to be interviewed were able to return their consent form separately from their questionnaire response if they wished as it was printed on a separate sheet.

Contact, in the first instance, was made with the acting Head of School, who advised of the timing of Staff meetings when it would be possible to speak to the staff of the whole school collectively. Face to face contact with potential research participants was thought to be the most effective way of attracting interest and participation in the research. Gaining time to speak to staff in a regular staff meeting provided an opportunity for general discussion of the research and provided a valuable initial contact. This meeting was followed up by inviting participation through the placement of a questionnaire and covering letter in the pigeonhole of every teaching lecturer in the School.

Seventy five teaching lecturers were identified from the School staff list in the internal telephone directory. Two of the lecturers who received a questionnaire contacted the researcher to say that they had such minimal involvement in direct teaching during the year that they did not consider their experience relevant to the questionnaire. A further two lecturers were discovered to have had limited tenure contracts which had expired by the time the questionnaire was distributed. Of the remaining population of 71 lecturers, 57 responded to the questionnaire, providing a response rate of 80%. Of the 57 responses, 46 lecturers indicated they

were willing to participate in a follow up interview, 80% of those who completed the questionnaire.

v Data Analysis

The questionnaire items were analysed using the SPSS/PC statistical package for IBM personal computers. Frequencies and percentages were calculated on all questionnaire items. All items were cross tabulated against length of time in teaching in order to identify any trends in responses which might show up within and between the three identified career points. Two measures of central tendency, means and standard deviations were calculated on the crosstabs of the items in part two of the questionnaire and the four items seeking information on the use of Professional Development Time (PDT). Further crosstabs were calculated crossing the variable of the department within the school.

3.7.2 Teacher Interviews

Sampling

These participants were selected by using systematic random sampling techniques to gain a sample that met two requirements. First, it reflected the composition of the population in terms of distribution across subject discipline and second, it was stratified into three groups representing different stages in participants teaching careers.

The sample required was four lecturers in each of the three categories of experience, that is new lecturers, defined as those with less than two years teaching experience; post probationary lecturers, defined as those with two to five years experience and experienced lecturers who were defined as those with more than five years of tertiary teaching experience. There were 58 women and 13 men in the population. The sample required 10 women and two men in order to reflect this gender distribution of the School.

A systematic random sample was obtained using the following procedures. The number of lecturers in each department and within the three categories of experience are identified in three tables (see Appendix 2). A sample required was identified within each category, which would proportionately reflect the composition of the population. Where respondents consented to an interview, their name was added to the table as population obtained. A random number table was used to select the sample to be interviewed from the population obtained in cases where the population obtained, that is those consenting to proceed with an interview, exceeded the sample required within their category.

i Construction Of Interview Schedule

The primary aim of the interviews was to gain insight into teachers' perceptions of their experience of learning about teaching and developments in their perspectives on or approaches to teaching with time. They also provided a way to follow up, in more depth, the broad indications and contextual trends which were produced by the questionnaire data. A final aim in the interviews was to identify any common triggers to changes in perceptions of teaching.

The interview schedule provided focus and direction in the interviews (see Appendix 3). Informants were asked to select one course, that they were teaching or had taught in the current year, to focus on during the first part of the interview. This request was made to enhance specificity of responses and to discourage over generalised or idealised discussion. They were asked to select a course for which they had major responsibility and which they would feel confident and comfortable discussing.

ii Four broad questions were identified as a guide to discussion, with the aim of giving participants maximum freedom to communicate their own

constructions of their experience with the least possible intrusion from the researcher. These questions were developed from the research questions. Every interview was different but all covered the four questions.

There was a sequence to the identified questions. During the introductory phase of the interview, informants were asked descriptive questions about their selected course, their experience in designing it, the context in which they prepared the course and the way they taught it. This was considered a relatively non threatening beginning to the interviews and a positive rapport was established.

The second question concerned change. A major research question was seeking to discover factors that influenced changes in lecturers perceptions of teaching. In this section they were asked questions about expected and unexpected changes that they noticed in their students during the course. They were encouraged to discuss changes they would like to make within the selected course and were asked to think about what it would be like making those changes within their current context.

The third question asked participants reflect on their own learning in relation to the subject of their selected course. Changes in understanding or experiences of deep learning were of particular interest. This section moved to asking participants to describe experiences of learning about teaching.

The final question asked lecturers to reflect on their day to day teaching practice within their current employment context.

iii Interview Structure

Powney and Watts suggest that interviews can be divided into two types, informant and respondent interviews. The distinction is drawn not from the techniques employed in structuring or executing the interview but rather the locus of control before, during and after the interview. (Powney and Watts, 1987). If the two types of interviews are viewed as end points on a continuum, the interviews within this research would be situated between the two but more towards the informant end. The nature and aims of this research favour informant interviews in that it is necessary that participants speak from there own experience, in a situation which seeks to restrain interviewer intrusion.

iv Administration Of Interviews

The people whose names were selected in the systematic random sample as interview participants were contacted by a written memorandum placed in their pigeonhole, with a schedule of interview times covering two weeks in advance. The interview informants were asked to return the schedule in the attached addressed envelope indicating three preferences for interview times. It was agreed that a copy of the schedule would be returned to each with a mutually convenient interview time within twenty four hours. This process occurred relatively smoothly.

Before the interviews informants were reminded of confidentiality and voluntary participation. They were asked if they objected to the use of a tape recorder and were told that the recording would be transcribed but would remain confidential to the researcher and possibly her research supervisor. All consented to the taping and transcription and none of the participants asked for a copy of the transcript.

The interviews were conducted in a room which belonged to the Staff Development Unit but was situated within the Health Sciences building. This venue provided neutral space for all lecturers interviewed in that it was not associated with any single Department within the School and it also provided a convenient location which was close to most offices and teaching rooms used by participating lecturers.

The interviews took place during the final week of the final term when lecturers had completed teaching commitments and most of their marking and end of year reporting activities. Each interview lasted for between sixty and ninety minutes.

Lecturers were willing to be contacted by the researcher, if necessary, for any clarification of meaning. The transcriptions were typed immediately after the interview and the researcher listened to the tapes and read the transcriptions to ensure accurate transcription.

v Data Analysis

The interview transcripts were read several times. Comments and sections relevant to the research questions were highlighted and topic themes identified. These topics were listed in a research notebook under each interview. Sections of the interview transcripts which contained data on topics which occurred within the interviews were cut out and put into topic categories on large sheets of paper. The interviews were analysed by themes which emerged from this process (Glaser and Strauss, 1967), which were reported under headings associted with the research questions.

3.7.3 Document Analysis

Content analysis is an unobtrusive research method particularly suited to the analysis of written material (Babbie, 1992). Two types of content, manifest and latent, are available to be coded for analysis, each presenting different qualities to the researcher. Coding the manifest content such as the number of appearances of a word in at text presents the advantage of reliability but at the possible expense of validity, given that a count of the occurrence of a particular word in a text might not truly represent the concept with which the word is associated. The coding of latent content is the coding of the underlying meaning which addresses the validity problem but potentially at the expense of reliability and specificity. The best solution to this dilemma is to use both manifest and latent content analysis Babbie, 1992).

Institutional policy documents which related directly to lecturers' teaching practice were analysed to provide background contextual information which supported and enhanced the interview data. Documents analysed were the handbook providing guidelines for the academic quality assurance committees and course handbooks, which provided a description of the structure, content, teaching approaches and assessment requirements of the courses lecturers chose to discuss in their interviews. The documents were made available by the interview informants.

i Sampling

Documents used in this research were supplied by the staff who were interviewed. Consequently, the sample of lecturers selected for interview was the same sample as for the course handbooks. Ten of the twelve lecturers brought their course handbooks to their interviews so that valuable interview time was not wasted with detailed explanation of the course being discussed. Similarly, several lecturers and managers referred to the guidelines for academic quality assurance committees and

departmental curriculum documents, during their interviews and made these documents available to the researcher.

ii Schedule For Content Analysis Of Course Handbooks

In the analysis of the course handbooks, the handbooks themselves were the units of observation and the lecturers teaching from the handbooks were the units of analysis. Manifest content was recorded in two categories, a frequency count of items which suggested students were required to reproduce knowledge, (Reproduction) and a frequency count of items which suggested students were required to demonstrate a change in understanding, (Change). Latent content or underlying meaning was identified using subjective evaluation of the handbooks and classifying these on a three point scale.

1 = Tending toward a student focus and conceptual change approach to teaching.

2 = Elements of both student focus/conceptual change and teacher focus/information transmission approaches without leaning either way.

3 = Tending toward a teacher focus/information transmission approach to teaching.

These categories of description were those used in the second section of the teacher questionnaire which was taken from an Australian pilot questionnaire.

iii Data Analysis

Material from institutional documents provided another perspective on the courses discussed in the teacher interviews. The questions addressed by the content analysis were what conceptions of teaching are held by teachers in a Health Sciences School of a polytechnic and how are those

conceptions related to years of teaching experience? Data on conceptions of teaching was identified in sections of the course handbooks which outlined approaches to teaching and assessment. These were analysed using the schedule outlined above. The question of how conceptions of teaching might be related to years of teaching experience was addressed by comparing the results of analysis of handbooks used by lecturers in the three different identified categories of experience. The content analysis of course handbooks identified signs of intention to bring about changes in students understanding, (deep learning) and for any indication of intention to transmit knowledge for reproduction. The handbook of guidelines for the polytechnic quality assurance committees was analysed by a quantitative measure of the frequency of the occurrence of each item identified in the guidelines. The limitations of such an analysis of the manifest content alone are acknowledged. However, ascertaining the degree of emphasis given to each item by the polytechnic in these guidelines, was considered to be of value to this case study.

3.7.4 Management Interviews

Management perspectives on teaching and learning within the School were further from the face to face immediacy of the lecturers, and offered a broad context in terms of time and space. Managers tended to have been employed by the organisation for a considerable time and had lived through an era of dramatic change in the funding and provision of tertiary education. They had also held different positions within the organisation and had different responsibilities within their current positions. The diverse experiences of this group added a more global dimension to the examination of conceptions of teaching.

i <u>Sampling, Population Of Managers And Sample Selected</u>

The managers who were interviewed were selected on the basis of having a direct line management relationship with the lecturers who

participated in the research, or with their managers. The six key informants interviewed were one Deputy Principal, two Heads of the School, which was the subject of this study, (one was moving out of a caretaker role as "Acting Head of School" while the other was a new appointment moving in to the position), two Heads of Departments, and a Staff Development lecturer attached to the Polytechnic as a whole and with responsibility for overseeing the probation process. In the interests of confidentiality, any quotes or comments made by managers and referred to in this text, will be attributed to the generic term of management.

ii Interview Schedule Construction

A schedule was developed using the seven step approach outlined by Gary Anderson Anderson 1990, p.239) Questions were grouped into four sections. The first section asked managers about their own and other peoples role in the promotion of good teaching before asking them to describe their view of good teaching. The second group of questions sought information on policy and recent policy changes which could influence teaching. This was followed by a series of questions on strategies utilised within the School or department which had the intention of supporting teaching. The final section consisted of two questions very closely related to the research questions See Appendix ..... for copy of schedule).

The questions were predominantly constructed as open questions to encourage managers to present their ideas and opinions (Powney and Watts, 1987). Where closed questions were asked, draft follow up questions were written in as a contingency in case of any 'awkward' silences'. The interview schedule provided a guide to areas which were to be covered but was not intended to be a rigid plan. The aim was to

encourage expression of ideas which could be elaborated on by probing and focussing from the interviewer.

iii Administration Of Interviews

Due to the small number of managers in the sample it was not possible to pilot the interview schedule. Managers were contacted by telephone and appointments set at a time and place of their convenience. All six interviews took place at the Polytechnic and lasted for about an hour.

iv Data Analysis

Topics, ideas and opinions expressed by managers during the interviews were listed and sorted into categories (Glaser and Strauss, 1967). The categories were sorted into themes which were reported under headings of the research questions or under the heading of the theme which emerged, if it did not relate directly to the research questions.

3.8 Summary

The case study method allowed for a range of research techniques to gather and analyse data. The mix of qualitative and quantitative techniques produced a wide range of findings within a limited time frame. The outsider status of the researcher required that the data was collected using a research design that was unobtrusive to the staff of the School of Health Sciences. This was achieved by scheduling the questionnaire distribution and interviews within a three week period at the end of the academic year. Document analysis provided an unobtrusive technique which added a further dimension for interpretation of the research questions.

Chapter 4 : Teaching Context

The context of teaching within the Health Sciences School of the polytechnic was developed and constrained by a range of influences. This chapter provides data from sources other than the teachers themselves, which had the potential to have direct influence on conceptions of teaching within the School. The two main sections of the chapter present data from documents which provided institutional guidelines on teaching and interviews with managers.

4.1 Document Analysis

Policy documents which directly related to teaching practice were identified as a source of data on the teaching context. Two document sources were identified and selected for analysis. These were the polytechnic academic board quality assurance committee guidelines, and course handbooks which demonstrated the implementation of the quality assurance policy at the level of an individual course under discussion on the teacher interviews. The quality assurance guidelines were analysed by the degree of emphasis given to each of the standards identified at the beginning of the document. The Course Handbooks were examined for indications of different conceptions of teaching outlined in the standardised format of the handbooks.

4.1.1 The Academic Board Quality Assurance Guidelines

The academic board quality assurance guidelines were compiled as a policy document which identified standards of academic quality and processes for academic quality assurance. The guidelines began with a standards statement which outlined standards which were required of each programme of study and component courses. The number of times each standard was mentioned in the handbook provided an indication of the attention which the polytechnic might expect lecturers to give to different aspects of their work.

Quantitative analysis showed that the standard which received the greatest emphasis by a very wide margin was that the evaluation protocol be consistent with the stated learning outcomes. Assessment of student learning was mentioned seventy two times. The subject of assessment fell into several further distinct categories, design, administration and reporting of assessment activities. Assessment was made prominent at all stages of course planning and delivery. The guidelines articulated the expectation that before the commencement of a course an assessment schedule communicating the number, types and timing of assessment activities be made available to students. The guidelines also outlined frameworks for the administration and moderation of assessment processes including extensive criteria for resitting assessments as well as granting aegrotat and conceded passes. Procedures were outlined for the monitoring, moderation and reporting from all assessment activities.

The parameters of organisation and operation of the quality assurance committees was the second most frequently stated standard in the quality assurance guidelines. There were fifteen statements related to these committees covering aspects such as the role of the committee's, organisation of meetings, lecturer checklists for moderation and guidelines for the resolution of disputes.

The third most frequently emphasised standard that related directly to teaching practice was that the programme of learning should comply with all relevant external requirements. In addition to requirements identified by bodies outside the polytechnic, such as NZQA and professional organisations, there were stipulations which emanated from within the polytechnic. While most of the polytechnic requirements had been passed down by NZQA to the Academic Board and its subsidiaries within the polytechnic, there was also an item checking that staff were aware of polytechnic policies and support services and that they had strategies for making students aware of these. The policies and support services identified were Charter requirements, eg assistance for people

with disabilities, anti harassment policies, the Learning Assistance Centre and the library.

The aspects of teaching which carried a fourth level of significance in terms of the frequency with which they were mentioned in the handbook, were the curriculum as a planned sequence of teaching/learning experiences that allow students to achieve the goals of the programme, and the standard that each programme had clearly articulated learning outcomes. These standards were mentioned eight and six times respectively.

Three further standards were each mentioned specifically less than five times in the handbook. The first was the entry requirements for students and recognition of the value of their previous learning, and the clear identification of prerequisite knowledge and skills while respecting principles of justice and equity. The next most frequently mentioned standard was the qualification of teaching staff for their role. The final standard received one mention after its identification at the beginning of the handbook. This was a statement of standard that facilities and resources are available to staff and students to support the teaching/learning process.

The level and range of attention given to assessment suggested that the polytechnic placed a high value on accountability to students. The notion of accountability was further emphasised by the amount of attention paid to the quality assurance committees and external accountabilities such as NZQA. Standards pertaining directly to teaching and learning were identified with less range and frequency than those concerned with accountabilities.

4.1.2 Course Handbooks

Course Handbooks were a means of implementation of the policies outlined in the quality assurance guidelines at the level of individual courses. Lecturers were required to provide a course handbook to students prior to the

commencement of a course. The format of these documents was standardised, but there was variation in the content of the handbooks that lecturers brought to their interviews.

Inclusion of complete course handbooks in appendices could have lead to the identity of particular lecturers. However a sample of teaching learning approach statements and assessment activities contained in the course handbooks is given in Appendix 7. These demonstrate examples the range of content evident in the course handbooks submitted by lecturers interviewed. Reference to very specific subject matter from which the identity of an individual lecturer could be ascertained has been omitted. The category of length of teaching experience and Department code is identified in each example.

Course handbooks documented information concerning the educational and administrative requirements that students would need to know to pass the course. This included a course standard which consisted of a statement of purpose and learning outcomes, a section on course delivery which included identification of academic staff teaching the course, a description of the teaching/learning approach, a statement of content, the assessment schedule including criteria for successful completion and reference material such as a course bibliography.

Quantitative analysis showed that the degree of emphasis given to different aspects of the course was similar to the focus of the Quality Assurance Guidelines. Generally three to four pages of course handbooks described assessment requirements both formative and summative, informing students of the relationship each assessment activity had to specific learning outcomes, terms of reference, other criteria such as word limits for written assignments, and descriptions of levels of competence where grades were allocated. While the format of the course handbooks was highly standardised, the content

demonstrated several different teaching and learning approaches including a range of forms and types of assessment.

Table 4.1 below illustrates the results of a quantitative and qualitative content analysis of the course handbooks. The lecturer associated with each course is identified by a code in the first column. The second and third columns provide results of a frequency count of content in the course handbooks which indicate either an approach which encourages learning for the reproduction of knowledge, column 2, or an approach which encourages learning for conceptual change. These items were taken from the statements of purpose and assessment schedule of each available course handbook. The final column was an evaluation of the latent content or underlying meaning of the handbook as a whole. Each handbook received a code which represented the following meanings. The categories used for analysis are those used in the items pertaining to approaches in teaching used in the second section of the teacher questionnaire, which were developed for an academic staff survey by Trigwell, Ramsden, Martin and Prosser (1995).

TF/IT = The handbook tended toward a teacher focus/information transmission approach

SF/CC = The handbook tended toward a student focus and conceptual change approach

SFCC/TFIT = Elements of both student focus/conceptual change and teacher focus/information transmission approaches without leaning either way.

Table 4.1 Items Suggesting Different Approaches to Teaching in Course Handbooks

Lecturer	Items indicating learning for reproduction (N)	Items indicating learning for conceptual change (N)	Latent Content TF/IT vs SF/CC
1C1	*Handbook*	*not*	*available*
1A2	3	2	SFCC/TFIT
1A3	3	2	SFCC/TFIT
1A4	2	6	SF/CC
2B1	8	4	TF/IT
2A2	0	6	SF/CC
2A3	0	5	SF/CC
2B4	4	2	SFCC/TFIT
3D1	4	2	SFCC/TFIT
3B2	*Handbook*	*not*	*available*
3A3	0	6	SF/CC
3A4	0	5	SF/CC

Table 4.1 shows a strong tendency towards student focussed approaches to teaching for conceptual change in statements in course handbooks of lecturers in Department A (departments are indicated by the alpha character in the lecturer identification code). This was a department teaching social sciences predominantly. Table 4.1 shows emphasis towards student focussed conceptual change approaches increasing with experience in teaching in both the quantitative item analysis and the analysis of latent content. Two lecturers in Department A with less than two years teaching experience, (1A2, 1A3 and

1A4), demonstrated elements of a teacher focussed information transmission approach along side elements of student focussed teaching for conceptual change, while their more experienced departmental colleagues showed elements of only the latter approach (2A2, 2A3, 3A3 and 3A4). The table shows handbooks from teachers in all the other departments, from which handbooks were available, demonstrating elements of both approaches.

It was difficult to draw any inferences or conclusions from the Department D example as so little information was given, however the additional material presented in the handbook demonstrates a heavily content based subject area, which relied on students being able to reproduce a significant quantity of anatomical and physiological data accurately, as a pre requisite to proceeding to different levels of learning. An example from a post probationary lecturer in Department B focused explicitly on the subject matter and required the students to "enhance the detail" of what occurred in class by "student centred and self directed learning" outside class time. None of the student activities indicated in the course handbook explicitly required the students to move beyond the level of reproducing existing knowledge. The 50% weighting for course work on a summative examination was inconsistent with other assessment practices noted within the School, and could be consistent with a conception of teaching as the transmission of knowledge.

Since the polytechnic required a uniform approach to course handbooks in the use of standards, the standards could be a factor within the environment which influences conceptions of teaching. Despite this, however, different approaches to teaching and learning were evident and these differences are evident in Table 4.1 and further illustrated in the examples selected for Appendix 7. In some examples these were explicit such as "problem based learning" in one course handbook and "inquiry learning" in another two instances. The naming of specific teaching and learning approaches was a feature of all lecturers who were interviewed from within Department A. In Departments B and D, in

contrast to Department A, there was a predominant tendency to use a pass/fail form of competency based assessment, as opposed to marks or grades. There were indications in the handbooks outlining problem based and inquiry learning, that students would have to move beyond the reproduction of the knowledge transmitted by the lecturer. In one course students were expected to supply "issues and challenges generated from the learning outcomes" in order to participate in class discussion. This suggested, (a suggestion that was confirmed in interview) that lecturers were aware of issues and challenges that students were likely to face when encountering the subject matter for the first time, and that the learning outcomes and approaches to teaching and learning were intentionally structured to take account of these issues and challenges in student learning. This contrasted with two other handbooks, one for a course taught by a post probationary lecturer in Department B and another from an experienced lecturer in Department D, which did not show any indication of requiring students to move beyond the reproduction of existing knowledge.

4.2 Management Interviews

This section reports the findings from interviews with key informants to provide further contextual data. These managers selected were people who had a direct professional relationship with the lecturers who participated in the research. (Managers interviewed are referred to with a randomly assigned code M1 to M6). Semi structured interviews were used with initial open questions addressing the research questions of the identification of factors which might affect the development of conceptions of teaching, and the context of teacher development in the School. Responses to the initial questions were taken further by focussing on points made and probing for further elaboration. The themes which emerged from these interviews are outlined as follows.

4.2.1 Expectations of Changes in Approaches to Teaching

Most individual managers said that particular approaches to teaching had become regarded as no longer appropriate. There was an expectation that people

who were lecturing using a knowledge transmission approach with the expectation that students reproduce that knowledge in assessment activities, must change their approach to what was frequently described as a more student directed approach. One manager described a sense of growing frustration amongst teaching staff who had been studying education, with a perception that they were generally working in a "*teacher driven kind of model.*" (M5) Two or three years before this research took place there was a deliberate effort by a group of teaching staff in Department A to bring about a shift in ways of understanding teaching.

> *"Quite a lot of people want a kind of formula of how you do it, and there isn't a formula. I think it's more of an attitudinal approach - it's more a need to be willing to let go and look at the kind of relationships and knowledge that you have with your students, and believe that learning is not a result of exactly what you've told people." (M5)*

A shift to a new conception of teaching was planned and co-ordinated and lead by a group of teaching staff within one department. While this occurred in the context of Department A and academic programmes pertaining to disciplines taught there, it was evident that similar changes were occurring in other areas within the School. A manager from a different area described how students in a different discipline had previously been mainly concerned with passing tests and implied that these assessments consisted primarily of reproduction of material taught. There was still a perceived need for students to develop a certain level of base knowledge, but that was no longer considered sufficient and students were expected to develop their learning to pursue individual lines of inquiry as their courses progressed.

One manager identified two transitions that polytechnic lecturers might generally face in their career. The first was from subject expert with no teaching

experience to lecturer with some experience. It was considered, by the manager, that the polytechnic handled that transition rather well in terms of both formal professional development opportunities and collegial support. The second transition was seen as a change in professional identity from a discipline based identity to that of educator in a particular discipline. It was thought that while the polytechnic might not handle this second transition as well as the first, that there was active encouragement for lecturers to move beyond their twelve weeks initial teacher education to study adult education further.

In reference to a perceived historical change in the ways teachers understood teaching a manager referred to the period before the education reforms (see chapter 2) and the introduction of comprehensive academic quality assurance procedures in Schools throughout the polytechnic. Prior to 1990 there had been a shared understanding amongst teaching staff that almost all responsibility for programme development and standards was vested in professional and vocational bodies external to the polytechnic, such as the Trades Certification Board (TCB), and the Authority for Advanced Vocational Awards (AAVA). Both of these had disappeared with the introduction of the New Zealand Qualifications Authority (NZQA) and its demands for more rigorous internal assessment. The manager described a perceived lack of control over teaching which had existed in the former environment and reflected on how teachers had described themselves as deliverers of a certain amount of knowledge over which they had no control.

4.2.2 Perceptions Of Relationship Between Conception of Teaching And Years Of Teaching Experience

The manager who had worked as part of a team to bring about deliberate changes in approaches to teaching within one department, noted a wide range of responses to the planned change. These ranged from a great willingness to take new teaching strategies on board to some who were unsure of how to actually 'do it' through to some who were resistant to change. There was a belief that

some experienced teachers who found the changed expectations difficult were "entrenched" in a model of teaching as transmitting knowledge, and learning as the reproduction of knowledge. In contrast to the minority of experienced people who were resistant to change, new lecturers were perceived to be arriving with broader conceptions of teaching.

Other managers considered that all teachers went through peaks and troughs within their careers, with some becoming "master teachers" while others were "stable and undynamic." There was a belief that the early years of teaching generally follow a sequence with the second year being one of correction of mistakes made in the first year, and the ability to reflect on practice developing from the third year of experience onwards. Mention was made of experienced teachers who had been effective in the past but had been unable to make the changes necessary to keep up with the changing demands of teaching and assessment practice.

Similar themes occurred in all the management interviews regarding the relationship between time in teaching and understanding about teaching. In summary these were that there was a developmental process of understanding teaching practice that occurred within the first three or four years of teaching. Second, that experienced lecturers within this polytechnic had been required to develop more facilitative approaches to teaching and assessment practice than had been deemed necessary at earlier stages of their teaching careers. The third common theme was that of greater expectations being placed on newly recruited lecturers than had been placed upon them in the past. New lecturers were expected to understand teaching as something beyond the transmission of knowledge at the outset of their careers. They were expected to have higher qualifications at entry level than had been expected of their more experienced colleagues at time of appointment, with a preference for qualifications in teaching or other aspects of education as well as qualifications and experience in

the discipline they would be teaching. One manager was quite explicit on this point in saying,

> *"Lecturers need a theoretical base to survive at the higher levels we are teaching at today. Practical experience in a discipline is a necessary but not sufficient condition for teaching. There can be no job [teaching] in the future for someone whose primary qualification is experience." (M1)*

4.2.3 Factors Perceived to Affect the Development and Change of Conceptions of Teaching

Factors perceived by managers to affect conceptions of and approaches to teaching were predominantly associated with policy changes arising from the 1990 education reforms and the polytechnic's strategic direction in the developing education market economy. The managers reported that policy changes in the context of this case study polytechnic introduced new academic structures, increased accountability of individual lecturers, introduced qualifications and curriculum frameworks that were new to the polytechnic, and increased class sizes and reduced class contact hours.

The quality assurance processes which had been developed as policies handed down by the Academic Board were perceived as making overt, practices which had previously been covert and introduced lecturers to a new level of scrutiny through peer review. Where previously an entire course and assessment schedule might have been developed by an individual working in isolation, moderation processes meant that all course material and assessment reporting were scrutinised by between three and twelve colleagues before and after course delivery. There was a shared belief amongst the managers interviewed that the level of peer review introduced by the quality assurance processes brought about a new level of accountability. A greater degree of responsibility for teaching and assessment activities, had been transferred to lecturers from external

professional and vocational bodies. It was considered that the increased responsibilities and accountabilities required lecturers to provide more innovative approaches to teaching and assessment than had been possible in their former more isolated environment.

The introduction of new qualifications into the polytechnic offerings, in particular the trend to offer programmes at degree level, was considered a factor which affected lecturers' conceptions of teaching. The introduction of degree courses had raised questions about the distinguishing characteristics of degree programmes as opposed to previously offered qualifications such as diplomas. In describing the defining characteristics of a new degree programme one manager implied that differing conceptions of teaching, differing from what were previously necessary, would be required for the degree programme.

> *".....in the development of a degree what was it about the degree, or what is a degree that distinguished it from a diploma? Because particularly when we were looking to differentiate and thinking that we would be maintaining the diploma, there needed to be - it wasn't the matter we believed of converting the diploma to the degree but rethinking it and saying there is something qualitatively different about a diploma and a degree. And one of the characteristics seemed to be the independence of the students in relation to their own learning."(M5)*

There was a consensus among the managers interviewed that the introduction of degree programmes brought with it a change in the focus of teaching. There was a general belief that teaching degrees required teaching staff to think more about what and how they were teaching and reflect on these activities more than had been necessary in other programmes. One manager noted that an institution wide movement to teaching higher level courses was a conscious strategy of the polytechnic. Although managers did not mention student expectations of

teaching specifically, one manager commented that the introduction of degree programmes had "brought more enrolments of a better quality."

The introduction of particular curriculum frameworks to courses of study was a further factor managers perceived to affect conceptions of teaching. The two curriculum approaches that were referred to specifically were inquiry learning and problem based learning. An inquiry learning approach was introduced into a new degree programme as means of bringing about more student directed learning. A final administrative factor which managers perceived as contributing to changes in lecturers conceptions of teaching was a rise in the average size of classes accompanied by a reduction in class contact hours. All managers regarded the reduction of class contact hours as a catalyst for lecturers to focus more closely on how they teach. There was a general opinion that there was a growing expectation that lecturers develop their skills as teachers in the sense that they were being encouraged to think about the directions in which they might want their students learning to proceed and that they would generate learning activities to ensure that the students went at least some way in the desired direction.

4.2.4 The Context Of Teacher Development

There were no expectations that tertiary teachers would have had any teacher education at the time of appointment to a teaching position. The Collective Employment Contract, in effect at the time of this research, entitled every lecturer to a maximum of twelve weeks teacher education which was usually undertaken during the first two years of employment as a lecturer. Recent changes in the provision of initial education were described as having moved away from a regional Tutor Education Centre, where new lecturers combined with peers from other institutions to learn basic educational principles, to more provision of similar information through the polytechnic Staff Development Unit.

A further condition of employment discussed was Professional Development Time. Professional Development Time (PDT) was a further condition of employment contained in the Academic Staff Collective Contract in place at the time of this research. It provided a right to two weeks of professional development time per year during which activities could be determined by the staff member. The amount of time could be reduced to one week for new teachers during their first two years of employment, to allow one week for initial teacher education. The other instance where the two weeks could be reduced to one week was when a lecturer has been assessed as having competency problems through some form of formal review process and they could be required to undertake remedial activity during one week of their PDT.

Managers all considered that the polytechnic offered extensive professional development opportunities to support and develop lecturers in their teaching. In the sense of formal professional development activities the polytechnic had a comparatively well resourced Staff Development Unit. One key role of this unit was to provide initial teacher education for new lecturers and to administer the probation process in which all new lecturers were assigned a colleague to act as a mentor. Further opportunities were provided, within the polytechnic, for lecturers who wished to develop themselves further by studying for a Diploma in Tertiary Teaching or a B.Ed.

In addition to programmes offered by the Staff Development Unit, there were schemes offered whereby lecturers undertaking academic programmes for their professional development could make application for reimbursement of course fees and financial assistance with purchasing text books.

While most discussion centred on institutional policies and processes which develop and support teaching, there was also a theme of qualitative expectations that teaching staff would develop a "reflective approach." There was no particular definition of the meaning of a reflective approach given during the

interviews. However there was discussion of collegial relationships and the opportunity to be nourished by other practitioners and by education theory, in order that education debate not become introspective.

4.3 Summary

The analysis of the Quality Assurance and Course Handbooks provided examples of the academic accountability requirements with which lecturers at the polytechnic were required to comply. Assessment was the area of curriculum which was afforded the greatest emphasis and teachers were compelled by this system to consider the relationship between identified learning outcomes and the forms of assessment they used. The standardised reporting required of each course ensured that lecturers had given due consideration to the areas defined in the policy and handbooks.

There was evidence of a range of approaches to teaching within the course handbooks. Analysis of the latent content showed that handbooks selected from Department A tended more towards a student focus and conceptual change understanding of teaching and learning than the examples from other Departments (See Table 4.1). Handbooks from Department A presented more defined approaches to teaching and assessment practices which were consistent with the stated approaches, than the other Departments.

Managers expected changes in conceptions of teaching to occur amongst the staff as they gained experience in teaching. The first few years of teaching were considered to be formative years where staff made a transition from subject expert to teacher of their subject. A teacher, from the managers' perspective, would have moved to a more facilitative approach over time.

Some experienced lecturers had needed to change aspects of their teaching with the implementation of the new accountabilities in course design, teaching and assessment. Managers wanted innovative approaches to teaching. New

curriculum frameworks were being introduced for new degree level courses. Higher expectations were placed on new academic staff in recent years than previously. Higher qualifications became necessary at recruitment and selection of new teaching staff.

A range of staff development activities and initiatives were provided by the polytechnic. These included initial teacher education, further teacher education to diploma and degree levels, a one year probation process for new staff, and sponsorship for further university study open to all staff who met requirements. A context of change existed in the School and probably the whole polytechnic, with new demands and challenges. Quality assurance requirements and curriculum development and teaching of degree programmes were issues exerting influence on conceptions of teaching within the School of Health Sciences and the polytechnic generally.

Chapter 5 : Teacher Questionnaire

This chapter reports the results of the questionnaire administered to the teaching staff in a Health Sciences School in an urban polytechnic. The first section sought information on the demographic composition of the School and the context of teacher education and development. The second section of the questionnaire sought views on approaches to teaching and influences on teaching.

The reporting of questionnaire results will begin with a description of the demographic composition of the School of Health Sciences which paid particular attention to length of teaching experience. This will be followed by the results of questions on approaches to teaching, which will be identified as elements of lecturers conceptions of teaching. Results from questions on contextual influences on teaching will identify a range of factors which have the potential to influence the development of lecturers conceptions of teaching. The research question of how conceptions of teaching are related to years of teaching experience will be addressed through the reporting many of the results in three categories of teaching experience, less than two years experience, between two and five years teaching experience and more than five years experience. The chapter will conclude with the results of a series of questions on the context of teacher education and development within the school.

5.1 Population Of Teaching Staff In The School Of Health Sciences

The academic staff within the Health Sciences School of an urban polytechnic was the population surveyed in this case study. The School consisted of four Departments broadly associated through their subject disciplines. Departments A and D taught programmes which lead to qualifications in health professions. The subjects taught in Department A were predominantly social science subjects, while those taught in Department D were predominantly natural sciences. Departments B and C taught programmes in environmental sciences. The School was managed by one Head of School with two Heads of Departments reporting to that position. One Head of Department was

responsible for Department A, the largest department, and the other was responsible for the other three smaller departments.

5.1.1 Gender Distribution

The gender distribution of teaching staff was weighted heavily towards women. This was due to two Departments within the School being associated with professions which have been women dominated historically. Table 5.1 shows an overall proportion of seventy five percent female staff with an even higher proportion evident when focussing on some Departments within the School. There were not enough males in some groups to make valid comparisons or statements on the basis of gender. There was also a likelihood that individuals might be identified if data were analysed by gender. Therefore, gender was not used as a variable in analysis of the research data. Table 5.1 also shows the number of lecturers who responded to the teacher questionnaire.

Table 5.1 : Gender Distribution of Teaching Staff Population and Sample Obtained

	Females		Males		Total	
	Population	**Sample respondents**	**Population**	**Sample respondents**	**Population**	**Sample respondents**
	(N)	(N)	(N)	(N)	(N)	(N)
Department A	41	38	3	2	44	40
Department B	4	3	10	6	14	9
Department C	4	4	2	1	6	5
Department D	7	3	0	0	7	3
Total	56	48	15	9	71	57

5.1.2 Length Of Tertiary Teaching Experience

Three categories of experience were identified and used as a major variable in analysing the questionnaire data. The population of the School staff was weighted towards longer experience in teaching. Length of continuous service teaching in tertiary institutions was used to analyse a number of questionnaire

responses, in order to identify possible differences related to teaching experience. If a transition in understanding teaching did occur, it was considered that a factor such as length of experience and proximity to training might be relevant. In reporting the data, lecturers with less that two years experience are sometimes referred to as new lecturers, those with two but less than five years experience as post probationary, (due to the fact that they had successfully completed an initial year of probation and were confirmed in their teaching positions) and those with five years or more as experienced lecturers.

Collection of data on length of service proved more difficult than first anticipated. At the time of this research, the Polytechnic was developing policy in response to the Privacy Act and was taking a cautious approach. Length of service details of academic staff in the School, within the three identified categories, was granted by one of the managers, on the condition that the information was only used for purposes of the research and that no individual be identified in the final reporting. Table 5.2 presents the data on length of tertiary teaching experience cross tabulated by department.

Table 5.2 : Length of Respondents Teaching Experience in Tertiary Institutions by Department

Department	Years of Teaching Experience			
	Less than 2yrs	2 yrs but <5yrs	5 years or more	Total
	(N)	(N)	(N)	(N)
Department A	6	5	29	40
Department B	1	2	6	9
Department C	1	2	2	5
Department D	0	0	3	3
Totals	8	9	40	57

5.1.3 Occupational Identity

Respondents were asked how they identify their current occupation on forms such as the electoral roll as an indication of their self reported professional identity. The question was asked because almost all Polytechnic teachers have more than one possible occupational identity, the discipline of the occupation from which they were recruited to teach as well as that of teacher. The question of whether Polytechnic teachers identify themselves as teachers or by their former occupation, and whether there are indications of a change in occupational identity related to time in teaching were considered as factors possibly related to approaches or transitions to approaches in teaching.

Table 5.3 : Self Reported Occupational Identity by Length of Teaching Experience

Stated Occupation	Length of Teaching Experience							
	Less than 2 Years		2 yrs but <5yrs		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Teacher	2	25	6	66.6	21	52.5	29	50.9
Subject specific Teacher	3	37.5	1	11.1	13	32.5	17	29.8
Subject related Occupation	3	37.5	2	22.2	5	12.5	10	17.5
No Response	0	0	0	0	1	2.5	1	1.8
Total	8	100	9	9	40	100	57	100

The nomenclature for Polytechnic teachers has undergone several changes in recent years. Responses such as tutor or lecturer have been grouped under the category of teacher which is used as a generic term for the occupation.

Table 5.3 shows that slightly more than half of the respondents report their occupational identity as teacher and indicates that over time people are more likely to identify themselves as teachers. Overall, a much smaller proportion (17.5%) identified with a subject specific occupation such as "registered nurse" or "civil engineer".

The strongest movement noted was within the group who identified as teachers and between those with less than two years experience and the post probationary group. Twenty five percent of new staff identified as teachers without any reference to their former occupation or discipline, and this rose sharply to sixty six percent of the post probationary group. There was a slight drop in the percentage of experienced lecturers who identified primarily as teachers with fifty two percent of that group identifying as "teacher" or "lecturer," or "tutor".

The post probationary group produced the most varied pattern of responses to this question. The new tutors demonstrated a greater tendency to identify with their discipline and former occupation while the experienced tutors showed more of a trend towards identifying as teachers or subject specific teachers. There was no identifiable trend within the post probationary group where 66% identified as teachers, 22% identified with their former occupation and only 11% identified in the middle group of subject specific teachers.

5.2 Teachers' Perceptions Of Teaching

Lecturers rated their perceptions of their approach to teaching and influences on teaching in the second section of the teacher questionnaire. There were four

categories within each of the two groups of items and several items pertaining to each category. The group of items on approaches to teaching contained four categories. These were student focus, teacher focus, information transmission and conceptual change. Appendices 4 and 5 present tables of lecturer responses to the questionnaire items on teacher perceptions of their approaches to teaching and influences on teaching.

5.2.1 Approaches To Teaching As Elements Of Conceptions Of Teaching

i Student Focus

The student focus items in the teacher questionnaire produced more varied results than any other group of items related to approaches to teaching. The varied results were evident both between items within the student focus category and between the different levels of teaching experience. The item where lecturers saw themselves as developing a conversation with the students about the topics they study was the only item on student focus which produced a strongly positive result. The experienced lecturers gave the strongest responses to the student focus factor overall. However, an unexpected result occurred with student focus item, when new lecturers rated themselves as on average more likely to use difficult or undefined examples to provoke debate in lectures, than either of the two other groups. New lecturers also gave a stronger response to the student focus items overall than their post probationary colleagues.

Lecturers in Department A gave the highest ratings on all three student focus items in the questionnaire. Lecturers in all departments tended to perceive themselves as trying to develop a conversation with students about the topics being studied. There was a tendency across all departments for lecturers to perceive themselves as not taking time in class for students to discuss amongst themselves, difficulties they are

encountering in studying this subject. The strongest general tendency across all departments was for lecturers to perceive themselves as not often using difficult or undefined examples to provoke debate.

ii Teacher Focus

There was a clear low response to items pertaining to the teacher focus items. The new lecturers gave the most teacher focussed responses generally, with the exception of the item TF19 where they produced the lowest score and the post probationary lecturers produced the highest average. Consistent ratings towards the negative end of the scale in all items which described teacher focus on the knowledge or expertise held by the lecturer indicated that this was not the type of approach that most lecturers believed they used.

There were generally low ratings on all teacher focus items across all departments. The department with the highest rating on all teacher focus items was Department B, a department which taught natural science subjects.

iii Information Transmission

The information transmission category produced the most consistent responses on all items clearly weighted towards the negative end of the scale. There was a similarly consistent trend away from information transmission as an approach to teaching which diminished with experience. There was, as with the categories already recorded, a consistent minority of between five and fifteen percent who identified information transmission as an approach to teaching that they used more than half of the time. There were generally low ratings, from all departments of self perception on all information transmission items in the questionnaire. Department B returned the highest ratings on all information transmission items.

iv Conceptual Change

There were mixed responses to items on conceptual change with the strongest negative response on CC25 which was the item referring to examinations as an opportunity for students to reveal their changed understanding. This item ought to be removed from consideration as many of the lecturers did not use examinations as an assessment strategy and there is a high possibility of bias in the responses, given the ideas about teaching that some lecturers stated in interviews. The other two items in the conceptual change category suggested that this was a frequently occurring approach within the school. Average responses between the levels of teaching experience showed a similar pattern across all items on conceptual change being rated as most frequently true for the post probationary group and least frequently true for those with less than two years teaching experience. Department A, the department teaching social sciences, rated themselves higher than their colleagues on two conceptual change items: the perceptions of encouraging students to restructure their existing knowledge in terms of new ways of thinking about the subject that they will develop and the perception that a lot of teaching time should be used to question students' ideas. There was a wide spread of responses, across departments, to the item rating a teacher belief that examinations should be an opportunity for students to reveal their changed conceptual understanding of a subject.

5.2.2 Influences On Teaching

The final section of the teacher questionnaire covered lecturers' perceptions on a range of possible influences on their teaching. The categories of influences on teaching about which data was collected were teaching control, class size, student characteristics and time pressure. Appendix 6 presents the results of lecturers perceptions of influences on their teaching.

i Teaching Control.

Lecturers generally felt a strong sense of control over what and how they taught. There was, however, a consistent minority of lecturers who considered they did not have a great deal of control over their teaching. The perception of teaching control tended to increase with experience, in three of the four items experienced lecturers reported the highest sense of control over their teaching. The one exception to this was a teacher control item where lecturers from the post probationary group responded with the highest average response on the perception of having a say in how their subject was run. When the teacher control items were crossed with departments there was a similar picture of a context where lecturers felt a sense of control over there teaching, but with a small minority from Department A who rated themselves as perceiving less control over their teaching.

ii Class Size

Responses to the items on class size gave the impression that lecturers attempted to not have large class sizes cause negative effects on student learning. This was indicated by the generally low ratings given to the two items which referred to teacher actions in relation to large classes, (CS27 and CS32). This contrasted with the higher overall rating given to the class size item, which was a more general statement about the possible impact of large classes on teaching. The lowest ratings on all items concerning the class size factor were returned by the post probationary group and the highest ratings from the new lecturers. The class size category produced similar results when rated against departments with a small response from all departments. A higher proportion of lecturers from each department perceived that large classes generally discouraged contact between themselves and students. The ratings on the two items which identified class size as an actual issue in their teaching, were lower across all departments.

iii Student Characteristics.

The generally low rating given to the first two items on student characteristics, (that students act as though the lecturer is a teacher at school rather than someone to assist their adult learning process and having a range of talent in classes makes directing teaching difficult), gave the impression that lecturers in the School, did not perceive the identified student characteristics as having a negative impact on their teaching. There was, however, a consistent minority similar to that in responses to the teaching control category who returned higher ratings on these items. The final item on student characteristics which asked for lecturers perceptions on their ability to assess student levels of knowledge, produced a more mixed response. The lecturers perceived themselves as having difficulty predicting what students know and don't know, to a greater extent than on either of the other items related to this category. The post probationary group of lecturers responded with the lowest ratings on all student characteristics items. The experienced lecturers rated themselves as more likely than the other groups to have difficulty in predicting what the students did and did not know, and most likely to think that students acted as though they were teachers at school rather than facilitators of adult learning. The experienced lecturers, however, had less difficulty in directing their teaching with the range of talent in their classes than the new lecturers. Similarly, two items on student characteristics (SC22 and SC33) received low rating across all departments. Departments A, (social sciences) and B, (natural sciences, returned a higher rating on the student characteristics item, "students have such variable skills that it is difficult to predict what they know and what they don't know."

iv Time Pressure

Time pressure did not appear to be a serious issue for the majority of respondents. There was the consistent minority of slightly less than 20% of lecturers who did find time pressure an issue more than half the time. Time pressure was the greatest issue for new lecturers and the least issue, comparatively, for post probationary lecturers. This issue will be followed up more fully in the interview results which will show that time pressure was perceived as an important issue for some lecturers. While time pressure received a low rating across all departments, it was rated as a slightly more important factor by lecturers in Department A than by lecturers in the other departments.

5.3 Teacher Development In The School

The first section of the teacher questionnaire gathered data from lecturers about their experiences of learning about teaching. Responses were analysed by frequency and cross tabulated against length of employment in tertiary teaching.

5.3.1 Teacher Education

A policy change in relation to the provision of initial teacher education had taken place in the years immediately preceding this research, in the context of a changed funding environment which was a result of the education reforms (see Chapter 4). The data gathered were used to identify lecturers' experiences in learning about teaching and their teacher development experience both in relation to different career points and to identify relationships between experiences of learning about teaching and conceptions of teaching.

Respondents were asked to identify any combination of providers through which they had received teacher education from a list of five possibilities. Different experiences in formal teacher education activities were identified. The results of this closed question are presented in the table below.

Table 5.4 : Sources of Teacher Education by Length of Teaching Experience

Source of Teacher Education	Length of Teaching Experience							
	Less than 2 Years		2yrs but <5 Yrs		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
TEC	0	0	4	44.4	9	22.5	13	22.8
Within Polytech	4	50	0	0	3	7.5	7	12.2
TEC+Poly	1	12.5	4	44.4	17	42.5	22	38.5
College of Educ.	0	0	0	0	1	2.5	1	1.8
TEC + COE	0	0	0	0	1	2.5	1	1.8
Poly + COE	0	0	0	0	2	5	2	3.5
TEC+Poly+COE	0	0	0	0	4	10	4	7
Other	3	37.5	1	11.1	3	7.5	7	12.3
Total	8	100	9	100	40	100	57	100

The most frequently occurring source of teacher education undertaken by lecturers within the School was the regional Tutor Education Centre (TEC). Forty respondents (70%) had taken part in formal teacher training programmes at the TEC. However when considered against time in teaching, participation in programmes run by a regional unit had diminished significantly. Eight of the nine post probationary tutors (88%) had participated in TEC programmes while none of the eight lecturers with less than two years experience had participated in these programmes.

The second most frequently occurring source of teacher education was the Staff Development Unit within the Polytechnic. This was the most frequent source of teacher education for new tutors and in the political context of institutional autonomy is likely to become the predominant provider of teacher education for new staff in the future.

The experienced and the post probationary groups both indicated a mix of involvement in teacher education programmes including those offered within their institution and those from TEC which is external to the polytechnic. The trend indicates that new lecturers are possibly less likely to interact with colleagues teaching the same subjects in other institutions during the course of their initial teacher education than they have been in the past.

Other sources of formal teacher education were evident. Nine lecturers had attended a College of Education. T he other source of teacher education identified by respondents in all categories of experience was the completion of University papers in disciplines of Education and Psychology.

5.3.2 Teacher Perceptions Of Most Valuable Sources Of Learning About Teaching

Respondents were asked to identify their most valued experiences of learning about teaching in two closed questions which gave four choices of sources of learning about teaching identified from the literature. These questions sought to identify trends in teachers perceptions of how they learned about teaching and to see if there were any changing patterns related to time in teaching. These responses were also analysed by frequency and cross tabulated against time in teaching.

Table 5.5 : Most Valued Source of Learning About Teaching in Last Two Years

Source of Learning	Length of Teaching Experience							
	Less than 2 Years		2yrs but <5 Years		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Can't Recall	0	0	1	11	2	5	3	5.2
Prof. Dev. Activities	2	25	3	33	9	22	14	24.5
Discussions with Colleagues	2	25	2	22	10	25	14	24.5
Student Feedback	1	13	2	22	10	25	13	22.8
Articles and Books	2	25	0	0	2	5	4	7
Other.	1	13	1	11	7	17.5	9	15
Total	8	100	9	100	40	100	57	100

There was a wide range of responses to the question of the most valued source of learning about teaching in the last two years. In total similar proportions of response between two items; professional development activities and discussions with colleagues. Student feedback was valued less by the new lecturers than by their more experienced colleagues. Slightly different patterns of response were evident within the three different levels of teaching experience. Half of the group with more than five years experience showed a similar proportion of responses between selecting discussions with colleagues and feedback from students as their most valued recent experience of learning about teaching. These responses were very closely followed by professional development activities within this group. While those with less than two years experience showed a wide range of responses, this group had a higher

proportion selecting literature as a valuable source of learning about teaching than either of the other groups.

The most frequently identified other source of learning about teaching was university study in the disciplines of education or psychology. This provided a valued source of learning about teaching for a small proportion (7%) of teachers.

Table 5.6 : Most Valued Source of Learning About Teaching Over Whole Career

Source of Learning	Years Of Teaching Experience							
	Less than 2 Years		2yrs but <5 Years		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Can't Recall	0	0	0	0	1	2.5	1	1.8
Prof. Dev. Activities	2	25	4	44.4	16	40	22	38.5
Discussions with Colleagues	2	25	3	33.3	9	22.5	14	24.5
Student Feedback	2	25	2	22.2	7	17.5	11	19.3
Articles and Books	1	12.5	0	0	2	5	3	5.2
Other.	1	12.5	0	0	5	12.5	6	10.5
Total	8	100	9	100	40	100	57	100

A different pattern of response occurred when the same question was asked in relation to the respondent's whole career. Those with five years experience or more, being the largest group in the population, influenced the overall results. While professional development activities were the most frequently recurring response overall, there were different patterns of distribution within the groups. The range of distribution of sources of learning about teaching within the group

of new lecturers shows quite a contrast with the experienced lecturers and the post probationary group who tended towards formal professional development activities.

Formal professional development activities were also most frequently mentioned when respondents were asked to describe their perception of their most valuable experience of learning about teaching in an open question. Categories generated by the researcher from the responses matched the categories of the previous closed questions although respondents provided more descriptive detail of the activities they identified. There was an equal number of favourable comment on regional Tutor Education Centre (TEC) courses and in house courses provided by the School or Department. Some respondents described the value they attributed to identified formal professional development activities when answering the open question.

> *" TEC was really good in providing practical and theoretical insights and knowledge; not just into teaching but into learning and life generally." (L30, Experienced Lecturer, Department A)*

> *"TEC was particularly valuable in that it put you in contact with teachers from around New Zealand. Discussion with them and formal teaching was a valuable learning experience." (L26, Experienced Lecturer, Department C)*

Several lecturers mentioned in house staff development activities as their most valuable source of learning about teaching.

> *"Visiting academics in the School such as the people from Alverno Nursing School in the USA and Dr. A. B, a visiting academic from Melbourne. There were others. But I have to add this was very valuable only in conjunction with other sources -*

colleagues, students etc." (L03, Experienced Lecturer, Department A)

The second most frequently occurring response to the open question seeking description of the most valuable source of learning about teaching was discussions with colleagues

"Discussion groups in which we discussed episodes from teaching experiences and methods which had been particularly beneficial." (L49, Experienced Lecturer, Department A)

"Discussion leading to experimentation in the classroom setting. This may be followed up with further discussion or on rare occasions a journal entry." (L51, Experienced Lecturer, Department A))

"Observation of people I consider as experts in teaching practice. Followed up with discussion and their observation of me to a lesser extent." (L21, Experienced Lecturer, Department B)

Feedback from students, in various forms followed closely behind discussions with colleagues as a most valuable source of learning about teaching. In the following examples lecturers describe their experiences of learning about teaching from their students.

"The students will show you how what you wanted to achieve is for them, and what I value as a lecturer they may see differently. Our concepts and their reality may be out of step with each other. Therefore I need to move/change." (L22, Experienced Lecturer, Department A.)

> *"Discussion with students throughout the time we are in contact has given me the opportunity to ascertain what works for them and their learning and then develop this further, rather than pursuing 'dead ends.' Each group is different, so I find I am constantly seeking student feedback to develop a teaching/learning relationship." (L05, Post probationary lecturer in Department A)*

Other responses referred to feedback from students as a source of learning about teaching too.

> *"I try to modify and respond to identified weaknesses in particular from feedback and to improve positive traits." (L31, Experienced Lecturer, Department A)*

> *"I learn from students every day and believe they are our greatest teachers." (L24, Experienced Lecturer, Department A)*

Three lecturers identified particular reading material as their most valuable source of learning about teaching.

A remaining different group of responses identified other sources of learning about teaching as most valuable to them.

> *"I have always experimented with teaching methods, guided partly by reading, partly by discussion with peers, partly by experiential training, mostly by the response of students. Excitement, intrigue, amusement, willing attendance and evidence of learning are the main criterion." (L48, Experienced Lecturer, Department A)*

"Hands on teaching, individual research, reading and preparation for teaching. Gaining confidence from teaching, gaining experience from teaching. Feedback from students. Intuitive knowledge as to how successful your teaching is." (L32, Post probationary lecturer in Department A)

"No specific time but in particular conferences and trips to other Polytechnics around the country on Tutor Refreshment Leave. Visited all Polytechnics in 1992 and all Social Science people. It was excellent." (L10, Experienced Lecturer, Department A)

5.3.3 Recency Of Most Valuable Experience Of Learning About Teaching

Respondents were asked to identify how recently their most valuable experience of learning about teaching occurred. This question was analysed by frequency and cross tabulated against time in teaching. The results are presented in the table below.

Table 5.7 : Recency of Most Valued Source of Learning About Teaching

Recency of Experience	Length of Teaching Experience							
	Less than 2 Years		2yrs but <5 Years		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
No Response	2	25	1	11.1	3	7.5	6	10.5
Less than one Year Ago	2	25	2	22.2	2	5	6	10.5
Between 1 and 2 years ago	1	12.5	1	11.1	4	10	6	10.5
Between 2 and 5 years ago	1	12.5	2	22.2	12	30	15	26.3
More than 5 years ago	1	12.5	0	0	6	15	7	12.2
On going	1	12.5	3	33.3	13	32.5	17	29.8
Total	8	100	9	100	40	100	57	100

This was asked as a closed question within the questionnaire. While there were no problems with this question in the questionnaire pilot, the 10% no response suggests that this question may have been better put as an open question.

The most frequently occurring response was "ongoing" This word was added to the response category by those who selected this item. This response suggests a context in which learning about teaching is an ongoing process.

Three people with less than two years tertiary teaching experience identified their most valuable experience of learning about teaching as having occurred more than two years ago. This suggests that the experiences of most value to some people do not occur within the employment context. However, teachers

with five years experience or more were almost equally as likely to have had their most significant experience of learning about teaching two to five years ago.

5.3.4 Help With Problems In Teaching

The next three tables report the results of three closed questions on the subject of how lecturers handled problems in teaching. These responses gave an impression of the day to day context of dealing with them, where people would go in the first instance and their satisfaction with access to resources and assistance. By cross tabulating these questions with the variable of time in teaching, as with the other questions, it was possible to identify different patterns related to length of service.

Table 5.8 : First Consultation for Help With Problems in Teaching

	Length of Teaching Experience							
	Less than 2 Years		**2yrs but < 5 Yrs**		**5Years or more**		**Total**	
	(N)	**(%)**	**(N)**	**(%)**	**(N)**	**(%)**	**(N)**	**(%)**
A Staff Development Tutor	0	0	0	0	3	7.5	4	7
A Colleague	5	62.5	8	88.8	32	80	45	78.9
Literature about Teaching	0	0	0	0	0	0	0	0
Students	3	37.5	1	11.1	4	10	8	14
Other	0	0	0	0	1	2.5	1	1.8
Total	8	100	9	100	40	100	57	100

There was a marked tendency across all groups to consult a colleague in the first instance. This response was selected by 77% overall and was a clear first choice. Students were the second most frequently identified first consultation within all groups. This response was proportionately higher within the group of new lecturers than those with more experience. Post probationary lecturers almost exclusively chose a colleague. Teachers with five years experience or more were the only ones to choose a Staff Development Tutor and were nearly as likely to do that as choose students.

Table 5.9 presents responses to a question which seeks to identify how easily lecturers perceive they can access resources when they encounter problems.

Table 5.9 : Time it takes to Access Resources When Problems Arise in Teaching

Time to Access Resources	Length of Teaching Experience							
	Less than 2 Years		2yrs but <5 Years		5 Years or more		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
No Response	0	0	0	0	1	2.5	1	1.8
Immediately as Problems Arise	4	50	3	33.3	11	27.5	18	31.5
Within a Few Days	3	3.75	4	44.4	18	45	25	43.8
Within a Few Weeks	0	0	0	0	1	2.5	1	1.8
With Difficulty	1	12.5	1	11.1	3	7.5	5	8.7
Resources not Needed	0	0	1	11.1	6	15	7	12.2
Total	8	100	9	100	40	100	57	100

Most lecturers appeared satisfied that they could access resources when problems arose either immediately or within a few days. However, the five people who responded that they generally found it difficult to access resources ought to be noted. Those experiencing such difficulties came from all three categories of experience.

A related question was asked which asked respondents to identify the time it took them to access help when problems arose in their teaching.

Table 5.10 : Time it takes to Access Assistance When Problems Arise in Teaching

Time to Access Assistance	Length of Teaching Experience							
	Less than 2 Years		2 to 5 Years		More than 5 Years		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
No Response	1	12.5	0	0	1	2.5	2	3.5
Immediately as Problems Arise	3	37.5	5	55.5	15	37.5	23	40.3
Within a Few Days	3	37.5	2	22.2	18	45	23	40.3
Within a Few Weeks	1	12.5	1	11.1	0	0	2	3.5
With Difficulty	0	0	0	0	3	7.5	3	5.3
Assistance not Needed	0	0	1	11.1	2	5	3	5.3
Depends on the Problem	0	0	0	0	1	2.5	1	1.8
Total	8	100	9	100	40	100	57	100

There was a general level of satisfaction with the ease with which assistance could be accessed if needed with teaching. Eighty percent of lecturers believed they could access assistance immediately or within a few days. Similar to the question on access to resources, there was a small number of people who experienced difficulty accessing help when they encountered problems. The number experiencing difficulty locating help was smaller, (three people) and they all came from the most experienced group of teachers.

5.3.5 Professional Development Time

A series of questions on Professional Development Time (PDT) provided an opportunity to gain quantitative data on the issue from a particular context, and further background description of the context of this case study. Lecturers were asked four closed questions about their use of PDT. These questions were analysed by the mean rating in each experience category being compared with the midpoint on the scale (see Appendix 7).

There was a fairly even response spread across all three categories of experience for the use of PDT to catch up on regular work overload such as marking, which indicated that lecturers were not likely to use their PDT to catch up on overload.

Lecturers in all experience categories were likely to use their PDT to catch up on new developments in their discipline. Post probationary lecturers were more likely than their colleagues in the other categories of experience to use their PDT to improve aspects of their teaching.

The experienced and post probationary lecturers experienced their PDT being absorbed into their regular workload while the new lecturers did not.

The post probationary lecturers provided an interesting response pattern with a higher average than the other groups, and an accompanying higher standard deviation on the subject development item and the final item of PDT becoming

absorbed into their regular workload. This indicates a greater spread of responses within this group to these items and may be an artefact of the small sample size.

5.4 Summary

The demographic composition of the School of Health Sciences was weighted towards female lecturers with five years or more teaching experience. More experienced lecturers identified their occupational identity as either 'teacher' or 'subject specific teacher' than identified as a subject related occupation. New lecturers had the highest proportion of lecturers identifying with a subject related discipline.

Focus on students ratings were higher amongst experienced lecturers. New lecturers, correspondingly, gave generally higher ratings on teacher focus. One of the departments where natural sciences were taught returned higher ratings than the other three departments on all teacher focus items.

An information transmission approach to teaching was identified less frequently as teaching experience increased. Teaching for conceptual change produced mixed results with the post probationary group returning the highest rating on one conceptual change item. New lecturers were least likely to teach for conceptual change.

A strong perception of teaching control was identified throughout the School and tended to increase with experience. Large classes posed greater difficulties in communicating with students for lecturers with less experience. In an unexpected result, experienced lecturers rated themselves as more likely to have difficulty in predicting what students did and didn't know. While time pressure was not rated as a big issue amongst respondents generally, it was a more important issue amongst new lecturers.

The majority of the lecturers had received initial teacher education at a regional tutor education centre but there was an increasing trend for new staff to receive initial teacher education within the polytechnic, through the Staff Development Unit.

Professional development activities and discussions with colleagues were rated as the most valuable sources of learning about teaching in the last two years by most lecturers. These were followed closely by student feedback. New lecturers identified a wider range of sources of learning about teaching than there more experienced colleagues who tended to attribute the highest value to professional development activities. Learning about teaching was frequently identified as an ongoing activity, but two thirds of the respondents were able to locate a particular experience in time, which they valued highly.

A generally supportive context. was indicated by responses to items on help with problems in teaching and time it takes to access assistance when required.

Professional Development Time (PDT) tended not to be used to catch up on overload, and to be used to develop aspects of teaching mainly by post probationary lecturers. Both experienced and post probationary lecturers perceived their PDT to be absorbed by their regular workload but this was not true for the new lecturers.

Chapter 6 : Teacher Interviews

This chapter provides information generated from semi structured interviews with lecturers in the School of Health Sciences. The range of courses selected by the teachers for focus reflected the range of offerings within the School at that time. The majority of courses selected for discussion were core components of qualifications which included certificates, diplomas, degrees, and a mix of local and national qualifications. There was wide variation in the size of courses in terms of duration, credit value and number of students. The courses of shorter duration tended to be at certificate level, while larger courses in terms of duration and credit value tended to be at degree level. Class sizes showed wide variations within qualifications.

Themes which emerged from lecturers responses to open questions about their teaching practice and development were grouped, for reporting purposes, into categories which related to the research questions.

6.1 Conceptions Of Teaching

The interview questions were open in order to reduce any influence on responses. Lecturers were encouraged to describe the course they had selected for discussion and then move into more general discussion on their experiences of developing and teaching the course. Three major themes, related to conceptions of teaching, emerged from the interviews. These were teaching as transmitting knowledge, teaching as facilitation and teaching as effecting changes in students. Each of these is discussed below, as they occurred in the interviews.

6.1.1 Teaching As Transmitting Knowledge

Lecturers from all of the three categories of experience made direct references to teaching as transmitting knowledge. All who made such reference described this conception of teaching as undesirable or as presenting a limited view of teaching. Most references were made from the basis of personal experience

where lecturers stated that either prior to their teaching careers or in some instances, during earlier stages of their teaching experience, they had understood teaching as the transmission of knowledge. In all instances where transmission of knowledge was mentioned, lecturers referred to a change in their own experience or conception of teaching, from a position of knowledge transmission to something different. Several lecturers referred to their own experience as students where they had often been taught by lecturers talking at them, (which they had accepted as satisfactory practice in their own earlier experience as students), and referred to differences in how they now believed their subjects ought to be taught as a result of their own teaching practice.

> *"Going back to my training I guess I come from a background of expecting didactic teaching .... and I also came in my teaching to see the great advantage and perhaps benefit of inquiry based project work. ... I was lazy as a student, I liked to be fed stuff. If anybody said go away and look it up or do anything like that, I'd think oh hell. It was laziness really. But as a teacher, I can see the value in getting people to inquire (3A3)"*

In this instance while strong negative values towards "didactic teaching" were expressed, there had been an implicit sense of comfort at having been on the receiving end of such teaching in the past, possibly in the absence of any alternatives. This lecturer was also reflecting on the experience of beginning to teach within an inquiry learning curriculum framework which had provided a possibility of viewing teaching from a different perspective.

Another lecturer volunteered the view that teaching was something more than transmitting knowledge and implied that this enhanced view of teaching was related to the polytechnic setting by referring to having taught that way in a different setting.

> *"Well teaching is something more than dissipating knowledge which we did in the hospital setting ... I normally try to get the students to focus on the important points, let them know what is important and go from there. Then to get their interest I normally try to relate the topic to practice." (2B4)*

The belief that teaching was something more than the transmission of knowledge occurred, in this instance, without the articulation of a different conceptual framework through which teaching might be understood. The lecturer was able to describe a set of techniques, learned through practice, which added variety to teaching in attempts to hold the students' interest.

Other lecturers who talked about their own earlier teaching experience, when they had approached teaching as transmitting knowledge, claimed they had changed their conception of teaching as a consequence of particular experiences in their teaching careers. One lecturer who was a first year teacher described a change process which was occurring at the time of the interviews as a consequence of reflection on student responses to teaching.

> *"I've tried to cram too much in my enthusiasm for wanting to deliver a lot of knowledge. But I'm actually better to slow down and get them to pick up learning skills rather than me just stuffing this knowledge into them." (1C1)*

In this instance the development of changes in understanding teaching seemed to arise directly from observation of student engagement with their subject matter. The enthusiastic intention of a novice teacher to transmit vast quantities of knowledge had been tempered by apparent limitations of students in acquiring the knowledge. The lecturer was aware of a definite shift in focus from the content of the material being delivered, to the students and their engagement

with the subject matter. This was occurring within the first year of teaching and in a context without a specifically identified curriculum framework.

There were instances where lecturers felt "content driven" and did not give any further indications of different conceptions of teaching. This view occurred within the new and post probationary groups.

Several lecturers questioned what students might be learning from a knowledge transmission approach to teaching. One lecturer pointed out limitations of a knowledge transmission conception of teaching:

> *"if I stand out there and teach them a lot of facts, they might be writing them down, they might be reading them in the future - but what are they learning ? They're learning to sit in front of a lecturer while she talks." (2A2)*

New lecturers referred more to teaching as transmitting knowledge but identified problems and inadequacy of such a conception in relation to student learning. New lecturers attention to these issues tended to focus on different teaching techniques which were perceived as superior to giving lectures. One new lecturer commented:

> *"I feel that it is an awful lot of information to get here and the students try to assimilate it in nine weeks and it's too quick for them. It gives no time for reflective learning." (1C1)*

There were clear statements from a majority of lecturers at all identified experience levels within all disciplines interviewed, that teaching as transmitting knowledge presented a limited view of teaching. In summary, three distinct perceptions of knowledge transmission as a way of teaching were articulated in the lecturer interviews. All three expressed perceptions considered such an

approach to teaching as inadequate. The first perception was that knowledge transmission was a limited approach to teaching but that other constraints such as the time available to teach particular courses and the amount of content in the courses meant that lecturers had little choice but to adopt this approach. The second perception was that it was an inadequate approach to teaching and that other techniques ought to be employed to retain student interest and to relate their academic learning to practical, vocational experience. The third perception considered information transmission, lecturing or didactic teaching as boring and inadequate for both students and teachers and articulated different approaches and curriculum frameworks which were understood to be more effective.

6.1.2 Teaching As Facilitation

The identification of teaching as facilitation was a theme which occurred within all categories of experience. The nature of facilitation was often presented as a contrast to didactic teaching, or as a more developed conception of teaching than knowledge transmission, rather than being specifically defined.

A sense of dissatisfaction with a knowledge transmission approach was frequently expressed by experienced lecturers. This contributed to the search for and development of more facilitative approaches to teaching. The quotation which follows articulates this widely held view and reflects a self interest on the part of teachers.

> *"After a while you burn out with chalk and talk - it's just too much one way delivery, it's not as satisfying...so I really enjoy the facilitating process." (3B2)*

One new lecturer had inherited a course which was designed in a problem based learning framework. In describing the curriculum framework, the lecturer described an understanding of teaching as a form of facilitation.

"The programme was already set up and it's a problem based learning arrangement where they set a scenario for the student which will hopefully be thoroughly realistic ..... So your role as a tutor is to sort of facilitate them going through the group process, figuring out what the issues and challenges are and the they actually go away and do some library work and network around a community, work as a group, come back and give feedback. So it's kind of a different way of teaching. (1A4)"

This example was contributed by a lecturer in the first year of teaching. The problem based learning curriculum had been explained to the new lecturer and a mentor/buddy was available to give assistance with any challenges in teaching which might have arisen. The example shows that the new lecturer had a fairly good idea of the teacher role in a problem based learning course. This suggests that new lecturers did not always expect to be lecturing or merely transmitting knowledge, but rather, in some instances they saw themselves engaging in a complex set of relationships designed to facilitate learning.

An experienced lecturer identified the idea of teacher as a facilitator as one which had been held for many years and had evolved from observing other teachers:

"I guess I always saw teaching as a sort of facilitation, you know the role of a facilitator - rather than - I didn't like people, or I didn't like the behaviour that went with the sort of teacher who commanded people and told them 'this is the way you shall do it.' ...I didn't like that sort of behaviour." (3N3)

Facilitation remained a term without clear definition but was used frequently to describe an approach to teaching. Two elements of the term could be

distinguished. The first, which has already been mentioned, was as an understanding of teaching that stood in contrast to a knowledge transmission conception. The second distinguishing feature followed the first, in a developmental sense, in that it gave stronger emphasis to the active involvement of students in the teaching learning relationship. This is most clearly expressed by the lecturer who described an understanding of an approach to teaching in a problem based learning course which was developed by someone else. Other lecturers, who described facilitation as a preferred way of teaching, referred to the relationship of student learning to the process of teaching.

6.1.3 Changes In Students

Changes observed in students as a result of participation in the courses under discussion was a further result from the interviews. There were several instances where lecturers in the post probationary and experienced groups, identified changes in students understanding which they either expected or observed as a result of the students participation in the course being discussed.

> *"Changes in their thinking, their way of seeing nursing. Really that they'll go on thinking. That's the biggest change, that they don't feel they've learnt it all. I'd say that they leave as a novice expert, if you see what I mean, or beginning practitioner however Benner defines it. And they go on from there...That they don't see themselves as 'oh I know all there is to know about nursing now...I'm trained.' ...I see that as the biggest change...They come in expecting to sort of go out as a finished off nurse, and hopefully they'll learn that they're only just beginning and that they only have a shadow of knowledge." (3A3)*

In this instance the lecturer was hoping that the students had developed a disposition towards inquiry. The major learning for students was perceived as a shift from expecting that a certain *amount* of knowledge needed to be acquired

for the student to qualify professionally, to an attitude of seeking continual learning from experience without any specified end point. The student needed to be prepared to deal skilfully with uncertainty. Consequently, the educative process was understood to be primarily involved with dispelling ideas of quantities of learning as being sufficient.

Another instance of changes in student thinking was described more specifically.

> *"One of the things that I was saying to myself all the time was I hope I can make a wee shift in their ideas, I hope I can move them on a bit. So I had that shift in mind....I always had this idea if I could open them up to new ideas, and a lot of them. The feminist perspective initially they said it was a whole lot of rubbish and they weren't oppressed and all that sort of stuff... And then they started to read and think about it and they were starting to use the language a little bit -well perhaps we need to look at the system that we work in, and how it serves us and doesn't serve us and things like that.'" (2A2)*

What this lecturer identified as "a shift in their ideas," is an example of a change in understanding, the type of learning outcome sought by Ramsden's Theory 3 conception of teaching. This was one of several examples where the lecturer described teaching as seeking transformative learning experiences which would challenge students existing ways of thinking and bring about new ways of seeing the world and interacting with their experience. The feminist example was one instance of a range of examples of teaching for conceptual change with a student focussed approach.

6.2 Conceptions Of Teaching Related To Years Of Teaching Experience

This section reports on lecturers' accounts of aspects of their teaching practice. At times conceptions of teaching are stated explicitly and at other times they are implicit in the lecturers' accounts of their practice. The material is presented in sections related to the categories of experience in order to draw distinctions between them.

6.2.1 New Lecturers

All of the new lecturers indicated that they regarded their teaching role as something different from the transmission of knowledge. They did not specifically articulate a definite conception of teaching but expressed partial conceptions by identifying the challenges they were encountering in their teaching. An implicit desire to move beyond knowledge transmission is evident in the quotation below.

> *"too much information and too little time to allow for reflective learning." (1H1)*

Another new lecturer saw her role as helping

> *"students to make sense of their own experience" (1N2).*

The same lecturer considered that it was important that the teacher not impose her own ideas on the students but allowed the students some say in the form and sequence of their learning.

> *"... it was right that each group chose their own topic because it had meaning for them. Even though they didn't understand right at the beginning what those concepts meant, it was right for them to have chosen their topic.....I didn't want to force anything on people." (1N2)*

This statement was representative of a number of statements by this lecturer, related to giving choice or responsibility to students. No formal theories of teaching or learning were identified, but there was repeated evidence of intention to be facilitative.

One new lecturer who was concerned about the high level of content in an inherited course stated that, regrettably, the course had to be taught predominantly by lectures. However at the same time she noted that with most sessions timetabled for two hours it was too long for most of the students to concentrate. She made considerable efforts to introduce discussions and practical activities to break up the time and hold the students interest.

All four new lecturers were teaching courses which had been designed and developed by others. A frequently occurring problem cited by new lecturers was the perception that there was too much content to be covered within the duration of the course. This concern suggested the possibility of an underlying quantitative perspective on student knowledge acquisition despite repeated claims that knowledge transmission was not a favoured approach to teaching.

One new lecturer taught a course which dealt with the development of self awareness and awareness of difference. She spent early stages "breaking the ice" encouraging students to participate verbally. She described herself as modelling openness and self disclosure and was willing to discuss social issues which could be viewed as personally contentious. In later stages of the course, students were expected to present their own ideas of various social values, in an

open forum of peers and lecturers. The approach described was generally facilitative and intentions of changes in students understanding were evident.

Another new lecturer stated quite clearly that her role was to

> *"facilitate the students going through the group process, figuring out what the issues and challenges are," (1A4)*

before the students went away to work in groups to solve problems. This lecturer was also able to clearly articulate expectations of changes in students within the context of the course she was teaching.

In summary, the new lecturers did not perceive themselves to be teaching from a knowledge transmission conception of teaching. While identified problems such as inadequate time to cover course material suggest some elements of a knowledge transmission approach, it was clear that the new lecturers all perceived teaching as something more than this. In most instances new lecturers were not able to articulate a different understanding of teaching, but there was clear evidence that they were striving for new understanding through reflection on their practice and discussions with colleagues.

6.2.2 Post Probationary Lecturers

The lecturers with between three and five years experience presented a wider range of perception of guidelines and constraints to course development. These experiences contributed to a broader range of conceptions of teaching within the group. Most of this group of lecturers regarded writing their course handbooks as a guideline for course design, however, attitudes and interpretations of the handbook writing exercise showed great variation. The post probationary group contained the broadest range of approaches to teaching evident within any single category of experience. An example of this range is given below in the context of a discussion on writing course handbooks.

> *"We were guided quite specifically as to what we had to put in - such specific things as learning outcomes, to use the right phraseology, starting of course with the purpose, going through learning outcomes, performance criteria and then identifying the delivery mode that we intend to use, which might otherwise be called the teaching or learning approach. And then the assessment schedule. And I guess really there's no simple way in which you can solve these difficulties. Terminology is critical in terms of performance criteria." (2B1)*

Another lecturer interpreted the practice of writing a course handbook in a far more autonomous way.

> *"I felt very free. I had to have the learning outcomes from the curriculum, obviously. Whether that is a constraint or not, they're there. ...People said 'go for it'. When I said I'm not going to have any lectures because I've got a small group, people were ecstatic and so was I. I see my strengths in clinical nursing..... So I'm going to make everything that I give the students related to practice. I was lucky again because these students could all refer to practice.....So I wanted to offer them ideas instead of justifying existing ideas. And I felt I got a lot of support and very little restrictions put on me apart from the fact that I had to work with an existing curriculum." (2N2)*

Another factor which was the subject of varying perceptions within this group of lecturers was the concept of inquiry learning. The concept was frequently referred to as the "delivery mode" for teaching degree programmes within the School. Various understandings of inquiry learning were communicated. There was a general endorsement of the notion of inquiry learning, in addition to

concerns that it may not suit all students or all courses. There were implicit statements that problems had occurred with an overall adoption of an inquiry learning approach. One concern related to the perceived lack of structure for students in the first year of their studies. An opinion was expressed that while the teaching staff were very excited about adopting an inquiry learning approach, the method became emphasised over students' needs and requirements.

> *"In my opinion, the tool became the emphasis rather than the student, in that the student had to fit the tool rather than having the student moving into and knowing how to use this tool appropriately. So for two reasons I think the students were very frustrated. Some came with the idea of wanting more structure and others felt they got too much of one thing." (2A3)*

Another post probationary lecturer had a different perception and experience of inquiry learning.

> *"I've learned that the inquiry approach is one way of teaching that can be very successful and take the students beyond the learning outcomes. I think in some sense they did go beyond the learning outcomes ..... although all the students didn't take to it, I think the students felt freed up, and I think they felt less tired too. .....They didn't feel that they were being shunted down particular paths. I think there was a sense that the students felt some control over what was going on." (2A2)*

Inquiries, in this instance were based on broad concepts like "health" and "culture." Learning outcomes were mainly concerned with introduction to broad concepts and conceptual models. The lecturer wanted the students to come out of the course knowing that concepts such as "health" were complex and to gain

that understanding through inquiry. The lecturer considered that books of readings didn't sit well with inquiry learning but gave them the occasional journal articles because they were new students. Students would work in groups for three hours per week on their inquiry and then present back to the group in a further three hours. Creative presentations, were encouraged. Most presented posters which the lecturer implied she found disappointing. Clearly articulated expectations of changes in students' understanding were evident in this instance.

While the approach was perceived useful to most students, another lecturer had a concern that some may not have understood essential factual material, such as the lungs having a double blood supply. The lecturer stated it was difficult to keep track of all the students learning, while they were following their own lines of inquiry. This concern arose in a context of a subject area where students needed to acquire a certain amount of factual knowledge (by transmission) before they could proceed with other levels of learning for understanding. The problem was being addressed by adding more structure to tutorials. This lecturer described teaching large classes of 150 students in a lecture theatre booked for one hour per week. Students used a comprehensive textbook, which the lecturer considered would be useful to them in years to come, as a resource. The lecturer identified lectures as a means to guide the students through topic. Lectures were complemented by tutorials, but attendance at these had diminished in the second semester, to only mature students and those with A and B grades, who the lecturer considered probably didn't really need to attend anyway. In tutorials, different activities were provided. Sometimes students come with questions about something they didn't understand.

> *"Or I give them something to read and they have to find out information, or I pose a problem. Sometimes to make it light I'll do a crossword to get them used to the terminology and add meaning to it. Sometimes I get a video with a sort of self test." (2B4)*

The lecturer acknowledged problems with the choice of activities and thought that the activities ought to be a bit more student directed. The course had previously consisted of a mix of straight lectures and tutorials. The lecturer was attempting to allow students more autonomy in their learning. A different approach to tutorials had been attempted to achieve this.

> *"Tutorials came in the form of trying to get the students to be facilitators and for the lecturers to sit back and let the students take over." (2B4)*

This attempt was reported as being completely unsuccessful in the first semester that it was attempted. The lecturer believed this was due to lack of structure. In the following semester, structure was provided in the form of students writing their names in the first tutorial, against a date for which they would be responsible. The students seemed to do better with this structure. In the first semester, lecturers tried to get them to do exercises, where students would take a trigger or focus from the lecture and then talk about it. But most students sat and didn't say anything, and that meant the lecturer had to keep intervening. This was an example of the problems of approaching teaching as organising student activity.

The other post probationary lecturer openly acknowledged a perception of being "content driven" and consequently using a knowledge transmission approach. This was perceived as the easiest approach for the lecturer. There was an implicit suggestion that the lecturer considered the students might be dissatisfied with some aspects of the course but this was not elaborated on. There was a comment that students responded favourably to site visits which occurred as part of the course.

6.2.3 Experienced Lecturers

The group of lecturers with more than five years experience were more consistent than either of the other groups in articulating their conceptions of teaching. They all identified earlier times in their teaching careers when they had lectured from a knowledge transmission perspective and were able to identify events or influences in their teaching careers which had contributed to changes in their teaching practice and understanding of their practice. A regularly occurring theme which emerged from the experienced lecturers as a catalyst for this change was the experience of dissatisfaction with knowledge transmission teaching.

> *"I can remember first starting to teach, being dumped into teaching at X Hospital ..... and how we stayed up all night to prepare something because that was my impression of what teachers did and that they always came with heaps of knowledge. I was always fearful I didn't have enough and that I had to have read such a wide background of everything that I would be prepared for anything that came up, any questions. I was getting cold sores and things because I was so run down doing these horrible things to myself. And I think that all came from my perception of teachers where they just gave information and you were the only one there in the middle of everything meant to do anything, which is a pretty tall order really." (3A4)*

This lecturer described moving through a series of different professional development experiences which, over a period of ten years, had brought about changes in the way teaching was understood. She described a parallel process of uncertainty with both lecturers and students during the introduction of an inquiry learning curriculum, a learning framework which clearly placed all teaching/learning activity outside of a knowledge transmission domain. Although the new curriculum had been implemented, there was a sense of

challenge amongst the teaching staff in coming to terms with letting go of a "lecturing" process.

We're trying very hard to provide principles and one of the main things of course is inquiry learning. There is a problem in our area with everybody coming from a place they see as very important. There's an awful lot of negotiation and meetings that take place to try and get everybody on board to be thinking like this. I can tell you about a meeting we had this morning as an example. It was talking about the effort that one lecturer had put into lecturing and believed that she had identified critical elements within the lectures. And some of our team challenged that because we believe with inquiry learning you can give a person a fish, and you feed them for a day, but teach them how to find those key element in things and teach them how to fish they can do it for the rest of their career." (3A4)

This statement also reveals discussion with colleagues as a factor contributing to the development of conceptions of teaching. Both focussed discussion in semi formal structured activities such as staff meetings and professional development activities were important sources of change and development in conceptions of teaching for experienced teachers.

Another experienced lecturer described a combination of moving between different teaching areas and the application of new models to teaching practice as a pathway of transition from knowledge transmission to a facilitative approach. An opportunity to work part time in another department had introduced this lecturer to the idea of facilitation and had provided a context to practice facilitation skills in an adult learning environment. This experience had a profound influence and changed the lecturers perception of teaching. This change led to a search for a formal educational theory which would support a facilitative approach. The lecturer attended a workshop at the regional Tutor Education Centre and identified a model, which suited a facilitative approach in

the lecturer's own subject area. The model was used as a framework for developing a new course. The change process from knowledge transmission to facilitation is described below in the lecturer's own words.

I've moved from the area of teaching sort of hard core science, so to speak, reasonably contact driven, chalk and talk and all that kind of stuff. And by coming across to (another teaching area) I did an awful lot more facilitating. That's how I was developing skills as a facilitator which was kind of well as the name suggests, facilitates he process. And so at that time I was looking around for someone who could kind of give me greater information and there was this course at TEC and so I joined it. I found it had a profound influence on me in that respect. And so I guess the student research project was the ideal area in which to introduce Heron's hierarchical, co-operative, autonomous model. (3B2)

There were indications that teachers conceptions of teaching developed over time in teaching. While new lecturers all aspired to teaching from a perspective that was beyond transmitting knowledge, they were grappling with the challenges of surviving their first year in the classroom. The greatest diversity of was apparent in the post probationary group. This range may indicate that this early career point, with some teaching experience to reflect on, has the potential to be a time of transition or opening up to new possibilities. All of the experienced lecturers interviewed were able to give accounts of changed conceptions of teaching, which had developed from knowledge transmission perspectives.

6.3 Factors Perceived To Affect The Development Of Conceptions Of Teaching

Lecturers isolated several factors which they perceived had influenced their conceptions of teaching. These are identified in the following sections.

6.3.1 Changes in Qualification Taught

One factor which nearly every lecturer mentioned as potentially influencing their perceptions of teaching was the change in the qualifications they were teaching. Diploma qualifications were at various stages of being upgraded to degrees and certificate qualifications were being reviewed and those that continued being taught were being up graded to diploma qualifications. Lecturers in Departments A and B were embarking on or preparing to teach degrees while those in Departments C and D were moving from certificates to diplomas. These changes were part of the polytechnic's strategic plan to concentrate on higher level programmes and courses.

Several lecturers who were teaching certificate level courses were involved in discussions with colleagues at a national level. Lecturers in Department C had been meeting nationally to restructure their courses to fit with the NZQA Framework. This was reported to be interpreted as an administrative exercise. A co-operative approach was being taken between institutions with each taking responsibility for writing a set number of unit standards. There was a perception that this exercise was not going to bring about significant change in the courses or provide any focus on ways of understanding teaching.

One lecturer who taught in a highly technical vocational area spoke of significant reviews, which had taken place over a period of years, that had changed the basis of the programme from skills based training to more student centred learning. The process had started to involve consideration of conceptions of teaching when the delivery of the programme moved from an industry based setting into the polytechnic. The course referred to by this lecturer was part of a Certificate level Programme and the only one of its type in the country.

The nature of changes described by this lecturer indicated a movement from a position where teachers determined and delivered content to students, to a

climate which accorded more choice and flexible learning for students. This lecturer regarded developments in the course selected for discussion as essentially linked to these wider programme developments, and viewed both course and programme development as ongoing processes rather than points reached. Several significant curriculum changes had happened within the last five years. These included reductions in the amount of technical content which had previously called for didactic teaching and learning for reproduction rather than understanding. New social science subjects were added in the time made available by these reductions in technical content, and were perceived to broaden the curriculum. Assessment protocols had been revised to allow more flexibility for students.

There was concern expressed by some lecturers in degree and diploma programmes about the Polytechnic's interpretation of NZQA policies. There was a perception from lecturers who had been involved in moderation processes for other Polytechnics that NZQA requirements were viewed differently in other institutions. There was a sense of resistance to the imposition of detailed frameworks which the polytechnic was perceived to be requiring in response to NZQA policies.

The nature of these concerns was the experience of having very detailed instructions for the format of course handbooks. There was implicit concern about the directive nature of the instructions from an indeterminate source, as well as concerns over possible negative consequences for curriculum development. This concern was articulated most clearly in the comment presented below.

> *"So there is a problem in trying to cross every "t" and dot every "i" in providing absolutely detailed stuff for the students, in that you can spend an awful lot of time doing that. The old reductionist problem is that once you reduce things, you have to*

reduce things more because what you are trying to do is control every eventuality, and you can't do that. Because in the end you actually lose the creative element and teaching has a very creative element ..... and I think if you try and constrain everything into this structured formalised documentation on processes you have to be careful that you don't lose that."(SD1)

6.3.2 Curriculum Change

Change in Departmental curriculum policy which occurred concurrently with the upgrading of qualifications was a factor which involved lecturers in the re-design of courses and consequent re-conceptualisation of teaching. Most experiences of course design were understood as the reshaping of existing courses to meet new requirements. One course, which several of the lecturers interviewed commented on, was designed to meet the needs of experienced professionals in upgrading their existing qualifications to degree level in a shorter time frame than the regular intake of degree students. One of the post probationary lecturers who had considerable responsibility for the design of this course described the experience in the following way.

"I was sort of catapulted into Degree Year One and asked if I would develop this nursing paper for this course. It was really new, so I had to get au fait with the Bachelor's Degree because I had been in the Diploma. I knew that this polytechnic had this focus on inquiry learning, which wasn't new to me but it hadn't been used very much in the Diploma course that I worked on in semester 1. So I had to take papers 101 and 102 from the degree document and meld it together into one course. It was a bit of a challenge because I had an amazing number of learning outcomes to all come together, make some sense, and then I had to take an inquiry learning approach and that was quite interesting for me because I don't like didactic teaching .... So I

had to do a lot of work preparing the handbook and I had to get into making this a non - lecture type course." (2A2)

Inquiry learning was a factor in developing new degree curricula that had precipitated changes in conceptions of teaching and teaching practice. There was mixed representation of the concept of inquiry learning amongst the lecturers interviewed. The most negative view reported was an opinion that inquiry learning was a technique whereby teacher class contact hours could be reduced and students were expected to assume more responsibility for finding and using resources to assist their learning. Most lecturers were at the stage of having come through at least one course using this approach and there was a degree of evaluative discussion occurring, particularly in Department A.

An opinion was expressed by several lecturers that more structure was needed in the initial stages of the courses when introducing the students to inquiry learning. This opinion was said to be developed from concern over student feedback. There was concern amongst lecturers teaching in the first year of a degree programme, that the approach may have been a contributing factor in the unusually high drop out rate of first year students. There was a sense of co-operation and a general willingness to conform with the introduction of this approach, but also a level of uncertainty as to how students were responding to the approach. There was a general desire for more input and discussion on the inquiry learning approach. While these concerns were expressed by some of the lecturers interviewed, an almost equal number of lecturers stated that the inquiry learning framework was contributing to a better quality of teaching and student learning. This range of views suggested that the inquiry learning framework was congruent with some lecturers conceptions of teaching and not others.

There were mixed responses to some of the curriculum changes. One lecturer perceived the introduction of inquiry learning in terms of being told that class contact hours must be reduced and greater emphasis on student directed

learning. This was an example of a group of lecturers who perceived they were responding to directives from management in making changes to their courses. It is possible that the different responses to change reflected different conceptions of teaching.

> *" I haven't got a lot of say in it. Like when X (former manager) was here she changed it to problem based learning for year 2, year 1 was very much the same. This year it has changed to inquiry learning. That's because it's a degree programme now. It hasn't changed an awful lot in the content except that they've cut the class contact hours so I've got less time. It's more the approach that's changed." (2B4)*

A different experience was reported by another lecturer who had been responsible for a course which was designed around two major themes. There had been a concern that in the curriculum changes one theme had been covered adequately at the expense of the other.

> *".....(the second course theme was) squeezed into a small portion at the end of the course. So the students became very annoyed and frustrated and angry because they had a lot of information on one issue and very little on the other. And I think in relation to that we've actually worked this year on looking at how we balance these out rather than putting all the importance on one aspect." (2A3)*

In this instance the lecturer reported a high level of frustration amongst staff and students during the delivery of the course but was able to reflect on the change experience and work co-operatively to address problems that had occurred during the change process. When this problem arose, there were collegial structures amongst the teaching team, where student feedback was reviewed,

discussed and changes made on the basis of student suggestions and recommendations. These structures were established as part of the academic quality assurance system and provided for any student concerns, not fully addressed during the course, to be thoroughly reviewed before the course ran again to a new group of students. Lecturers from Department A gave an impression that these processes worked effectively most of the time. This impression was not as evident in the interviews with lecturers from other departments.

6.3.3 Course Review

Course review was prevalent throughout the School as a consequence of new policy initiatives. The internal moderation function of the Polytechnic's quality assurance system provided some opportunity for lecturers to think about their conceptions of teaching. Within this process, every course was reviewed at it's conclusion by a panel of peers. This review consisted of monitoring the delivery of the programme to ensure the graduate profile and intended learning outcomes for each course were achieved. A very comprehensive monitoring and review system was developed by the Polytechnic in response to NZQA requirements. While the policy was an institutional one, and involved members of the Polytechnic Academic Board, it was operated and administered at Department level.

6.4 The Context of Teacher Development in the School Between the Three Identified Experience Categories

A diverse range of teacher development activities were occurring within the School. Different experiences in initial teacher education (formerly referred to as tutor training) were evident between the different categories of experience.

6.4.1 New Lecturers

Within the new lecturer category there were differences in the type of initial teacher education received which appeared to be related to tenure. Two of the

four new lecturers had tenured positions and two were on limited tenure contracts which were due to expire at the end of the year. The lecturers on probation for tenured positions had completed two weeks of teacher training provided internally by the polytechnic. Although the limited tenure lecturers were theoretically entitled to attend the courses provided by the polytechnic they had not done so. Reasons given by the lecturers included difficulties with operational requirements arising from employment commencing after the beginning of the semester, and personal choice related to the perceived relevance of the courses to limited tenure employment. One of the limited tenure lecturers had been supported by the polytechnic to attend a conference on assessment held at another institution at a time which fitted in with teaching responsibilities. The lecturers on probation for tenured positions had participated in departmental professional development activities more frequently than those with limited tenure. New lecturers all discussed colleagues as a valuable source of learning about teaching with particular value being placed on mentors who were more experienced teachers assigned to individual new lecturers through the polytechnic probationary system.

6.4.2 Post Probationary Lecturers

The post probationary lecturers had participated in a more diverse range of teacher preparation and development processes. They had received initial teacher education from the regional teacher education centre and from programmes run by the Professional Development Unit within the polytechnic. They had also participated in a range of curriculum and professional development activities organised by Department A. Participation in these sessions was open to lecturers from other disciplines within the School. Half of the post probationary lecturers were involved in university study to upgrade their academic qualifications. In terms of less formal teacher development the post probationary group also identified colleagues as a source of development and referred more directly to collegial discussions in the context of programme and course development.

6.4.3 Experienced Lecturers

Lecturers with more than five years teaching experience had a very wide range of teacher education and development experiences. In terms of generic teacher education, all had received twelve weeks initial teacher education at the regional teacher education centre. Some had attended courses at teachers training colleges as well. There was a lesser degree of involvement with generic teacher education programmes provided internally by the polytechnic, although there was considerable participation in focussed staff development programmes provided on specific topics designed for experienced teachers. Experienced lecturers attributed high value to professional development activities organised from within their discipline facilitated by their colleagues and visiting academics. They were supported by the polytechnic to attend conferences and courses sponsored by other organisations related to their discipline in particular and general education issues. Most of the experienced lecturers held post graduate degrees and those who did not were working towards them. Experienced lectures identified students responses to teaching and their feedback, both direct and implicit as valuable sources of teacher development.

6.5 Summary

Lecturers at all levels of experience understood teaching as something more that the transmission of knowledge. New lecturers were less likely to articulate a conception of teaching beyond knowledge transmission, than lecturers from either of the other two categories. The broadest range of conceptions of teaching was evident within the post probationary category. In one instance a post probationary lecturer expressed views consistent with a knowledge transmission conception, another, clearly viewed organising activities as a key to making a difference in student learning and another articulated understanding that was consistent with a view of teaching as making learning possible. Experienced lecturers generally, recalled times when they had understood teaching as the transmission of knowledge and were able to identify experiences which had made a difference. These included curriculum development

activities, individual staff development experiences, feedback from students and discussions with colleagues. Differences in staff development and teacher education experiences were evident between the three experience categories.

Chapter 7 : Discussion and Conclusions

The findings of this case study revealed different conceptions of teaching evident amongst lecturers in the School of Health Sciences. There was a stronger relationship between disciplines, identified by departments, and conceptions of teaching than between time in teaching and conceptions of teaching in this case study. The post probationary group of lecturers produced the most varied and unexpected results. Working within theoretical curriculum frameworks was the factor which most strongly influenced development of conceptions of teaching towards a theory 3 perspective. This chapter will discuss these findings and address the research questions in relation to the research literature.

7.1 Conceptions Of Teaching Within A School Of Health Sciences

Different conceptions of teaching were evident among staff within the School of Health Sciences in the study polytechnic. It was not the purpose of this research to use Ramsden's theoretical framework (Ramsden, 1992) as a diagnostic tool to assess individuals. While, clearly, results were obtained from individuals in interviews, through the questionnaire and through submission of course handbooks for analysis, the purpose was to obtain a contextual picture of conceptions within the School which then provided a basis for analysis of items which had influenced the development of or changes in conceptions of teaching.

The approaches to teaching section of the teacher questionnaire (Trigwell, Ramsden, Martin, and Prosser, 1995) provided specific evidence of elements of conceptions of teaching within the school. Emphasis on teacher focus and information transmission items suggested a more limited conception of teaching, probably consistent with a Theory 1 or Theory 2 conception of teaching. Conversly, emphasis on student focus and conceptual change items indicated the likelihood of Theory 3 conceptions of teaching. (Ramsden, 1992).

The responses to questionnaire items showed a range of views related to student focus and conceptual change, but with a tendency towards higher ratings on these items. Eighty five percent of respondents considered that they attempted to develop a conversation with their students about the topics being studied more than half the time. This item was indicative of the notion of working cooperatively with students to help them change their understanding of a subject, and was associated with a Theory 3 conception of teaching Ramsden, 1992). The varied responses to the three items on conceptual change suggested a range of conceptions but with a definite emphasis towards approaches to teaching for conceptual change. Seventy five percent responded that they "encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject that they will develop, "more than half of the time. This, again, showed an emphasis on teaching for changed understanding amongst students, an approach consistent with a Theory 3 conception (Ramsden,1992). Lecturers, in interviews, described qualitative changes they expected to see in students' understanding as well as changes in their attitudes and approaches to learning (Marton and Saljo, 1976a; Bevis, 1988). These provided evidence of teaching being understood as making learning possible, or a Theory 3 conception within Ramsden's framework.

A distinct trend was evident in responses to all items on information transmission. Respondents from all categories of experience and across departments gave low ratings to information transmission items. This gave the clear impression of the School as a context where an information transmission approach to teaching occurred very infrequently. Responses to the related questionnaire items on teacher focus also showed generally low ratings.

Several interview informants described their teaching as a process of facilitation, but did not give a positive account of what they meant by facilitation. It was clearly seen as a movement away from information transmission and included more focus on students. Facilitation was most clearly described when it was

articulated in the context of a particular curriculum theory, such as the new lecturer who, when interviewed, described experiences in facilitating students learning through a problem based learning curriculum. The frequently used term lacked clear definition, however a consistent theme associated with the idea of facilitation was student focus.

Lecturers' accounts of the development of changes in understanding of teaching, identify focus on the students as a precipitating factor in such changes. Learning from students was regarded by Ramsden as the key principle of effective teaching, underpinning a Theory 3 conception (Ramsden, 1992). The occurrence of the student focus items as a factor influencing change in a direction away from information transmission indicates a context which is likely to support the development of understanding teaching from a Theory 3 perspective. Experienced teachers tended to state that they found information transmission as boring for themselves as it was for their students.

All lecturers in this case study either stated or implied that they understood teaching to be something more than the transmission of knowledge. There were, however, several instances of lecturers being concerned with the problem of how to fit the amount of content they were required to cover in their learning outcomes into the time allocated for teaching the course they had selected for discussion. This problem is one that is most likely to arise associated with a Theory 1 conception of teaching, but does not necessarily mean that a teacher encountering the problem understands teaching only as the transmission of knowledge. Ramden's higher level theories take account of content knowledge and build upon earlier theories. In the situations where the problem of covering the course content required to meet the learning outcomes was expressed, end of course examinations carried significant weight in summative course assessment. While it would be wrong to conclude that teachers in such circumstances understood teaching solely as the transmission of knowledge, the content coverage problem provides an indication that attention to aspects of course

design and assessment might contribute to a higher level understanding of teaching. The content coverage problem was articulated by teachers within all the different career categories from Departments B,C and D where natural sciences.were taught predominantly. This suggested different approaches to teachingbetween natural and social science disciplines, as the problem was not identified by any lecturers from Department A.

Lecturers in Department A, where social sciences were taught predominantly, were most likely to describe the courses they had selected in terms of a particular curriculum framework. Two types of curriculum framework, problem based learning, and inquiry learning, were identified. Accounts of the application of identified frameworks by lecturers in Department A were descriptions of design and practice of teaching which intended to promote deep learning. This intention was supported by consideration of different ways in which students might understand concepts and principles of the subject matter they were encountering both in the classroom and in their practical experience. Assessment criteria and processes were perceived as providing opportunities for students to demonstrate changes in their understanding of the subject matter, and the intention to promote deep learning approaches was supported by interview statements from Department A lecturers. A wide range of formative and summative assessment activities, outlined by lecturers from this department, provided opportunities for students to approach and review their learning from different perspectives.

Ramsden (1992) identified the quality of learning aimed for by a Theory 3 conception of teaching, as learning which brought about conceptual change in the students as opposed to a quantitative or additive type of learning. While a range of approaches were present within the School, (identified in questionnaire and course handbook analysis) there was clearly more emphasis on student focussed approaches directed towards conceptual change than on teacher focussed approaches directed towards information transmission. A marked

emphasis on student focus and conceptual change was apparent in data contributed by lecturers in Department A. Subjects taught there were more closely aligned with the social sciences than subjects taught in the other three departments, which dealt more with natural science subjects. These results may be seen to support to Ramsden's earlier research on the context of learning which identified differences in the teaching approaches and learning tasks set by lecturers in arts and science departments (Ramsden, 1984). One reason for selecting the School of Health Sciences as the subject of this case study was the mix of natural and social sciences taught there and the assumption that similar distinctions in approaches to teaching might be found between the natural and social sciences as Ramsden reported from student perceptions of arts and science departments. Data from lecturers in Department A which did include aspects of a teacher focus/information transmission approach, came from new lecturers in their first year of tertiary teaching experience. There was more evidence of an information transmission approach in courses related the natural sciences.

7.2 Relationship Of Conceptions Of Teaching To Time In Teaching

Differences in conceptions of teaching, and differences in elements of these conceptions were evident between and within the different categories of experience. Questionnaire and interview data indicated that lecturers began their teaching careers with a knowledge transmission conception of teaching and developed higher levels of understanding as they gained experience. In interviews, experienced lecturers referred to earlier stages in their careers when they had taught from a knowledge transmission approach. A combination of dissatisfaction with this approach as a result of student responses, and professional development activities which provided alternative approaches, were key influences in bringing about transitions in approaches to teaching. Discussions with colleagues were an important influence in addressing problems perceived with newly introduced curriculum frameworks. These findings supported the notion of practical knowledge acquired through experience,

proposed by Benner (1988) as an influence on the development of higher level conceptions of teaching.

Lecturers perceived themselves as less likely to be utilising an information transmission approach as they gained experience. An implied use of information transmission approaches came from the lecturers with less experience. It appeared to be an expedient response to the perception of a large amount of content to cover. The nature of this percieved problem was consistent with a Theory 1 or 2 conception of teaching.

The first and most frequently reported influence away from information transmission was focus on students. The initial concerns of new lecturers were related to covering the content in the course adequately. However, as the new lecturers gained experience in teaching, their attention shifted from exclusive concerns of content delivery, to a focus on students. When focus on students began to occur, lecturers noticed that students seemed to be less interested or involved with their learning when didactic teaching was occurring. Student responses provided an impetus to look for different ways of regaining and retaining their interest. Some initial responses were to try to introduce different activities in classes to make the topics more interesting, or to relate the material they were learning to practical experiences they would be encountering. These responses have strong elements of a Theory 2 conception of teaching, that of organising student activity to create conditions for learning. These observations suggest that there is a relationship between time in teaching and the development of conceptions of teaching.

New lecturers returned the highest ratings on all information transmission items in the teacher questionnaire. However, they also identified elements of teaching approaches which they valued that did not belong with an information transmission approach. These elements included student choice in selection of topics and sequence, and reflection on learning. It is possible that these

elements occurred for the new lecturers in a context of strong environmental norms which devalued a knowledge transmission approach. The notion of development of higher level theories of teaching over time in teaching was supported by the pattern of questionnaire results in the information transmission and teacher focus items. There was a trend of lecturers moving away from teacher focussed, information transmission approaches, as they gained experience in teaching. However, new lecturers returned some unexpected questionnaire results. New lecturers gave the lowest ratings on one teacher focus item, the perception that students have very little useful knowledge of the topics to be covered. They also returned the highest ratings on one student focus item rating themselves as more likely than their more experienced colleagues to use difficult or undefined examples to provoke debate in lectures. New lecturers' ratings on these two items suggested that elements of a student focused approach to teaching were evident amongst beginning teachers in the context of this study. This suggestion was supported by the content analysis of course handbooks which showed elements of teacher focused and student focused approaches to teaching evident amongst new lecturers.

Post probationary lecturers produced the broadest range of responses to questionnaire items on approaches to teaching. They returned the lowest average response to student focus items and the highest average response to conceptual change items. They produced mid range average responses across the experience categories on the teacher focus and information transmission items except for one teacher focus item where they returned the highest average of the three experience categories, rating themselves as considering students to have very little useful knowledge of the topics to be covered. The variation in ratings between student focus items and conceptual change items in the questionnaire returned by post probationary lecturers is indicative of the variation and inconsistency of responses within this category of experience.

Wide variation in approaches to teaching amongst post probationary lecturers was evident in other data sources. The content analysis of post probationary lecturers course handbooks produced the greatest range of teaching approaches within any category of time in teaching, with one handbook presenting a teacher focussed information transmission approach, two presenting a student focussed, conceptual change approach, while the fourth contained elements of both approaches.

The teacher interviews also illustrated the wide range of approaches evident amongst post probationary teachers. When sharing interpretations of the task of writing course handbooks, one post probationary lecturer felt constrained by a perception of institutional requirements, while another expressed a sense of freedom and a perception of the same task as a creative exercise. A different example of the range of understandings apparent amongst post probationary lecturers was a contrast in interpretations of an inquiry learning curriculum approach evident between lecturers from the same department. One lecturer showed little evidence of willingness to understand the inquiry learning approach and interpreted inquiry learning as giving students insufficient structure for their learning and too much emphasis on one topic. Another post probationary lecturer observed that some students didn't "take to it" but interpreted the approach as freeing up students and giving them more choice. Yet another post probationary lecturer described a range of activities being generated in a natural science class, intended to assist student learning. This behaviour could indicate a Theory 2 conception where the lecturer attempts to organise student activity to enhance learning (Ramsden, 1992).

A further unexpected result was the high proportion of post probationary lecturers in the teacher questionnaire who gave their occupational identity as teacher. The highest percentage rating across all experience groups which occurred within the post probationary group was for an occupational identity of teacher. This was alongside new lecturers rating their occupational identity

equally between subject related discipline and subject specific teacher with a lower rating for the occupational identity of teacher. On the other hand, experienced lecturers produced a pattern of ratings which suggested a shift from subject related occupation, through subject specific teacher to the occupational identity of teacher. This result suggests a stronger focus, amongst post probationary lecturers, on the teaching components of their occupation rather than emphasis on affiliation with a subject related discipline. It could also suggest that the post probationary lecturers have made or are in the process of making a transition identified by one of the managers, at this point in their teaching careers. That is a transition from subject expert with no teaching experience to lecturer with some teaching experience.

It was expected that if transitions between conceptions of teaching did occur over time, that the post probationary lecturers would be at a stage where transitions might be occurring, given that they had some experience to use as a basis for action, consistent with Benner's model of professional skill acquisition, and they had received some initial teacher education and might consequently have developed or begun to develop a conceptual basis for their teaching (Benner, 1984). However, it was not possible to draw any conclusions on the basis of data from the post probationary group. Time in teaching is an insufficient explanation for the extent of variation of conceptions of teaching evident amongst the post probationary lecturers.

Experienced lecturers reflections on changes which occurred in their understanding of teaching over time and the contrasting evidence from new lecturers, particularly in the questionnaire items on information transmission and their interview accounts of the nature of the problems they encountered in their teaching, suggest that teachers' conceptions of teaching were influenced towards higher level conceptions by time in teaching.

While it is likely that time in teaching is an important factor in the development of higher level conceptions of teaching, other factors were identified. A discussion of other factors found to influence lecturers conceptions of teaching, in this instance, follows.

7.3 Contextual Factors Perceived To Influence Conceptions Of Teaching

In outlining progression through his theoretical framework, Ramsden states that to consider the improvement of teaching only from the point of view of the individual teacher, is a limited view. Rather, he suggests, that intervention needs to occur at the level of courses, academic departments and the management of academic units. It is through the system of ideas about teaching that exists in the context within which lecturers work that developments in understanding teaching and learning will occur (Ramsden, 1992). Contextual factors which were perceived to influence teachers' conceptions of teaching were institutional policy changes, management expectations of teachers and curriculum development exercises. These perceptions were identified in interviews with lecturers and their managers.

7.3.1 Changes In Institutional Policy

This research took place in the wake of significant reforms to the funding and delivery arrangements of tertiary education in New Zealand. A context of increased institutional autonomy and accountability existed with the establishment of a Polytechnic Academic Board and a range of policies and procedures associated with academic quality assurance. This included a shift towards internal assessment of qualifications and a trend towards teaching higher level qualifications which included the introduction of degree programmes to polytechnics.

The response of the polytechnic which was the focus of this case study was to establish a series of quality assurance committees which were administered at School level. These required that lecturers design course handbooks which

fulfilled the institutional requirements of outlining learning outcomes and their relationship to all assessment practices implemented in each course. The standardised format of the course handbooks introduced a unified structure for teachers to use in designing and teaching courses which was a new experience for a number of experienced lecturers. However, the range of teaching conceptions evident in content analysis of course handbooks, under a single School administration, suggested that the standardised requirements of the quality assurance committees had not exerted an influence on the conceptions of teaching amongst staff in the School.

Changes in institutional policy were perceived by some managers to support higher level conceptions of teaching, but while they influenced teaching practice, particularly in the areas of course design and assessment, they did not influence teachers conceptions of teaching. This was because they did not, and could not address the qualitative dimensions of student learning which are associated with higher level conceptions of teaching. Policy changes such as the introduction of quality assurance processes addressed teaching practice at a behavioural level, which represented a limited and incomplete perception of teaching.

7.3.2 Managers' Expectations Of Teaching Staff

Managers acknowledged changed expectations of teaching performance as a parallel development to the institutional policy changes. Managers perceived the introduction of degree programmes called for a qualitative reconceptualisation which differentiated degrees from the diplomas that they were replacing. There was a perception amongst the managers that a previously apparent teacher driven model was inadequate for the demands of the new era and that their frustration with this model was shared by a number of staff. A further expectation was a change in assessment practices from a position where major emphasis had been placed on summative assessment exercises, which required little more than reproduction of information delivered, to practices

which encouraged students to develop their own lines of inquiry and adult learning skills. Both explicit and implicit statements that lecturers required a theoretical base in education contributed to a climate of expectation that lecturers would develop higher levels of teaching conceptions.

The range of lecturer responses to these expectations indicated that management expectations did exert some influence on lecturers conceptions of teaching but the degree of influence varied between individual lecturers. Those who perceived management expectations as an instruction, such as the specific guidance of wording in course handbooks, were less likely to have their conceptions of teaching influenced by management expectations than those who perceived relationships between other contextual factors and managers' expectations.

While the nature of the managers' changed expectations of teaching was attributed by the informants to the introduction of degree level teaching in the polytechnic, they were also consistent with the type of development in conceptions of teaching proposed in Ramsden's framework (Ramsden, 1992). The administration of quality assurance processes at School level suggested that managers were implementing strategies which were intended to support qualitative reconceptualisation of teaching. However, the varied responses evident amongst lecturers suggests that managers' intentions were realised more through lecturers who were looking for relationships between their environmental context and student learning, than through lecturers who perceived management expectations as received instruction to be implemented. These differences can be explained by differences in lecturers' approaches to learning about teaching. Those who perceived management expectation as received instruction were using a surface approach to learning about teaching, whereas the lecturers who were looking for relationships and meaning were utilising a deep approach (Marton and Saljo, 1976,a).

7.3.3 Curriculum Development Activities

The most important factor which supported the development of understanding teaching, in this instance, was curriculum development. One of the managers, in collaboration with a group of lecturers, had described the identification of the need for a new model of teaching as having occurred from dissatisfaction amongst lecturers. This expressed discontent had been utilised in developing a strategy of planned curriculum change, partly in anticipation of the introduction of a degree programme and the perceived need for higher levels of learning, and partly out of the desire of that group of lecturers to develop their understanding of teaching. Deliberate planning in one department, was followed by implementation of curriculum designs in either problem based learning, or inquiry learning frameworks. Neither of these frameworks is limited to a conception of teaching as transmitting knowledge. In fact one author states that an inquiry learning approach to curricula actually precludes teaching from a knowledge transmission focus (Print, 1987).

The environment in which this initiative took place was the department which contained the largest proportion of lecturers who selected the highest ratings on the student focus and conceptual change questionnaire items. All interview informants from this department (Department A) identified a curriculum framework which formed the basis of organisation of their courses. These were either inquiry learning, in examples of degree courses or problem based learning in examples of diploma level courses. A similar emphasis was given to the nature of student activity in relation to achieving the stated learning outcomes, as to the courses' content in student handbooks submitted by lecturers from this department. A range of formative assessment activities were also evident in all courses with defined curriculum frameworks. These provided multiple opportunities for students to engage with the subject matter and to develop and practise their learning strategies, before having to undergo summative assessment for the course.

While there were indications in the teacher interviews that some lecturers in this department took an instrumental approach to the re-design of their courses when introducing an inquiry learning framework, lecturer focus was placed on student learning and difficulties students encountered during the change process. The curriculum framework necessitated this focus and the utilisation of collegial discussion on student feedback to address problems students were encountering with the less teacher directed approach.

The selection of the curriculum framework in the department described above, was a pivotal factor in establishing a context which facilitated an understanding of teaching as making learning possible. Inquiry learning as a concept, was strongly associated with the discipline and subject matter taught in the department and provided a framework which precluded teaching with an information transmission approach. It was also the highest level of learning on Bevis' taxonomy of types of learning which she advocated curriculum models make explicit. While Bevis was not specifically mentioned during interviews, the nature of inquiry learning as a basis for curriculum development described by lecturers, was consistent with the type of learning that Bevis described as inquiry learning which was a key element of an inclusive curriculum for professional education (Bevis, 1988). The curriculum model provided the substance which supported lecturers in their own inquiry as to how students might interact with the subject matter in ways which would facilitate the type of thinking and activity required of graduates in their discipline. It also focused teacher attention on the problematic nature of teaching practice.

All of the principles which constituted Ramsden's Theory 3 were evident amongst interview informants from the department which had initiated systematic curriculum development activity. The process of the development and teaching of courses was driven by the paramount principle of a Theory 3 conception of teaching namely learning from students. Even the instances of lecturers who felt equivocal about aspects of the curriculum, focussed their

discussion (in interviews) on student responses and showed genuine concern and respect for students and their learning. Lecturers considered that the concerns and challenges they faced worked to promote enhanced interest and explanation of both content and process. This was evident in both the teacher interviews and the analysis of courses handbooks. The basis of the described curriculum was directed toward students' independence, control and active engagement. The course handbooks provided evidence of clear goals and intellectual challenge as well as a wide range of assessment activities which allowed students multiple opportunities to obtain feedback on their own understanding before facing the judgement of summative assessment. This evidence of principles which constitute a Theory 3 conception of teaching suggested that the lecturers who wrote these handbooks saw teaching making learning possible (Ramsden, 1992).

7.3.4 The Context Of Teacher Development

At the outset of this study it was considered that changes to the funding and delivery of initial teacher education may have been an important aspect in the context of the development of understanding teaching. Changes in the sources of teacher education being received were evident in differences between the experience of new lecturers and the initial teacher education experience of their colleagues in the other categories. New lecturers were receiving initial teacher education from a range of different sources and were not attending the regional Tutor Education Centre where their more experienced colleagues had generally received twelve weeks of initial teacher education. These differences did not prove to be as important as they had been considered at the outset of the research. New lecturers on probation for permanent teaching positions were receiving the same amount of initial teacher education from the Staff Development Unit within the polytechnic. New lecturers on limited tenure had not attended these courses but were entitled to do so. One new lecturer on limited tenure had attended a conference on assessment at another polytechnic. While it was not known if this was undertaken as part of the lecturer's initial teacher education entitlement, or in addition to it, this activity was an indication

of the range of teacher education being undertaken in the context of this study. The related issue which proved more important in this instance was the context of staff development context in the School.

A context which supported teacher development was indicated by the range of responses to questionnaire items on teacher development and most valued sources of learning about teaching. In particular, the high value placed on professional development activities and discussion with colleagues suggested an environment which which affirmed inquiry and development of ideas about teaching. The range of activities described in the open questionnaire item seeking lecturers' most valued sources of learning about teaching, gave an impression of variety of both structured and informal teacher development activities occuring amongst lecturers in the School of Health Sciences. These included attendance at conferences, dialogue with visiting academics and a range of semi structured and informal discussions with colleagues.

Managers identified the upgrading of lecturers' academic qualifications as an important staff development issue associated with the introduction of higher level qualifications being taught in the School. A range of incentives which had been introduced to support lecturers in their study for higher qualifications was evidence of contextual support for a different approach to teacher development. Several lecturers specified university study as an important source of learning about teaching in their questionnaire responses.

The value attributed by lecturers to the range of professional development activities and discussion with colleagues as sources of learning about teaching, indicated a context which supported inquiry into understanding teaching. The range of conceptions of teaching evident amongst lecturers in the School and evidence of new lecturers reaching beyond information transmission approaches to teaching, suggested that a supportive professional development context did

influence deeper understanding of teaching and contibute to improvement in the quality of teaching.

7.4 Conclusions

Polytechnic lecturers in this case study showed evidence of the three conceptions of teaching proposed by Ramseden's theoretical framework. This showed Ramsden's conceptions of teaching to be a valid theoretical framework for lecturers in New Zealand as well as Australia.

There was evidence that teacher's conceptions of teaching developed hierarchically and sequentially over time in teaching.

Development of higher level conceptions of teaching was supported by contextual influences. Formal professional development activities and a context of collegiality were particularly valued sources of learning about teaching.

Curriculum development using models which explicitly promote the type of student learning relevant to the subject discipline, offered most robust support for enhancing the development of understanding teaching. So, understanding teaching and the development of more advanced conceptions of teaching can be best supported by an intentional focus on curriculum development using a curriculum model relevant to the discipline.

Appendix 1

Research On Teaching Practice And Development

I am a graduate student from Massey University who is presently conducting research in the area stated above. My main interest within this study is to identify how tertiary teachers develop and change their perceptions of teaching practice at different points in their teaching career.

This study, although it has the approval of the Wellington Polytechnic Research Committee, is being conducted independently and participation is purely on a voluntary basis. Your participation would however be greatly appreciated.

Ideally, I would like a 100% response rate to the attached questionnaire, in order to enhance the validity and reliability of the study. The questionnaire is anonymous, however if you are willing to participate in a follow up interview I have asked that you identify yourself at the end of the questionnaire. If you do choose to participate further, your responses remain confidential and will be used as a basis for beginning the interview which will focus on the issues raised in more depth.

I can assure you that all information gathered during the course of this study will be used solely for research purposes and will be available only to the researchers, that is myself and possibly my Massey University supervisors. No individual names will be identified in any reports resulting from this study.

You will automatically receive feedback through an executive summary which will be available to all participants at the end of the study.

Your rights as a participant:

- You have the right to contact me at any time during the research to discuss any aspects of the study.
- You have the right to refuse to answer any question, or withdraw from the study at any time.
- You have the right to expect that any information provided during this study is completely confidential and will be used only for the purposes of this research. You also have the right to expect that it will not be possible to identify individuals in any reports of the results of this research.

- You have the right to receive information about the results of this study on its completion.

Thank you for the time you have taken to read this letter. Instructions on the return of your completed questionnaire appear on the final page.

JANE KHULL

Confidential

Teaching Practice & Development Questionnaire

This questionnaire is divided into two sections and should take 10-15 minutes to complete. The first section addresses some aspects of your experience of learning about teaching and teacher development and asks some questions about your background.

Section 1:

In this section please tick only <u>one</u> item unless otherwise indicated.

1. *How do you identify your current occupation on forms such as the electoral roll?*

   .....

   .....

2. *Which gender group do you belong to?*

   a) Female ❒
   b) Male ❒

3. *How long have you been employed as a lecturer in a Tertiary Education Institution?*

   a) Less than one year ❒
   b) One year, but less than two years ❒
   c) Between 2 years and 5 years ❒
   d) 5 years or more (*Please specify ..... years)* ❒

4. *Which of the following formal teacher training programmes have you taken part in? (Please tick all relevant boxes)*

a) I have not had any formal teacher training ❒
b) At a regional Tutor Education Centre ❒
c) Within this institution through Staff Development ❒
d) Within this Department/School ❒
e) At a College of Education ❒
f) Other *(Please specify)*.....

5. *Which has been the <u>most</u> valuable source of learning about teaching <u>within the last two years?</u>*

a) Cannot recall a particular experience ❒
b) Formal professional development activities ❒
c) Discussions with colleagues ❒
d) Feedback from students ❒
e) Articles and books on improving teaching ❒
f) Other *(Please specify)* .....

6. *<u>Over your whole teaching career,</u> which has been the <u>most</u> valuable source of learning about teaching?*

a) Cannot recall a particular experience ❒
b) Formal professional development activities ❒
c) Discussions with colleagues ❒
d) Feedback from students ❒
e) Articles and books on improving teaching ❒
f) Other *(Please specify)* .....

7. *If you were able to identify the most valuable source of learning about teaching (in Q6, above), please describe this as fully as possible. (Note: Go to Q9 if you could not recall a particular experience.)*

.....
.....
.....

8. *When did this learning experience occur?*

a) Less than one year ago. ❐
b) One year, but less than 2 years ago. ❐
c) Between 2 and 5 years ago. ❐
d) More than 5 years ago*(Please specify _____years* ❐
e) Other *(Please specify)* .....

9. *When you encounter problems with teaching who/what would you consult in the first instance?*

a) A Staff Development tutor. ❐
b) A colleague. ❐
c) Journal articles or books about teaching. ❐
d) My students ❐
e) Other *(Please specify)* .....

10. *Generally, when you encounter problems in your teaching, how easily can you locate the resources you need?*

a) Immediately as problems arise. ❐
b) Within a few days. ❐
c) Within a few weeks. ❐
d) With difficulty. ❐
e) Resources not needed. ❐

11. *Generally, when you encounter problems in your teaching how easily can you access the assistance you need?*

a) Immediately as problems arise. ❐
b) Within a few days. ❐
c) Within a few weeks. ❐
d) With difficulty. ❐
e) Assistance not needed. ❐

12. *How frequently do you think about ways to improve your teaching?*

a) Often. ❐
b) Sometimes. ❐
c) Rarely. ❐

For each of the following items there is a row of numbers (1-5) corresponding to a five-point scale. A response for an item is shown by circling one of the five numbers. The numbers stand for the following responses:

1 - this item is **only rarely** true.
2 - this item is **sometimes** true .
3 - this item is true for me **about half the time.**
4 - this item is **frequently** true.
5 - this item was **almost always** true

13. *In your Employment Contract, Professional Development Time (PDT). is an entitlement, of two weeks per year to be set aside for professional development activities of your choice. (NB If you are in your first two years of teaching and participating in tutor training your PDT may be limited to one week.)*

		only rarely				**almost always**
(i)	I use my PDT to catch up on overload. (eg extra marking).	**1**	**2**	**3**	**4**	**5**
(ii)	I use my PDT to catch up with new developments in my subject.	**1**	**2**	**3**	**4**	**5**
(iii)	I use my PDT to develop or improve aspects of my teaching.	**1**	**2**	**3**	**4**	**5**
(iv)	My PDT get absorbed into my regular workload.	**1**	**2**	**3**	**4**	**5**

Section 2

This section is designed to explore the ways you go about teaching and the influences on your teaching. If you teach in several different programmes, please focus on one major course you teach this year while responding to the following questions. All questions in this section reflect on this course.

14. *What is the nature of this course?.*

a) Degree ❐
b) Diploma ❐
c) Certificate ❐
d) Other: *(Please specify*.....

15. *What is the level of this course?*

a) Level 1/ First year ❐
b) Level 2/ Second year ❐
c) Level 3/ Third year ❐
d) Other *(Please specify*.....

16. *What is the primary nature of your teaching practice in this course?*

a) Theory ❐
b) Practical/Clinical ❐
c) Laboratory ❐
d) Mixed *(Please specify eg.Clinical 50%, Theory 50%,)* ❐
e) Oher *(Please specify* .....

17. *Which Department is this course located in?*

.....

For each of the following items there is a row of numbers (1-5) corresponding to a five-point scale. A response for an item is shown by circling one of the five numbers. The numbers stand for the following responses:

1 - this item is **only rarely** true for me in this course.
2 - this item is **sometimes** true for me in this course
3 - this item is true for me **about half the time** in this course.
4 - this item is **frequently** true for me in this course.
5 - this item was **almost always** true for me in this course.

		only rarely				almost always
18.	I build on students life experience in my subject and my teaching.	**1**	**2**	**3**	**4**	**5**
19.	I find out about students expectations of my subject and use this information to adapt my curriculum	**1**	**2**	**3**	**4**	**5**
20.	I provide opportunities for students to reflect on the values they hold	**1**	**2**	**3**	**4**	**5**
21.	I take note of the gender, ethnicity and other characteristics of students in my classes and take these into account in responding to their learning needs.	**1**	**2**	**3**	**4**	**5**
22.	I provide opportunities for students to reflect on the values they hold.	**1**	**2**	**3**	**4**	**5**

		only rarely				almost always
23.	I provide opportunities for students to choose aspects of course work or assessment which are relevant to their interests and experience.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
24.	I encourage students to become aware of the potential for learning from each other and the benefits of working in groups.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
25.	I encourage students to remember the textbook definition of technical terms as the best way for them to understand.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
26.	I provide personal assistance to students and/or refer them to the range of resources and agencies which are available to assist them.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
27.	I structure my teaching to help students pass examinations.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
28.	I relate my teaching to other learning experiences and learning environments of my students.	**1**	**2**	**3**	**4**	**5**
		only rarely				**almost always**
29.	I gather new information about teaching generally.	**1**	**2**	**3**	**4**	**5**

		only rarely				almost always
30.	I try to relate new ideas I am teaching to real life situations.	1	2	3	4	5
31.	I think an important reason for giving lectures is to give students a good set of notes.	1	2	3	4	5
32.	When working with research reports or case studies I try to get students to examine evidence carefully and to decide whether conclusions are justified.	1	2	3	4	5
33.	My students have to retain a large amount of information in order to pass assessment tasks.	1	2	3	4	5
34.	Large classes discourage contact between myself and my students.	1	2	3	4	5
35.	I consciously provide opportunities for students to learn and participate in different ways.	1	2	3	4	5
36.	I provide regular opportunities for students to review and improve their performance.	1	2	3	4	5

		only rarely				almost always

37. I gather new information related to the content of this course **1 2 3 4 5**

	only rarely			**almost always**
38. I use student feedback to change the way I teach this course.	**1**	**2**	**3**	**4**	**5**

Thank you for the time you have taken to complete this questionnaire. Please use the space provided below for any additional comments you wish to make, which have occurred to you but have not been covered by this questionnaire.

I am hoping to interview four people at three of the career points identified in Question Three. This would take approximately one hour at a mutually convenient time before the end of the second semester (December 1994).

If you are willing to take part in an interview, please sign your name in the space below. The interview would give an opportunity to reflect in more detail on the areas covered by this questionnaire. The information you give will remain confidential.

If you do not want to take part in an interview, please return your questionnaire in the sealed envelope, as indicated above. All questionnaire material remains confidential to the researcher and will only be used for my thesis. Only aggregate and non - identifying information will be used in the final report. As stated in the preliminary letter, an executive summary of the results will be made available to you at the end of the research.

I agree to take part in an interview: Signed.....
Please print your name below your signature)

Please place your completed questionnaire in the attached envelope and seal it . Send your sealed envelope through the internal mail. Alison Viskovic has offered to provide clearing house services for me, thus saving a poor student the expense of postage.

Appendix 2

Tables of Random Sample Selection of Lecturer Interview Participants

Selection of Interview Sample: New Lecturers

Department	**DEPT A**		**DEPT B**		**DEPT C**		**DEPT D**		**Total**	
Gender	M	F	M	F	M	F	M	F	M	F
Population	0	9	0	0	1	2	0	0	1	11
Sample Required	0	3	0	0	0	1	0	0	0	4
Population Obtained	0	4	0	0	0	1	0	0	0	5
Sample Selected	Select 3 Females		None required		Obtained		None required		0	4

Selection of Interview Sample: Post Probationary Lecturers

Department	**DEPT A**		**DEPT B**		**DEPT C**		**DEPT D**		**Total**	
Gender	M	F	M	F	M	F	M	F	M	F
Population	0	5	1	2	0	1	0	0	1	8
Sample Required	0	2	1	1	0	0	0	0	1	3
Population Obtained	0	4	1	1	0	1	0	0	1	6
Sample Selected	Select 2 Females		Sample Obtained		None required		None Required		1	3

Selection of Interview Sample: Experienced Lecturers

Department	**DEPT A**		**DEPT B**		**DEPT C**		**DEPT D**		**Total**	
Gender	M	F	M	F	M	F	M	F	M	F
Population	3	28	9	2	1	1	0	7	12	38
Sample Required	0	2	1	0	0	0	0	1	1	3
Population Obtained	2	21	3	1	1	1	0	3	6	26
Sample Selected	Select 2 Females		Select 1 Male		None Required		Select 1 Female		1	3

Appendix 3

Lecturer Interview Schedule

Informants will be asked, prior to interview, to bring documentation to provide a focus on a particular course they teach. This might include, brochures, course outlines, student assignment handouts, tests, assessment schedules and evaluation forms. These will provide a picture of the structure of the course and help to focus discussion.

Begin with warm up. Ask if okay to use tape recorder. The interview is about their approaches to taching and their experiences of learning about teaching. In order to provide a clear focus on experience, part of the interview will focus on a recent course they have been teaching.

(Referring to documents)

Tell me about this course:

General description: .....

Subject.....

Topics .....

Duration.....

Where does this course fit in relation to other courses that lead to the qualification (eg. Degree, Diploma, Certificate)?

.....

What can you tell me about your experience of the development and design of this course?

.....

.....

Who was involved?

.....

Were there any guidelines, instructions, constraints?

.....

Tell me about them. (Do they shape/influence your teaching in any way?)

.....

.....

How do you teach this course?

.....

.....

What sort of activities do you set up?

.....

.....

(Probing or elaborating questions related to responses and documents related to activities such as student assignments.Following questions rmay relate to particular points in discussion, rather than generally as phrased below)

Do you expect any changes in the students during the course?

.....

Tell me about them:

.....

.....

Have you noticed any unexpected changes in the students during the course?

.....

.....

Tell me about them:

.....

How did the course go this year? (Compared with other years if appropriate)

.....

Are there any changes you would like to make? (Next year)

.....

What are they?

.....

How easy do you think it will be to make any changes you want to make?

.....

What would help you make the changes you want to make?

.....

Reflecting back on this year, what have you learned from teaching this course?

.....

Can you remember how you learned the subject you teach in this course?

.....

Tell me about your experience of learning this subject.

.....

Has your understanding of the subject changed over time?

.....

Tell me about these changes:

.....

Can you remember any particular experiences which brought about these changes?

.....

Has teaching the subject brought about any changes in your understanding of this subject?

.....

At this point, I'd like to shift the focus from the particular course we have been discussing, to your experiences of learning about teaching. You may remember that there were several questions in the questionnaire around this topic. You may like to refer to your questionnaire while we are discussing these points.

I am interested in your experiences of learning about teaching. You have identified (several) formal experiences of learning about teaching. Can we discuss these first.

Tell me about your formal experiences:

- at TEC .....

.....

- College of Education .....

.....

- within this department .....

.....

Do you think you changed as a result of these experiences?

.....

How? .....

.....

In your questionnaire, you identified some particularly valuable sources of learning about teaching. Can we discuss these in more depth?

.....

.....

Tell me more about: (responses to Question 7)

.....

.....

.....

Do you think you have changed as a result of these experiences?

.....

.....

How? .....

.....

What aspects of your daily working life support your teaching practice?

.....

.....

.....

Do you have any thoughts about aspects that could be improved?

.....

.....

.....

Appendix 4

Management Interview Schedule

Areas

Faculty population
Time in teaching
Teacher Training
Trends of change in policy on training.

Research Requirements:

Approval to sample whole school with initial questionnaire which will also be used to assist participant selection. Grounds for selection will now be purely demographic, based on time in teaching to provide the spread I want and willingness to participate.

Access to staf flists and any further relevant information that is kept, such as starting dates and courses within which staff members teach.

Informed consent/permission as per poly conditions.

Possible Interview Question Prompts:

What is your role in relation to the promotion of good teaching in this department?

Who else is involved in the promotion of good teaching?

How would you describe an excellent teaching in the context of this department?

What policies directed towards improving teaching exist?

Where do the policies that are in operation originate? (eg institutional, departmental, professional).

Have there been any particular policy changes in the last three to five years?

If "yes" what consequences have you noticed?

What are the various strategies employed within this department, aimed at improving teaching?

How is good teaching fostered and developed within this department?

Could you describe the level of effectiveness of the different strategies from your perspective as a manager?

To what extent do you think lecturers woudl share your views on the effectiveness of these strategies?

Do you notice any relationship between time in teaching and quality of teaching?

Are there any other particular factors that you can identify which have a significant positive influence on the quality of teaching in this department.

Ethical Issues:

Explanation of measures taken to assure confidentiality.

Enquire as to any concerns.

Appendix 5

Approaches to Teaching by Department and by Teaching Experience

Student Focus:

SF23 *In my class/tutorial for this subject, I try to develop a conversation with students about the topics we are studying.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	0	0	1	2.5	4	10	14	35	21	52.5
Department B	0	0	1	11.1	1	11.1	4	44	3	33.3
Department C	0	0	0	0	0	0	3	60	2	40
Department D	0	0	0	0	1	33.3	1	33.3	1	33.3

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	0	0	1	12.5	2	25	1	12.5	4	50
2-5 years	0	0	1	11.1	0	0	4	44.4	4	44.4
More than 5 years	0	0	0	3.5	4	10	17	42.5	19	47.5

SF28 *We take time out in classes so students can discuss amongst themselves the difficulties they encounter in studying this subject.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	8	20	3	7.5	12	30	9	22.5	7	17.5
Department B	6	66.6	1	11.1	1	11.1	0	0	1	11.1
Department C	0	0	4	8.0	1	2.0	0	0	0	0
Department D	1	33.3	1	33.3	0	0	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	1	12.5	2	25	3	37.5	2	25	0	0
2-5 years	2	22.2	2	22.2	2	22.2	2	22.2	0	0
More than 5 years	12	30	5	12.5	0	22.5	6	15	8	20

** 1 person did not respond to this item.

SF34 *In lectures for this subject, I use difficult or undefined examples to provoke debate.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	20	50	6	15	10	25	4	10	0	0
Department B	5	55.5	2	22.2	2	22.2	0	0	0	0
Department C	2	40	2	40	1	20	0	0	0	0
Department D	3	100	0	0	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	4	50	0	0	3	37.5	1	12.5	0	0
2-5 years	5	55.5	2	22.2	1	11.1	1	11.1	0	0
More than 5 years	21	52.5	8	20	9	22.5	2	5	0	0

Teacher Focus:

TF19 *I design my teaching in this subject with the assumption that most of the students have very little useful knowledge of the topics to be covered.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	13	32.5	17	42.5	5	12.5	4	10	1	2.5
Department B	1	11.1	3	33.3	1	11.1	1	11.1	3	33.3
Department C	1	2.0	1	2.0	0	0	3	60	0	0
Department D	1	33.3	1	33.3	0	0	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	4	50	2	25	1	12.5	1	12.5	0	0
2-5 years	2	22.2	4	44.4	0	0	2	22.2	1	11.1
More than 5 years	10	25	16	40	5	12.5	6	15	3	7.5

TF29 *In this subject I concentrate on covering the information that might be available from a good text book.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	21	52.5	13	68.4	5	15	0	0	0	0
Department B	2	22.2	3	33.3	2	22.2	1	11.1	1	11.1
Department C	1	20	3	60	1	20	0	0	0	0
Department D	0	0	0	0	2	66.6	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	2	25	2	25	4	50	0	0	0	0
2-5 years	3	33.3	4	44.4	1	11.1	0	0	1	11.1
More than 5 years	19	47.5	13	32.5	6	15	2	5	0	0

TF35 *I structure this subject to help students pass the examinations.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	19	47.5	6	15	10	25	0	0	3	7.5
Department B	2	22.2	1	11.1	1	11.1	2	22.2	3	33.3
Department C	0	0	1	20	2	40	1	20	1	20
Department D	0	0	0	0	1	33.3	1	33.3	1	33.3

Years of Teaching Experience	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	0	0	1	12.5	3	37.5	0	0	4	50
2-5 years	2	27.2	3	33.3	2	22.2	1	11.1	1	11.1
More than 5 years	19	47.5	4	10	9	22.5	3	7.5	3	7.5

** 2 people did not respond to this item.

Information Transmission:

IT20 *I feel it is important that this subject should be completely described in terms of specific objectives relating to what students have to know for examinations.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	18	45	10	25	5	12.5	5	12.5	1	2.5
Department B	2	22.2	2	22.2	1	11.1	2	22.2	1	11.1
Department C	1	20	1	20	2	40	0	0	1	20
Department D	0	0	0	0	2	66.6	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	2	25	1	12.5	2	25	1	12.5	2	25
2-5 years	1	11.1	4	44.4	3	33.3	1	11.1	0	0
More than 5 years	18	45	8	20	5	12.5	5	2.5	1	2.5

** 3 people did not respond to this item.

IT24 *I feel it is important to present a lot of facts in classes so that students know what they have to learn for this subject.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	18	45	11	27.5	10	25	1	7.5	0	0
Department B	1	11.1	3	33.3	2	22.2	2	22.2	1	11.1
Department C	1	2	1	20	2	40	1	20	0	0
Department D	0	0	2	66.6	0	0	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	2	25	1	12.5	3	37.5	2	25	0	0
2-5 years	3	33.3	1	11.1	3	33.3	1	11.1	1	11.1
More than 5 years	15	37.5	15	27.5	8	20	2	5	0	0

IT36 *I think an important reason for giving lectures in this subject is to give students a good set of notes.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	22	55	11	27.5	3	7.5	1	2.5	2	5
Department B	2	22	3	33.3	2	22.2	2	22.2	0	0
Department C	1	20	2	40	2	40	0	0	0	0
Department D	1	33	0	0	1	33.3	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	2	25	1	12.5	3	37.5	0	0	2	25
2-5 years	3	33.3	5	55.5	1	11.1	0	0	0	0
More than 5 years	21	52.5	10	25	4	10	4	10	0	0

** 1 person did not respond to this item

Conceptual Change:

CC25 *I feel that examinations in this subject should be an opportunity for students to reveal their changed conceptual understandings for the subject* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	13	32.5	8	20	5	12.5	9	22.5	2	5
Department B	1	11.1	3	33.3	1	11.1	2	22.2	1	11.1
Department C	1	20	0	0	0	0	2	40	0	0
Department D	0	0	0	0	2	66.6	0	0	3	33.3

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	1	12.5	2	25	3	37.5	1	12.5	0	0
2-5 years	2	22.2	2	22.2	1	11.1	3	33.3	1	11.1
More than 5 years	12	30	7	17.5	4	10	9	22.5	3	7.5

** 7 people did not respond to this item.

CC30 *I encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject they will develop.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	1	2.5	3	7.5	4	10	17	42.5	14	35
Department B	0	0	0	0	5	55.5	3	33.3	1	11.1
Department C	0	0	0	0	0	0	3	60	2	40
Department D	0	0	0	0	2	66.6	0	0	1	33.3

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	0	0	2	25	1	12.5	3	37.5	2	25
2-5 years	0	0	1	11.1	1	11.1	3	33.3	4	44.4
More than 5 years	1	2.5	0	0	9	22.5	17	42.5	12	30

** 1 person did not respond to this item.

CC37 *I feel a lot of teaching time in this subject should be used to question student ideas.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	3	7.5	5	12.5	15	37.5	13	32.5	4	10
Department B	2	22.2	3	33.3	3	33.3	0	0	1	11.1
Department C	0	0	2	40	0	0	3	60	0	0
Department D	0	0	3	100	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	0	0	1	12.5	6	75	1	12.5	0	0
2-5 years	0	0	3	33.3	2	22.2	4	44.4	0	0
More than 5 years	5	12.5	9	22.5	10	25	11	27.5	5	12.5

Appendix 6

Influences on Teaching by Department and by Teaching Experience

Teacher Control:

TC21 *I have very little say in the way this subject is run.*

	Responses									
	Rarely		Sometimes		About Half The Time		Frequently		Almost Always	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	15	37.5	7	17.5	9	22.5	6	15	3	7.5
Department B	7	78	1	11.1	0	0	0	0	1	11.1
Department C	4	80	0	0	1	20	0	0	0	0
Department D	2	66.6		33.3	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	Rarely		Sometimes		About Half The Time		Frequently		Almost Always	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	3	37.5	0	0	3	37.5	2	25	0	0
2-5 years	7	77.7	1	11.1	0	0	0	0	1	11.1
More than 5 years	18	45	8	20	7	17.5	4	10	3	7.5

TC26 *The Department allows considerable flexibility in the way I teach this subject.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	4	10	4	10	4	10	16	40	12	30
Department B	1	11.1	0	0	0	0	3	33.3	5	55.5
Department C	0	0	0	0	1	11.1	1	20	3	60
Department D	0	0	0	0	0	0	0	0	3	100

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	0	0	1	12.5	2	25	3	37.5	2	25
2-5 years	1	11.1	1	11.1	0	0	4	44.4	3	33.3
More than 5 years	4	10	2	5	3	7.5	13	32.5	18	45

TC31 *I feel a lack of control over what I teach in this subject.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	20	50	6	15	6	15	6	15	2	5
Department B	7	77.7	1	11.1	0	0	1	11.1	0	0
Department C	1	20	3	60	1	20	0	0	0	0
Department D	3	100	0	0	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	3	37.5	2	25	1	12.5	2	25	0	0
2-5 years	5	55.5	1	11.1	1	11.1	2	22.2	0	0
More than 5 years	23	57.5	7	17.5	5	12.5	3	7.5	2	5

TC38 *I am under increasing pressure from the students to stick to the syllabus.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	22	55	5	12.5	6	15	4	10	1	2.5
Department B	6	66.6	2	22.2	1	11.1	0	0	0	0
Department C	0	0	2	40	1	20	1	20	1	20
Department D	1	33.3	1	33.3	0	0	0	0	1	33.3

Years of Teaching Experience	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	3	37.5	0	0	3	37.5	2	25	0	0
2-5 years	4	44.4	3	33.3	1	11.1	0	0	1	11.1
More than 5 years	22	55	7	17.5	4	10	3	7.5	2	5

** 2 people did not respond to this item.

Student Characteristics:

SC22 *Having a range of student talent in a lecture makes it difficult for me to appropriately direct my teaching.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	20	50	12	30	4	10	3	7.5	1	2.5
Department B	4	44.4	1	11.1	2	22.2	1	11.1	1	11.1
Department C	1	20	2	40	1	20	1	20	0	0
Department D	0	0	1	33.3	0	0	1	33.3	1	33.3

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	4	50	2	25	2	25	0	0	0	0
2-5 years	3	33.3	4	44.4	1	11.1	0	0	1	11.1
More than 5 years	18	45	10	25	1	10	6	15	2	5

SC33 *The students act as though I'm a teacher at school, rather than someone who will assist their adult learning process.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	21	53	13	37.5	3	7.5	2	5	1	2.5
Department B	4	44.4	1	11.1	3	33.3	1	11.1	0	0
Department C	0	0	1	20	4	80	0	0	0	0
Department D	1	33.3	1	33.3	0	0	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	1	12.5	4	50	3	37.5	0	0	0	0
2-5 years	2	22.2	3	33.3	3	33.3	1	11.1	0	0
More than 5 years	23	57.5	9	22.5	4	10	3	7.5	1	2.5

SC40 *Students have such variable skills that I feel it hard to predict what they know and what they don't know.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	6	15	15	37.5	11	27.5	4	10	3	7.5
Department B	2	22.2	0	0	3	33.3	3	33.3	1	11.1
Department C	0	0	2	40	1	20	2	40	0	0
Department D	0	0	1	33.3	1	33.3	1	33.3	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	1	12.5	2	25	4	50	0	0	1	12.5
2-5 years	0	0	4	44.4	2	22.2	3	33.3	0	0
More than 5 years	7	17.5	12	30	10	25	7	17.5	3	7.5

** 1 person did not respond to this item.

Class Size:

CS27 *In large classes I give students less encouragement to see me.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	24	60	4	10	4	10	6	15	0	0
Department B	4	44.4	3	33.3	0	0	1	11.1	0	0
Department C	0	0	2	40	2	40	0	0	1	20
Department D	0	0	1	33.3	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	5	62.5	1	12.5	1	12.5	1	12.5	0	0
2-5 years	5	55.5	1	11.1	1	11.1	1	11.1	1	11.1
More than 5 years	18	45	8	20	4	10	5	12.5	0	0

** 5 people did not respond to this item.

CS32 *In large classes I try to avoid questions from students.* **

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	27	67.5	8	20	1	2.5	0	0	1	25
Department B	6	66.6	2	22.2	0	0	0	0	0	0
Department C	2	40	1	20	1	20	0	0	1	20
Department D	1	33.3	1	33.3	0	0	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	7	87.5	0	0	1	12.5	0	0	0	0
2-5 years	7	77.7	1	11.1	0	0	0	0	1	11.1
More than 5 years	22	55	11	27.5	1	2.5	0	0	1	2.5

** 5 people did not respond to this item.

CS39 *Large classes discourage contact between myself and the students* **.

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	8	20	10	25	2	5	11	27.5	6	15
Department B	0	0	3	33.3	2	22.2	2	22.2	1	11.1
Department C	0	0	0	0	0	0	4	80	1	20`
Department D	0	0	0	0	1	33.3	0	0	0	0

Years of Teaching Experience	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	3	37.5	2	25	0	0	2	25	1	12.5
2-5 years	0	0	3	33.3	1	11.1	2	22.2	3	33.3
More than 5 years	5	12.5	8	20	4	10	13	32.5	4	10

** 6 people did not respond

Time Pressure:

TP18 *It is difficult to really assist students in this subject in the time we have available for teaching.*

	Responses									
	Rarely		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Department A	8	20	17	42.5	6	15	7	17.5	2	5
Department B	2	22.2	6	66.6	0	0	1	11.1	0	0
Department C	0	0	4	80	0	0	1	20	0	0
Department D	2	66.6	0	0	1	33.3	0	0	0	0

	Responses									
Years of Teaching Experience	**Rarely**		**Sometimes**		**About Half The Time**		**Frequently**		**Almost Always**	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Less than 2 years	2	25	5	62.5	0	0	0	0	1	12.5
2-5 years	0	0	6	66.6	2	22.2	1	11.1	0	0
More than 5 years	10	25	16	40	5	12.5	8	20	1	2.5

Appendix 7

Excerpts from Course Handbook

Example from Handbook for a course taught by a new lecturer in Department A (1A2)

Teaching/Learning Approach

The specialised knowledge and the learners own attitudes and behaviour pertaining to nga tikanga will be explored via varied learning activities including group work, self directed and active learning methods.

Assessment

Group play assignment. This assignment is such that the content/ideas presented by all methods of teaching and learning is directly involved.

Criteria for pass:

a Has participated in and contributed to the assignment.
b Meets all the terms of reference.
c States ideas clearly.
d Demonstrates knowledge and understanding of identified topic.

Example from handbook for a course taught by a new lecturer in Department A (1A3)

Teaching/ Learning Approach

This course will utilise a problem based learning approach. Students will share information with the group with presentations and discussion. Videos and guest speakers will also be utilised.

Required Formative Activities

Partcipate in exercises which examine the groups values and beliefs about sexuality.
Develop a pamphlet on preconceptual care.

Summative Assessments

Class presentation evaluated by peer assessment
Class test pre state will cover material included in this course.

Example from Handbook for a course taught by a new lecturer in Department A (1A4)

Teaching/Learning Approach

This course will utilise a problem based learning approach. Students will share information within group presentations and discussion. Videos and guest speakers will also be utilised.

Assessment

Required Formative Activities:

- Participate in exercises which examine the group's values and beliefs about [the subject matter of the course]
- Develop a pamphlet on [the specific subject] nursing care.

Summative Assessments:

- Class presentation evaluated by peer assessment Grade Pass/Fail
- Class test which will cover material included in this course.

Example from Handbook for a course taught by a Post probationary Lecturer in Department B (2B1)

Teaching/Learning Approach

The subject matter will be introduced and discussed in class. Students will be expected to enhance the detail of the subject matter by student centred and self directed learning. Field/site visits will provide an opportunity for observation of practical applications.

Assessment

Required Formative Activities:

Students are expected to attend all site visits, make notes of information given and notes of what is seen.

Summative Assessments:

There will be four tools of assessment:

3 investigative numeric descriptive assignments each worth 16.66% of course value
1 Written examination of 3 hours duration worth 50%

Example from Handbook for a course taught by a Post probationary Lecturer in Department A (2A2)

Teaching /Learning Approach

This course is structured around a series of tutorials based on the learning outcomes. Inquiry learning forms the basis for the teaching/learning approach. Issues and challenges generated from the learning outcomes will be explored in group discussion. Tutorials are a required learning activity, students will come fully prepared to actively participate in each inquiry. Parameters for the planning and delivery of the tutorials, symposium and workshops will be negotiated between students and lecturers.

Assessment

Formative Learning Activities

Symposium "So you think you know what health is"

Ungraded, each student will be reviewed in relation to the terms of reference and criteria.

Workshops - To discover how nursing practice is regulated in New Zealand. To critically review those regulatory mechanisms and to provoke questions and seek answers about their purpose.
Ungraded, each student will be reviewed in relation to the terms of reference and criteria.

Summative Assessment:

- A group inquiry to encourage a collaborative inquiring approach to learning. To encourage the learner to explore the impact that individuals, groups and events have had on the development of nursing in New Zealand. Grade Pass/Fail

- A 1000 word presentation discussing a particular model as a theoretical framework for nursing practice. Grade Pass/Fail

Example from Handbook for a course taught by a Post probationary Lecturer in Department B (2B4)

Teaching/Learning Approach

The central themes of this course will continue to be developed concurrently in the following format - lecture, tutorial and laboratories. The focus of the teaching/learning experience will be inquiry learning.

Learners will be encouraged to work in small groups, participate in the establishment of learning/teaching objectives and design specific activities to achieve learning outcomes related to this course.

Summative Assessments

Formal test	2 hours
Grades A Pass with Distinction	85-100%
B Pass with Merit	70-84%
C Pass	60-69%
Fail	Less than 60%

Assignment

To demonstrate an understanding of a selected topic of scientific knowledge as it applies to anatomy and physiology, Chemistry, biochemistry, physics, microbiology related to the human body. Grade Pass/Fail

Example from Handbook for a course taught by an experienced lecturer in Department D (3D1)

Teaching and Learning Approaches

Lectures, tutorials and discussions take place.

Required formative learning activities

2 x one hour tests

Summative Assessments

Assignment 1500 words
3 hour examination
Assessment for overall course grade
one distinction, one merit = distinction
two merits = merit
two passes = pass

Example from Handbook for a course taught by an experienced lecturer in Department A (3A4)

Teaching Learning Approach

This course is organised into lecture and tutorial sessions. Tutorials are based upon adult and inquiry learning principles. Participation in tutorial sessions is essential for each student to achieve the learning outcomes of the courses.

Each Monday lecture will focus on the timetabled learning outcome for the week. Time is allocated after each lecture to enable the student to research and prepare to report on their findings in a tutorial session timetabled on the same day. Friday lecture sessions will enable students and lecturers to consolidate this information.

Assessment

Required formative learning activities.

Assignment 1 Tutorial inquiry, to review a model of nursing and explain each concept in your own words.

Grade: Ungraded. Meets stated level of competence. Students who do not meet this level will have the opportunity to re-submit their work until the level of competence is achieved.

Summative Assessment

A written assignment in which the student demonstrates their understanding of the particular theoretical framework for nursing practice which has been taught in the course. Word limit, student discretion. Grade Pass/Fail

Appendix 8

Professional Development Time

Respondents were asked to circle one of five numbers which carried the following values.

1 = this item is **only rarely** true
2 = this item is **sometimes** true
3 = this item is true for me **about half the time**
4 = this item is **frequently** true
5 = this item is **almost always** true

The following four tables present the average responses for lecturers in each of the three categories of teaching experience and the total average for each item. The standard deviations for each category and the whole sample on each item demonstrate the spread of responses. The generally high standard deviations are related to the relatively small sample size.

Table 5.14 : Use of PDT to Catch up on Overload

	Length of Teaching Experience			
	Less than 2 Yrs	**2 to 5 Years**	**More than 5 Yrs**	**Entire Sample**
Mean	2.50	2.62	2.53	2.54
Std Deviation	1.85	1.30	1.51	1.51
No Response	0	1	1	2
Total Cases	8	9	40	57

Table 5.15 : Use of PDT to Catch up on New Developments in Subject Discipline

	Length of Teaching Experience			
	Less than 2 Yrs	**2 to 5 Years**	**More than 5 Yrs**	**Entire Sample**
Mean	3.42	3.11	3.05	3.11
Std Deviation	1.71	2.57	1.52	1.72
No Response	1	0	3	4
Total Cases	8	9	40	57

Table 5.15 indicates a tendency for all groups to use PDT to investigate new developments in their subject areas.

Table 5.16 : Use of PDT to Develop or Improve Aspects of Teaching

	Length of Teaching Experience			
	Less than 2 Yrs	**2 to 5 Years**	**More than 5 Years**	**Entire Sample**
Mean	2.28	3.44	2.89	2.90
Std Deviation	1.38	2.50	1.55	1.71
No Response	1	0	2	3
Total Cases	8	9	40	57

Table 5.17 : PDT gets absorbed into regular workload

	Length of Teaching Experience			
	Less than 2 Years	**2 to 5 Years**	**More than 5 Years**	**Entire Sample**
Mean	1.71	4.22	3.12	3.12
Std Deviation	.95	2.27	1.73	1.85
No Response	1	0	1	2
Total Cases	8	9	40	57

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