Mindfulness and the Beginning Teacher

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Abstract

Teaching is stressful. A number of studies have demonstrated that teachers are not coping in the classroom and many are leaving the profession (Viola, 2009). To promote self esteem and self efficacy for beginning teachers and to help them cope with the stress and isolation prevalent in the first year, resilience training is needed (Keltchermans & Ballet, 2002; Molner Kelley, 2004; Findlay, 2006). Pastoral support and assistance for personal and emotional issues have potentially significant impacts on resilience and performance for beginning teachers. However, few mentoring programmes consider these stressors which, when addressed in a structured mentoring programme, have a significant impact on improving teacher efficacy and job retention rates (Gless & Moir, 2004).

Mindfulness, a form of contemplative practice, is used throughout the world for personal wellness (Kabat-Zinn, 2005). Prior to the past five years, though, there have been few programmes in tertiary education that included contemplative practice (Bush, 2011).

This doctoral study reviews the findings from the individual 'lived experiences' of a small group of beginning teachers who were introduced to mindfulness. The purpose of these exercises was to improve their ability to be more compassionate, more focused and more aware of the present moment (Kabat-Zinn, 2005). Based on perceived reductions in stress and increased ability to cope with the needs of individual students, the results of this study indicated that mindfulness was a significant part of the initial teacher education and professional development programmes for the participants.

A hermeneutic phenomenological study was undertaken to describe the personal and professional lived experiences of these beginning teachers. Mindfulness itself was used alongside hermeneutics and phenomenology. Mindful meditation strategies outlined by Zajonc (2009) and Kabat-Zinn (2005) were implemented to complete the data interpretation. The philosophies of hermeneutic phenomenology espoused by Husserl, Heidegger and Gadamer were drawn upon to describe the participants' lived experiences.

Chapter 1

Mindfulness, Beginning Teachers and Me

- 1.1 Background information
- 1.2 A personal perspective
- 1.3 Aim of the study, the research question and the course of action
- 1.4 Relevant background/How I came to mindfulness
- 1.5 Assumptions and foundational concepts for this study
- 1.6 My contribution to research and the significance of the project
- 1.7 The component parts of this thesis

1.1 Background information

Rudolf Steiner (1924/1997) proposed that individuals are not aware of each other as human beings. He went on to say that alternatively, we make judgements about others rather than experiencing our lives in the moment or truly 'being' with other human beings.

Like many people, I have lived parts of my life unconsciously. At times I have not really engaged with the people I encountered including my students. Though physically I was present and reacted to each event as it happened, I was not *being* or *living in the moment*. I was mentally in the past or the future. How often have I 'awakened' to a very special moment! When commuting home from work, arriving at the door thinking, "How did I get here?" having been so absorbed in thoughts about the events of the day. Although I was alive and breathing, I was not totally conscious of each moment.

Consciousness and awareness

Jung (1960) believed that when an individual observes his or her own life, consciousness is experienced. Observing one's own life takes effort and energy and is directly linked to sensorial perceptions and awareness (Jung, 1960). Consciousness, being alive in each moment, brings not only personal awareness, but also awareness of others and of the world. Through individuation each being becomes self aware and declares distinctiveness from others in society, and this results in a felt-sense of authenticity (Jung, 1971). Attentive to that knowledge, we discover our unique individuality, enhancing our lives.

Being aware of ourselves, others and the world in this way comes from cultivating and developing a calm, uncluttered mind (Hart, 2001a). How do we find this peace of mind? Cranton and Carusetta (2004) concurred with Jung and suggested that instead of reacting to each moment, greater self-awareness and peace of mind comes from observing, reflecting and responding deliberately and purposefully from one moment to the next.

Since I started practicing mindfulness, I have tried to live deliberately and with clear, specific intentions, conscious of each moment. This means, for example, that I am now noticing where and how I am driving, the traffic, other drivers, and the scenery. At the same time, I have the intention of experiencing each moment without making judgements. Mindfulness, slowing down to notice each moment non-judgementally (Kabat-Zinn, 1990; May, 2006), helps individuals to become more conscious, more aware (Kabat-Zinn, 1990). By slowing down, individuals expand their 'self' knowledge as well as knowledge of others and the surroundings through greater awareness and observation. Events are felt more deeply, and decisions are made based on clearer understanding.

Mindfulness in 'fix-it' and 'good health' paradigms

Kabat-Zinn (1990) conducted a number of studies at the Mindfulness Based Stress Reduction Clinic at the University of Massachusetts Medical School using mindfulness to assist ('fix') patients with a variety of chronic illnesses. Around the same time, Langer (1989) initiated her research centre at Harvard which focused on using mindfulness to increase one's awareness, learning capability and creativity. Langer's studies suggested to me that mindfulness could be a part of a 'good health' paradigm for everyone in a teaching and learning environment. Mindfulness principles can be applied to a learning environment for stress reduction to keep students focused, but also for pedagogical purposes (Zajonc, 2009).

Langer (1997), through a series of empirical studies, discovered three key principles for using mindfulness to enhance learning. A student might approach a new topic through:

regularly creating new categories to organise information

- being open to learning new ideas, and
- focusing on new perspectives and accepting different points of view (p. 4).

From their studies using mindfulness in different settings and under different conditions, Langer (1989) and Kabat-Zinn (1990) concluded that through the practice of mindfulness, confidence, thought and practice would improve. It seemed possible that the 'good health' or well-being gained from learning and practicing mindfulness could be extended to other parts of an individual's life.

Schonert-Reichl and Stewart Lawlor (2010) confirmed the potential benefits of mindfulness when they pointed out that positive psychology, which includes mindfulness, focuses individuals on their positive qualities and promotes well-being. This research suggested that mindfulness might be used as part of a 'good health', 'wellness' or 'preventative' model for everyone, as well as to 'fix' a patient's symptoms or problems.

The results from studies in the education field including Langer's research, and within the health sector, Kabat-Zinn (1990), and others, were the foundation for this thesis.

1.2 A personal perspective

By practicing mindfulness through meditation, focusing, journaling and using other contemplative practices, I have become more aware of myself, others and the surroundings in my personal life and my professional life as an educator. Hart (2001a) suggested that not only can this kind of awareness be cultivated personally, but teachers can guide students to engage in these practices. When teachers and students are able to slow down and notice each moment more clearly, improvements in academic achievement and social emotional skills may result (Hart, 2001a). Based on these ideas, I introduced university students to mindfulness exercises and noticed anecdotally, a calming effect in the classroom. In particular, students demonstrated an increased ability to actually be 'present' and aware in the classroom and to engage in what was being discussed.

I believed that if teachers had the deliberate intention to increase their awareness of themselves and their students, mindfulness might then be used to assist teachers to make the moment by moment decisions required in the classroom. I believed that teachers needed to model this present-moment awareness to build their own self efficacy and confidence in their teaching in order to support students' development of self confidence.

I thought that mindfulness might assist first-year teachers on this journey to self efficacy, and that the resulting self efficacy would be something special and unique that might support teachers, particularly beginning teachers, in coping with stress, and in meeting the demands of the classroom. Gibbs (2006, p. 8) confirmed Palmer's (1998) assertion that self awareness improves teaching when "we teach who we are" (p. 1). In this way, teachers become more authentic in their professional practice. "Authentic identity reveals a presence of commitment, being at ease, or inner peace in being meaningfully connected with who we are" (Gibbs, 2006, p. 18). This inner peace and intrapersonal connectedness provides a foundation for individuals to develop a strong sense of self efficacy which, in turn, improves their teaching (Gibbs, 2006).

1.3 Aim of the study, the research question and the course of action With this study, I wanted to explore how beginning teachers would perceive the first year of their lived professional experiences if they engaged in mindfulness practices. This was, therefore, *not* a study focused on the children in the classroom, but rather the teachers themselves.

The aim of this study was to review the effects of mindfulness on the professional lives of a group of teachers. I wondered if these practices would help them become more focused, improve consciousness and observation skills, and build self efficacy. Would this have an effect on their professional development in planning, teaching, and assessment practices and thereby assist them in coping with all the stress and demands of that first year of teaching?

From these initial thoughts, a research question emerged: What is the lived professional experience of beginning teachers who have been introduced to mindfulness during initial teacher education? The question had two key components:

- What effect does mindfulness have on the personal and professional resilience of these beginning teachers in their individual contexts?
- Would introducing mindfulness lead to greater ability to cope with the demands of the first years of teaching, and would it possibly lead to improved academic achievement and social relationships for students?

I drew upon phenomenology and hermeneutics research philosophies and methodologies from Husserl, Heidegger and Gadamer, to observe the journey of five beginning teachers who had been introduced to mindfulness during their initial teacher education. These beginning teachers were graduates who had completed a Bachelor of Education, Primary Teaching Programme, in which I had incorporated mindfulness and mindful learning.

The participants engaged in mindfulness personally and introduced similar practices to students in their own classrooms. To gather data, each participant reflected on their personal and professional lives in journals. Information extracted from the journals prompted key questions for discussion in a series of subsequent interviews.

I reviewed their journals and the interview transcripts; I used hermeneutic interpretation and mindfully meditated on the data in a similar fashion to the contemplative inquiry model proposed by Zajonc (2009). This contemplative process supported Heidegger's (1953/1996; 1954/1968) and Gadamer's philosophy (1960/1993; 1975/1985) of hermeneutic phenomenology. Meditating on the data, to 'sit with' it, and reviewing significant parts with my supervisor and the participants provided opportunities to 'play' with my interpretations in a hermeneutic circle such as that recommended by Gadamer (1967/1976; 1975/1985).

By using mindfulness, the participants in this study and I, as researcher, have become more aware of the effects of mindfulness in their personal and professional lives. Krishnamurti (1953) noted that intelligence and new knowledge come from awareness of our own thoughts and feelings and observing ourselves and others mindfully in everyday life and in meditation. Therefore, by asking beginning teachers to pay attention mindfully to their thoughts and feelings, I can now report on aspects of their lived professional experiences.

1.4 Relevant background/How I came to mindfulness

Who am I anyway? Am I my résumé, which is a picture of a person I don't know? What should I try to be? (Kleban, 1974). These words from the musical A Chorus Line (Papp, 1975) struck a chord with me from the first time I heard them. Who am I, anyway? In this section, I attempt to explain 'who I am' and reveal my personal biases that relate to this study. My prior knowledge and understanding of mindfulness has been influenced by my personal, professional and cultural contexts.

Over the years, I tried various methods to discover the essence of who I am to enhance my own personal development and in turn, my professional development and pedagogical practice. Palmer (1998) encouraged effective teachers to teach being true to one's identity and indicated that by doing this, we improve our pedagogical practice and enhance learning opportunities for our students. How do we find our identity; who we are? By engaging in exercises to build self-awareness, an individual can start to bring into consciousness an understanding of who he/she might be. Then, that individual can infuse his/her teaching with that awareness and understanding. As I have suggested earlier, mindfulness may provide the opportunity to build self awareness. Mindfulness practices were the key to unlocking that awareness for me.

Who am I anyway? I have been in primary education since 1980, and though I always tried to do my best to provide quality educational programmes for my students, there were times when I was not totally 'present' and was judgemental of the school and individual students. My students achieved well on standardised testing; my teaching evaluations were always excellent, and my students, I believed, were genuinely thoughtful and caring individuals. However, I felt more was possible. I didn't realise it

at the time, but I was trying to 'find myself'. I was searching for a path to follow to allow me to become a more creative human being; not caught up in the mindless chatter in my brain, but focused on the moment, giving to others and to society.

Krishnamurti (1953) inspired me in his reflection on the journey to maturity. He concluded that maturity evolves from stillness in each moment which opens a pathway to creative expression:

Creativeness is a state of being in which the conflicts and sorrows of the self are absent, a state of mind in which the mind is not caught up in the demands and pursuits of desire. To be creative ... is to be in that state in which truth can come into being. Truth comes into being when there is a complete cessation of thought ... when the mind is utterly still without being forced or trained into quiescence, when it is silent because the self is creation (Krishnamurti, 1953, p. 128).

Calmness and turning off the continuous meta-cognitive chatter seemed critical for success. I kept searching for ways to find stillness and creativity for personal growth and development so that I could weave that into my classroom pedagogy. Growing up, completing my initial teacher education programme and the first ten years of my teaching career in California, there were a variety of 'self-help' and therapy programmes on offer. As a deputy principal and principal in Surrey, British Columbia, Canada, I continued to explore my personal identity and searched for techniques that might also improve the lives of children who would attend the schools where I was working.

My search led me to a variety of self help programmes such as the Science of Mind Church, founded by Ernest Holmes, www.religiouscience.org, (not to be confused with Scientology) which teaches participants to live in a spiritual environment based on harmony and to focus on the power within yourself. As a primary school principal in a suburban school district, I was introduced to Effective Behaviour Support (EBS; also known as PB4L or Positive Behaviour for Learning, www.pbis.org), designed to provide a positive learning environment for all students in a school focused on improved social

and personal skills (Positive Behaviour Support, nd). But, each of these only provided momentary clarity as I lived life from event to event, and worked purposefully with students and teachers. Often, I was more 'present' in mind and body when living life using these new strategies, but not always.

Moving to New Zealand and becoming a lecturer in teacher education was a significant part of my journey. A key component of the initial teacher education programme at the university where I teach is the development of a personal philosophy of education to integrate the threads of curriculum, pedagogy, theory and practice. While teaching in this programme, I continued my personal self development quest which led me to a mindfulness counsellor, Dianne May, in 2005. From individual and group sessions, I learned the value of mindfulness and specific exercises to cultivate that present-moment awareness combined with non-judgement and compassion.

Through slowly learning the mindfulness practices and incorporating them into my daily life, I found I was 'present' more in the moment; more self aware and I gained new insights. Through this self-awareness, I have been able to move forward by embracing creative opportunities and personal self acceptance and self confidence. I have learned to listen to my meta-cognitive chatter without getting caught up in it, and to listen to myself, my feelings, and my body in order to be more mindful of each moment.

After experiencing the benefits of mindfulness personally, I wondered whether including mindfulness in a teacher education programme would assist beginning teachers in developing a stronger foundation of skills, knowledge and dispositions to meet professional challenges. For my initial teacher education students, I initially wavered from using mindful practices for personal development and stress release, and focused on mindful learning. But, I grew to believe that mindful pedagogy and mindful living complement each other and began to use mindfulness exercises to promote general well-being in my lectures. I started classes with mindfulness practices and integrated information about mindfulness, including the neuroscience behind it, into my lectures, and then related it to the topics being studied. By teaching in this way, I was authentic to my own identity, which echoed Palmer's (1998) belief that

when teachers reveal the essence of who they are as they teach, they are more effective.

I realised how significantly mindfulness had changed me when I participated in a colleague's partially completed phenomenological study on "spirituality in education" in March, 2008. I described for her the feeling of 'glow' that emanated from an inner spiritual strength when teaching, without making judgements about myself or the students; fully present in the moment. This was particularly evident when I engaged with classes in a mind/body or mindfulness meditation exercise. Further, I noted that when the 'glow' continued to be present, the class could experience this through fully connecting with the course content and discussions. I was able to relate to my colleague specific instances from my lectures where I had felt this 'glow'. These conversations, and other casual moments shared with her, validated my journey. And with her sudden and unexpected death in April, 2008, I was fortified again to share my spiritual experiences.

Thich Nhât Hanh has been another spiritual influence in my life. He related a story about a seemingly simple task that many do hurriedly and without thinking: washing dishes (Nhât Hanh, 1987, p. 3). At one time it was very difficult to wash dishes but now with soap and machines, many of us wash dishes mindlessly without being totally present in the moment. There are two ways to wash the dishes. The first is to wash the dishes in order to have clean dishes while not paying attention to what you are doing. The second is to wash the dishes in order to wash the dishes; totally conscious and aware of what you are doing, your own breath and your thoughts, actually experiencing washing the dishes. This is now how I choose to live my life; actually experiencing what I am doing.

I have not always been mindful in each moment but continue on that journey. The completion of this doctorate has been for the completion of the doctorate, not simply to get it done. I have been more focused on what I have gained in each moment of the doctorate journey itself and how I have grown intellectually. I have completed a doctorate to *complete* a doctorate, actually experiencing every moment of the journey as a learning opportunity.

1.5 Assumptions and foundational concepts for this study

My key reason for embarking on this study was the assumption that by adopting mindful practices within their personal lives and within the pedagogy in their classroom, beginning teachers would be better equipped to meet the challenges of their first year of teaching. I thought that with further research, mindfulness might be demonstrated to be a useful practice for beginning teachers. And if this was so, then it might also improve the learning environment by creating an atmosphere for creativity and personal development, leading to improved professional achievement and student learning. The stress and dramas of the first year of teaching, therefore, might be somewhat ameliorated.

Teaching is stressful. Demands are placed on teachers to provide an appropriate educational programme. All curriculum areas (physical education, arts education, literacy, numeracy, etc) that meet the individual academic, social, personal, and emotional needs must be covered. The design and implementation of that curriculum must consider the fact that these students will be adults in a world where technology will continue to rapidly change the way individuals live and work. Kelchtermans and Ballet (2002) signalled the magnitude of these challenges and the associated difficulties for beginning teachers as they come to grips with the realities and responsibilities of their career choice. Grudnoff and Tuck (2003), in a survey of 400 graduates of a teacher education programme in New Zealand, confirmed the intensity of the challenges and high stress levels for beginning teachers.

To help reduce this stress for teachers, I thought the first step would be for participants in my research, to embrace the principles of mindfulness. The seven principles of mindfulness include:

- being non-judgemental of self, others and events
- cultivating patience with yourself and others
- enjoying the beauty and newness of each moment
- trusting in yourself and your own feelings
- paying attention to what is, rather than striving for something else
- accepting things as they are and

• letting go (May, 2006, pp. 6-11).

I assumed that when being mindful, individuals could control their 'mind chatter' and thus open their minds to form new concepts and ideas. For me, this was why meditation was useful to calm the chattering mind so individuals could be open to new information. Such embodied learning helps each person to see rather than look at, hear rather than listen, feel rather than react (Bai, 2001). These qualities could only enhance the beginning teacher's practice.

Authentic teaching comes from observing mindfully to hear, see, and respond to the pedagogical demands of each moment. Hocking, Haskell, and Linds (2001) discussed the importance of being "watchful" or mindful as a key to effective pedagogy. Hocking (2001), in a different article, suggested that this form of teaching would encourage: risk taking, learning to make choices, goal setting, pushing beyond limits, and being tuned into senses. These pedagogical practices, for me, align with the principles of the New Zealand Curriculum document including thinking, relating to others, understanding text, managing self and participating in society (Ministry of Education, 2007). It is my contention that when mindfulness is practiced by beginning teachers in both their personal and professional lives, it has the potential to help them as teachers and their students improve thinking skills, self-awareness and other key competencies highlighted in the New Zealand Curriculum.

The participants' journals and interview transcripts outlined their knowledge of their lived experiences using mindfulness practice. Understanding from a phenomenological perspective is more than the just a reflection of the experience. It is the vivid initial or eidetic perception of the experience itself, immersed in a deep thinking process considering all the possibilities, to describe the essence of the experience. "Phenomenology, or better, the eidetic theory of lived processes ... opens up an infinite field of truths ... and in general ... enrich empirical natural science" (Husserl, 1912/1980, p. 38).

I believe that through reflection on and hermeneutic phenomenological interpretation of their experiences, the participants and I learned about the role of mindfulness for

them as beginning teachers. "Experience is a title for acts exhibiting factual existence, acts originally grasping as perception ... and phenomenology is eidetic truth (essence) from those experiences" (Husserl, 1912/1980, p. 41). In a phenomenological study, knowledge comes from the intuitive understanding of lived experiences.

As a key ontological belief of phenomenological study, understanding from experience also suggests *how* an individual comes to know new information or gain understanding, and is therefore also a foundational epistemological perspective for this study. Heidegger (1953/1996) believed that understanding comes from 'being' (*Dasein*), and *Dasein* 'understands' because the essence of *Dasein* is the ability to interpret experiences that are lived as something. In this case, the 'beings', beginning teachers and I, interpreting lived professional experiences as 'something' within the classroom setting. Hermeneutics, the art of interpretation, guides the researcher, from his or her own context, to illuminate the essence of those lived experiences (Gadamer, 1967/1976). Therefore, I believe that hermeneutic phenomenology is useful in describing particular lived experiences from which insights can be drawn to contribute to knowledge.

Based on these assumptions, I proposed the following key foundational concept for this hermeneutic phenomenological investigation: If the lived experiences of these beginning teachers using mindfulness skills noted that they appeared to be better equipped to cope with the demands of the classroom, then, mindfulness might be a useful component of initial teacher education programmes.

1.6 My contribution to research and the significance of the project

The aim of this study was the exploration of the role of mindfulness in teacher education as a way to support new teachers to cope with classroom demands. I show in chapter 2 that within the body of research on mindfulness, there has been very little study of the potential of mindfulness within initial teacher education. I believe that the exploration of my research question, What is the lived professional experience of beginning teachers who have been introduced to mindfulness during initial teacher education?, has expanded this nascent field of study by focusing on the lived

professional experience of these beginning teachers as they embarked on their professional careers having been introduced to mindfulness.

This study was *not* a quantitative study of the reduction of stress in beginning teachers when introduced to mindfulness which could be an important follow-up study. Rather, I used hermeneutics or interpretation and meditative enquiry to review the participants' revelations to present the new knowledge about the phenomenon of mindfulness for beginning teachers. From this, I have then proposed suggestions for future incorporation of mindfulness practices and pedagogical principles into teacher education programmes in chapter 9.

Another outcome of my study was applying mindfulness itself as a way of knowing or accessing information, or an epistemology. Kozik-Rosabal (2001) demonstrated the use of mindfulness as a way of accessing knowledge in her research with student teachers. She stated that being mindfully aware of the present moment provided the opportunity for more profound growth than reflection alone, which is based on past information (Kozik-Rosabal, 2001). She does not infer that critical reflection is not useful, but only that mindful contemplation significantly improves the potential to access new knowledge and then use that knowledge to make changes.

I was inspired by Kozik-Rosabal's study to use mindfulness as the researcher to gain knowledge in the data interpretation cycle. Zajonc, a physicist, outlined a contemplative inquiry model, 'epistemology of love', that he proposed is as important to gaining new knowledge as a scientific positivist research approach (Zajonc, 2009). I have drawn upon this model to interpret data. Using mindfulness as a researcher has given me the opportunity to consider the question: What is the possible role for mindfulness itself in research design? As there has been very little discussion of contemplation or mindfulness as part of a qualitative study in the literature, this thesis contributes to the body of knowledge pertaining to the value of contemplative inquiry in research design. The role of mindfulness as part of the research methodology is discussed in chapter 4, as well as in the subsequent chapters outlining the research process and the data interpretation.

The significance of this project, therefore, was two-fold:

- I believe I have created new knowledge about the use of mindfulness for beginning teachers and in initial teacher education.
- 2. I have also demonstrated the use of mindfulness itself, or contemplative inquiry, as a research methodology.

1.7 The component parts of this thesis

A large portion of this research is theoretical: a literature review of mindfulness exploring its history, practical applications of mindfulness and research studies of its benefits, and a philosophical discussion of mindfulness, phenomenology and hermeneutics, their interrelationship and their application to research. These theoretical chapters are followed by the data, data interpretation findings and conclusions. This thesis contains the following chapters:

Chapter 1, Mindfulness, beginning teachers and me:

This introductory chapter explored my personal journey to mindfulness, my background in education and provided the background for this study.

Chapter 2, What is mindfulness?:

In this first literature review chapter, I have discussed various aspects of mindfulness in the literature, ending with the working definition of mindfulness used in this study.

Chapter 3, Mindfulness in action and research:

I have discussed in the second literature review chapter research related to the effectiveness of mindfulness in the health and education sectors.

Chapter 4, Philosophical underpinnings and the research design:

This chapter explains how I have drawn from the ideas of the key philosophers of phenomenology, hermeneutics and mindfulness for this study, particularly Heidegger and Gadamer. The review of these philosophical perspectives led me to use mindfulness as a research method. I have also looked at the contemplative inquiry process outlined by Zajonc (2009). Finally, the concept of 'quality' in an interpretivist study is addressed.

Chapter 5, How this mindfulness research unfolded:

In this chapter, I have outlined the research process used with the beginning teachers including the data collection methods. It includes a review of the 'quality' criteria, outlined in chapter 4, in light of what actually happened. The meditation process used in the research is explained in detail.

Chapter 6, Distilling ideas to describe the 'what' of the participants' lived experiences:

In this first section of the data presentation, a description of the lived experiences of the participants using mindfulness is outlined. The chapter lists the kinds of mindfulness practices engaged in and some of the effects from a reductionist Husserlian point of view, bracketing (setting aside) bias or at least attempting to. The interpretation in this chapter relates to the first half of Zajonc's (2009) 'epistemology of love' which refers to the concentrative focus on the 'what' of the experience. Initial insights from the beginning stages of deeper reflection are included in this chapter.

Chapter 7, Synthesis of the data: My perceptions:

For this second chapter of data presentation, the journals and interview transcripts were reviewed through a Heideggerian lens acknowledging and including my biases and personal experiences that influenced my interpretation. The interpretation in this chapter relates to the second half of Zajonc's (2009) 'epistemology of love' by creating 'space' in consciousness for new ideas or 'insights' to be revealed about the qualities of teachers using mindfulness.

Chapter 8, Deconstructing this study of mindfulness:

In this chapter, I have discussed the data interpretation in the unseen broader implications, the resulting connections or links, and the limitations of the research.

Chapter 9, This present moment and potential future mindful moments:

The final chapter included my outline of my contribution to the research, and future possible associated research and further study. I have also explored how this research has affected my own use of mindfulness personally, professionally and in my own teaching.

I have written poems to coincide with the research in this study, and these are interspersed throughout the chapters.

This story is my story. It describes part of my journey to personal and professional authenticity through a hermeneutic phenomenological study of beginning teachers' use of mindfulness. The study was augmented by my use of mindfulness meditation to contemplate and analyse the data. I believe the use of mind/body practices enhanced the personal and professional development of the participants and contributed to the research methodology of this thesis. The resulting thesis demonstrates that mindfulness practices can be applied alongside all personal beliefs; that mindfulness is a way of aligning the mind/body to self-awareness on the journey of life.

Chapter 2 What is mindfulness?

- 2.1 Introduction to Chapters 2 and 3
- 2.2 What is mindfulness? Origins and perspectives from several traditions
- 2.3 Contemplative mindfulness as a western cultural phenomenon
- 2.4 Cognitive mindfulness
- 2.5 Identifying elements or subskills of mindfulness to construct a definition
- 2.6 Implications of cognitive and contemplative mindfulness for the field of education
- 2.7 My ontological beliefs and a working definition of mindfulness
- 2.8 Mindfulness (poem)

2.1 Introduction to Chapters 2 and 3

Chapters 2 and 3 constitute a review of the literature and research in the area of mindfulness. This literature review establishes a foundation for this study which reports my investigation into the professional lived experiences of beginning teachers who were introduced to mindfulness during their initial teacher education and who have integrated mindfulness practices into their lives.

The definitions of mindfulness found in the literature are discussed, including those from eastern and western paradigms as well as from other philosophical perspectives. I have illustrated two different perspectives of contemplative mindfulness and cognitive mindfulness, both forms of concentration and awareness 'in the moment'. Langer (1997) is a strong proponent of this distinction while others consider mindfulness a contemplative practice that might also have implications for teaching and learning (Siegel, 2007; Kabat-Zinn, 2005).

This leads to a discussion of my own ontological beliefs and the definition I used in this study.

Contemplative practice aligns directly with the social-emotional curriculum (Hart, 2001a; Siegel, 2011). Cognitive mindfulness (section 2.4) is discussed in this chapter to illustrate this alternate perspective as well as to demonstrate that the tools of contemplative mindfulness can provide a structure for curriculum development beyond social emotional learning. I have argued that cognitive mindfulness is an extension of contemplative mindfulness.

My critique of the cognitive or contemplative mindfulness debate is that these two perspectives are connected and as such, can provide an intense present-moment focus, which is filled with creativity and compassion. Cognitive/contemplative mindfulness has some similarities to Csikszentmihalyi's (1988) concept of 'flow'. These similarities and the differences are discussed later to assist in refining the definition of mindfulness for this study.

The key characteristics of mindfulness and possible implications for the field of education are examined. From my analysis of the two positions of contemplative and cognitive mindfulness, I summarise my ontological beliefs and propose a working definition of mindfulness for this study. This definition leads into the next literature review chapter (Chapter 3).

In chapter 3, studies of mindfulness within the health and education sectors are outlined. These studies highlight a gap in the literature which provides a rationale for the research focus of this study. Research on the effects of mindfulness began in the health sector and has a long history compared to the emerging research within the education arena. The health sector research is included to provide a breadth of understanding of the perceived effects.

2.2 What is mindfulness? Origins and perspectives from several traditions

In this chapter, eastern and western traditions and current research studies are considered to provide a foundation for the definition of mindfulness for this study. Mindfulness is a contemplative practice that traces its origins back to eastern philosophy particularly Buddhism and the Noble Eightfold Path (Snelling, 1991; Kornfeld, 2009). The online Oxford English Dictionary defines *mindfulness* or *being mindful* as: "taking heed; being conscious or aware". For me, mindfulness includes this dictionary definition and much more. In this section, I will consider these four philosophical perspectives related to mindfulness:

- 1. the eastern philosophical foundation (Buddhism),
- 2. mindfulness practices from other religious traditions,
- 3. indigenous populations experience with mindfulness, and

4. connections with Montessori and Steiner philosophies.

Eastern philosophies stress the importance of the mind/body connection in mindfulness. Kabat-Zinn (2005) confirmed this connection in mindfulness in Buddhism, but also highlighted that mindfulness has connections to other philosophies including Judaism, Islam, Christianity, Hinduism, and other traditions suggesting widespread usage and practice. Additionally, many indigenous populations practice forms of mindfulness and value the mind/body connection, including the Māori in New Zealand (Pohatu, 2000) and Native Americans (Kerr & McAlister, 2002).

A philosophical foundation

In *Pali*, the language of Theravada Buddhism, mindfulness is *sati*, an **active** state of mind in which individuals focus their attention on a subject and direct that attention through thinking and reflection to a deeper consciousness (Gethin, 2011). These writings from the Theravada, or the elders' teachings, provided insights into the spiritual path (Claxton, 1990) and emphasised the importance of mindfulness. This active state of mind during meditation leads to what Adhidhamma, the Theravada Buddhist scriptures, referred to as an 'absence of floating' (Gethin, 2011). In mindfulness, an individual focuses in the present moment, rather than drifts in thought; aware of each thought, feeling and sensation, without getting caught up in any of these. Gethin (2011) added to this definition noting that this state of mind encourages restraint and an understanding that all things of this world are impermanent (Gethin, 2011).

In the Theravada Buddhist tradition, two types of meditation are practiced: *samatha*, which includes concentration to develop a calm, quiet, tranquil frame of mind, and *vipassana* which builds skills of insight, clarity and awareness (Gunaratana, 1991). Both these types of meditation build the quality of *sati* (mindfulness).

Gethin (2011) suggested that mindfulness serves as a 'gatekeeper', protecting the mind/body. In this way, each individual knows what to do or what to notice in the moment, so that thoughts, feelings and perceptions don't get in the way or take over the mind. Nhât Hanh (2007) noted that the Buddha engaged in mindfulness through

daily meditation practice with the intention of developing the ability to live mindfully with a calm, still, quiet mind open to different perspectives. The mind/body connection stressed in the Buddhist practice of mindfulness promotes a greater ability to focus on the moment in a non-judgemental way.

Buddha, which means 'awakened one', identified the Four Noble Truths of existence in the world. One of the Noble Truths states that life includes *dukka* (suffering) which has its origins in man's desires to be satisfied (Sharples, 2003). The key to awakening from that suffering is to follow the spiritual guidance from the Buddha which includes mindfulness (Batchelor, 2011). The guide is defined as the Noble Eightfold path, and is designed to help each individual find their own path beyond dissatisfaction by practicing:

- 1. Right understanding
- 2. Right thought
- 3. Right speech
- 4. Right action
- 5. Right livelihood
- 6. Right effort
- 7. Right mindfulness
- 8. Right concentration (Snelling, 1991, p. 55).

Right mindfulness and right concentration combine into a contemplative, meditative practice. The purpose of mindfulness is "calming and stilling the mind; generating wisdom; and cultivating kindness and compassion" (Sharples, 2003, p. 27) to cope with dukka (suffering). This parallels the concepts of samatha (concentration) and vipassana (insight) meditation discussed earlier. Therefore mindfulness, enriched through daily practice, strengthens the ability to be aware of each moment with compassion, and a more balanced state of mind rather than remaining in perpetual dissatisfaction.

In day to day Buddhist practice, "mindfulness is the observance of the basic nature of each passing phenomenon" (Gunaratana, 1991, p. 153). To explain the actual act of being mindful, Gunaratana (1991) discussed the perceptual process of mindfulness.

Before an individual pictures something in their mind, there is a brief moment of awareness that is mindfulness, accompanied by a profound sense of knowing (Gunaratana, 1991). He added that immediately after this flash of awareness, the individual perceives the object, sees it, labels it, and then the mind proceeds to review previous notions of, and judgemental ideas about the object (Gunaratana, 1991). It takes regular practice to extend the amount of time one is 'mindful' of the present moment, observing like a scientist, without judging or linking this object or thought to any previous thoughts. Mindfulness is that initial awareness, the simple noticing, before the individual has the time to think about what is happening or what the object is (Gunaratana, 1991).

Mindfulness is this simple, bare attention (Snelling, 1991). Nyanaponika (1962), in a treatise on Buddhist meditation, confirmed the importance of 'bare attention' in mindfulness, before the observer considers perspectives related to self interest, or personality and ego. Williams and Kabat-Zinn (2011) referred to this as "clear comprehension and discernment" (p. 15). The investigative aspect of mindfulness to describe the nature of phenomena before making any judgements is similar to the process of phenomenological study, the research methodology for this thesis. This notion of 'bare attention' connects to Husserl's (1912/1980) perspective on phenomenology and will be explored in the methodology chapter (Chapter 4) along with other philosophers' concepts of phenomenology.

The mindfulness practices from other religious traditions

Contemplative practice, as described above, can be found in other traditions from the Hindu Yogic tradition to Judaism to Christianity (Sharples, 2003). "Mandalas (*are*) ancient objects of meditation for Hindus and Tibetan Buddhists that were adapted for contemplation in medieval Christianity" (Broomfield, 1997, p. 81). In the Hindu Yogic tradition, heavy emphasis is placed on the concentrative nature and importance of meditation to restore calm, well-being and understanding (Gunaratana, 1991). Gunaratana (1991) identified contemplative practices in Judeo-Christianity, which focused thought on a specific subject, religious concept or passage, to restore calm and well-being; which correlates with mindfulness. Having grown up in a Jewish household and having worked in a Jewish Day School, I am aware that Orthodox Jews

spend many hours contemplating messages in the Old Testament, the Kabala and other religious texts.

Following communion in the Catholic Church, there is a short meditation for contemplative thought. Catholics are always encouraged to reflect on their lives and actions. There has been a recent resurgence in meditation and contemplative practice in the worldwide Christian (including Catholic) community following the traditional practices of early Christian monks (World Community for Christian Meditation, nd.). This meditative thought often precedes prayer or is closely associated with prayer.

Zajonc (2009) cited several examples of contemplative practice in the Christian tradition including meditative reading, reflection, and a prayer to 'centre' the mind. He also highlighted the contemplative silence of the Benedictine Order as part of their focused attention on sacred text (Zajonc, 2009). Christ, as reported in the Bible, exhorted his followers that 'the kingdom of God is within' which suggests a contemplative practice (Sharples, 2003). It is also recorded that Christ spent forty days and nights in the wilderness, possibly in contemplative thought, meditating. Many Christian traditions also practice contemplation to develop positive qualities such as compassion and forgiveness through reflection (Sharples, 2003).

In summary, the literature highlighted above indicates that 'present-moment awareness' and contemplative practice are evident in the philosophy and practice of many religions. This contemplative practice was designed to ponder religious texts, discover new insights and experience a sense of calm for individual practitioners. Next I review definitions of mindfulness from other philosophical traditions, before considering the influence of western culture on mindfulness and contemplative practice.

Indigenous populations experience with mindfulness

I now address the worldviews of two indigenous populations in relation to their perspectives on mindfulness: the Māori of New Zealand and the practice of Shamanism by Native Americans.

The nature of contemplation and mindfulness and how it might be accepted in Māoridom is evident through the principles of *Ata*, a Māori philosophy that guides personal practice. *Ata* addresses the importance of quality space and time through reflection, an integral part of mindfulness practice (Pohatu, 2000). The concept of *ako* refers to reciprocal teaching and learning practices where students and teachers are both active participants, and are focused 'in the learning moment' (Pohatu, 2000). This 'in the learning moment' where teachers and students are open to each other's ideas, aligns with definitions of mindfulness. Forsyth and Kung (2006) noted that *Ata* provides a cultural basis for a mindful reflection within the teaching and learning process.

The following key concepts of *Ata* align with the principles of mindfulness:

Ata-haere: to be intentional and approach reflectively;

Ata-whakarongo: to listen with reflective deliberation;

Ata-noho: to give quality time to be with people and their issues;

Ata whakaaro: to think with deliberation, considering possibilities;

Ata-korero: to communicate and speak with clarity

(Pohatu, 2000, p. 6).

Reflective practice is also evident in other indigenous populations. Shamanic knowledge is derived from being in tune with nature through practicing mindfulness (reflection, meditation, awareness without judgement) giving shamans the ability to heal (Broomfield, 1997). These powers evolve as a result of spiritual journeys which provide the shaman with ever greater awareness (Kerr, & McAlister, 2002). "The shaman orchestrates consciousness, using meditation, song, dance, drumming and ceremony to encourage the spirit to travel to a realm where healing takes place" (Kerr & McAlister, 2002, p. xiv).

Zajonc (2009) reflected upon a different Native American tradition of contemplation: the Navajo of North America, who meditated upon sand paintings in an effort to become one with the painting. This mindful concentration also included a mind/body connection and openness to new ideas or the 'other' within the painting.

Connecting with Steiner and Montessori philosophies

Mindful concentration is also highlighted in an analysis of Steiner's and Montessori's teaching. Two of the participants in my research had studied Montessori philosophy, and two had studied Steiner philosophy during their initial teacher education. This provided the impetus to include these perspectives in the literature review and may suggest their interest in participating in the study and their pre-understandings of mindfulness.

Both Steiner and Montessori considered concentration to have a spiritual foundation or connection. Steiner highlighted the importance of present-moment awareness and compassion (Steiner, 1883/2000) while Montessori discussed the importance of noticing and focused awareness in the learning process (Montessori, 1919/1989).

Steiner (1883/2000) found resonance with Goethe's practice of being open to different perspectives, which led him to consider the idea that the entire universe is one organism. Steiner (1883/2000) extended Goethe's idea as he believed that through contemplation and a heartfelt compassion to be open to other's ideas, greater imagination (from thinking), inspiration (from feeling), and intuition (from willing) were achieved. Steiner (1924/1997) elaborated further noting that mindfulness and meditation are the path to knowledge that can be shared with the rest of the world. This knowledge is deep within each individual and brought to consciousness through meditation (Steiner, 1924/1997).

lannone and Obenauf (1999) concurred with Steiner and added that contemplative meditation or mindfulness enhances intuitive thinking which, they claimed is critical for acquiring new knowledge. By including the concept of knowledge acquisition, lannone and Obenauf extend the definition to cognition and the concept of cognitive mindfulness or mindful learning. Cognitive mindfulness is explained and compared to contemplative mindfulness later in this chapter.

Montessori (1919/1989) also addressed skills similar to mindfulness by proposing that when an individual focuses attention, the key is noticing and distinguishing attributes of objects or thoughts to identify the differences and similarities. She believed that

this mindful process of focused awareness is often corrupted because the mind perceives only what it chooses to see, and disregards what is not needed. Using a focused awareness approach, children were prepared for a silence exercise which also enhanced intellectual growth (Montessori, 1919/1989). When children are absorbed in the intellectual flow of focused concentration, Montessori (1919/1989) believed that they learn skills similar to meditation. Children (and adults alike) are calmer as a result of this intellectual concentration because their curiosity and hunger for knowledge is satisfied. Montessori (1919/1989) discussed contemplative thought often in terms of intellectual pursuit, which relates to cognitive mindfulness, noting that when one *meditates* on a poem, personal transformation occurs.

Montessori (1919/1989) asserted that personal transformation results when individuals are open to new ideas, and compassion for others emanates from this openness. Gilbert (2009) outlined the key attributes of compassion that supported Goethe's philosophy and that grow from mindfulness:

- directing our attention with compassion and warmth
- thinking and reasoning with compassion and warmth
- behaving with compassion and warmth, and
- feeling with compassion and warmth (p. 207).

My belief is that these attributes of compassion and mindfulness are important for all individuals, and particularly for teachers working with students of all ages.

Montessori (1949/1967) summarised this focused, meditative process as part of child development in her concept of the absorbent mind of the young child. The young child is open to new ideas, and takes in new information through mind/body connections of feelings, thoughts, and perceptions derived from the immediate environment. Mindful focus through attention and imagination evolves into individual development and new learning (Montessori, 1949/1967). This worldview incorporates several aspects of mindfulness: concentration, compassion and non-judgement evidenced in many definitions of contemplative and cognitive mindfulness.

To summarise, mindfulness (present-moment focused awareness to bring clarity and calmness) had its origins in Buddhism. It is present in various forms in cultures and

philosophies around the world. Because each moment brings something new, mindfulness practitioners learn through experience that no thought, feeling or sensation is permanent; they change in each moment. Using these previously discussed perspectives of mindfulness as a guide, the next section addresses the westernisation of these concepts since the 1950s.

2.3 Contemplative mindfulness as a western cultural phenomenon

Buddhism migrated to the western world principally during the 1950s and 60s (Oldmeadow, 2001). This coincided with significant social and cultural change in North America including the Civil Rights Movement, Anti-War protests, Feminism, and the exploration of alternative lifestyles and spiritual perspectives. At the same time, many westerners visited Tibet in search of 'enlightenment'. Kornfeld, one of the main 'importers' of Buddhism to North America, became a monk following his studies in Thailand, Burma and India (Kornfeld, 2008). He later established Insight Meditation in 1975 as a teaching and retreat centre.

Burr and Hartman (2001), when describing key features of mindfulness meditation in western culture, noted, in contrast to eastern tradition, the absence of a religious connection, and instead a generalised focus on breathing and a mind/body connection. This mind/body connection is a key aspect of the definition of mindfulness in this study, and a focus of the western philosophies discussed here. One of the unique features of the westernisation of Buddhism is the emphasis on practice rather than the establishment of 'religious' institutions (Oldmeadow, 2001) to promote this spiritual movement in the western world.

Mindfulness was one of a number of Buddhist practices that emerged in western society. It focuses on one aspect of the Noble Eightfold Path described earlier. One example of the implementation of mindfulness outside a religious institution is the use of mindfulness for the specific purpose of reducing stress for patients in hospitals and clinic settings.

Kabat-Zinn, a western Buddhist adherent and doctor of medicine, realised that he had a number of patients with chronic conditions that he was not able to 'fix' with medication or other medical treatments (Kabat-Zinn, 1990). In an attempt to find an

alternative way to help his patients cope, he started the Mindfulness Based Stress Reduction (MBSR) clinic at the University of Massachusetts Medical Center in the late seventies. At the clinic, Kabat-Zinn and his colleagues used mindfulness as an additional treatment to address patients' needs which were not necessarily met with conventional treatment in a 'fix-it' model. This clinic led the way for the introduction of mindfulness as a western cultural phenomenon in healthcare. In MBSR, mindfulness is a contemplative practice that focuses on the key aspects of mindfulness: present-moment attention, acceptance, and non-judgement (2005).

Following the initial patient trials, Williams and Kabat-Zinn (2011) noted wider use of mindfulness in alternative healthcare practice, further signalling the convergence of Buddhism and western culture. The work of Kabat-Zinn has been the foundation for many western contemplative mindfulness programmes including Zyklowska, Ackerman, Yang, Futrell, Horton, Hale, Pataki, and Smalley (2008), Semple and Lee (2008) and others which are included in chapter 3 in Table 2, a summary of benefits on pages 53-54. Kabat-Zinn has also influenced other researchers such as Siegel (2010), Varela, Thompson, and Rosch (1991), and Carmody (2009) who worked closely with Kabat-Zinn at the MBSR clinic. The health professionals who adopted the technique and philosophy initially developed by Kabat-Zinn, have defined mindfulness as: being conscious, aware and engaged in each specific moment, non-judgementally and with an open heart (Kabat-Zinn, 2005; May, 2006). A brief look at some of these studies by health practitioners is included in this chapter, as part of the discussion of a definition for mindfulness, and are explored in greater detail in chapter 3 to highlight the potential benefits of mindfulness.

The health studies suggested definitions that focused on clarity of thoughts and emotions, with the inclusion of compassion for self and others, to help people cope with suffering; the purpose of mindfulness as originally revealed by the Buddha as stated earlier (page 20). Finding a consensus of opinion on a comprehensive definition of mindfulness amongst these medical researchers was difficult. There is still debate in the literature about the definition of mindfulness in a western context.

A group of researchers met in 2004 to attempt to fine tune the definition (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, Segal, Abbey, Speca, Velting, & Devins, 2004). These researchers and medical practitioners agreed that mindfulness is a metacognitive skill of attention control, and consciousness monitoring, made up of two distinct components:

The first component involves the *self-regulation of attention* so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment. The second component involves adopting a particular orientation toward one's experiences in the present moment, an *orientation that is characterized by curiosity, openness and acceptance*. (Bishop et al., p. 232)

(Italics added by the author of this thesis).

Carmody (2009) tried to distil down the definition in a more recent study he conducted and noted problems with the definition, particularly 'in the present moment' as he believed that individuals are always 'in the moment' even when lost in thoughts, because they are actually thinking in *that* moment. Carmody (2009) concluded that mindfulness is simply 'noticing'. Brown, Ryan and Creswell (2007) suggested that some definitions of mindfulness, including Kabat-Zinn's, were limited to a list of skills and practices. Instead these authors, focused on the consciousness aspects and the intense focus and involvement in the moment to moment experience (Brown et al., 2007).

I disagree with Brown, Ryan and Creswell's critique of Kabat-Zinn's concept of mindfulness as I believe the distinction between 'deliberate' and 'effortless' mindfulness *does* address consciousness in the moment to moment experience.

Kabat-Zinn (2005) referred to meditation in all its forms as 'deliberate' mindfulness in which the practitioner has intentionally set aside time to engage in mindfulness exercises. These exercises were designed to strengthen consciousness and intense awareness in the moment of each experience. Being mindful in every moment in everyday life, he described as 'effortless mindfulness' (Kabat-Zinn, 2005).

Siegel (2007) concurred with Kabat-Zinn and emphasised the point that ultimately mindfulness traits learned in these exercises may become part of everyday being and become more effortless. Likewise, Nhât Hanh (2007) referred to the use of mindfulness in everyday life as "practice without effort" (p. 1). Everyday effortless mindful awareness is contrasted with 'being on automatic pilot' where individuals do not notice what they are doing when completing an everyday task, such as brushing their teeth or washing the dishes.

Effortless mindfulness is using the skills developed during deliberate mindfulness exercises in everyday life, moment by moment. This distinction is helpful in developing a working definition of mindfulness. These descriptions of mindfulness incorporate aspects of attention, awareness, and compassion, and are supported by Brown and Ryan (2003) who viewed mindfulness as "enhanced attention to and awareness of a current experience or present reality" (p. 824). Brown and Cordon (2009) suggested that enhanced attention using mindfulness assists the individual to moderate emotional responses. Compassion is central to the regulation of emotions and, as noted earlier, complements mindfulness. Gilbert (2009) referred to the connection between mindfulness and compassion as: "two wings of a bird (that) fly together" (p. 242). All of these ideas help develop a clearer picture of mindfulness.

Going a step further, Goleman (1995) discussed the characteristics of mindfulness as part of emotional intelligence for personal development and success. The key skills in emotional intelligence that are also engaged in during mindfulness practice include: "emotional self-awareness, managing emotions, harnessing emotions productively, empathy and handling relationships" (Goleman, 1995, pp. 283-284). The emotional intelligence curriculum developed by Goleman (1995), includes aspects of mindfulness, and has been adopted by a number of schools throughout North America.

To build the skills inherent in mindfulness discussed above, specific exercises are used to form the foundation for the contemplative deliberate practice of mindfulness.

These contemplative exercises are outlined below and demonstrate qualities of mindful practice, and shed further light on a definition of mindfulness.

Thurman (2006) indicated that the two types of meditation practiced in mindfulness, mentioned earlier, develop these key characteristics. Calmness comes from concentration in *samatha* meditation while *vipassana* meditation brings insight or new learning through awareness of thoughts which may have previously been unconscious or sub-conscious (Thurman, 2006). Calmness and insight are developed through these mindfulness practices according to Kabat-Zinn (2005) and Zajonc (2009).

Siegel (2010) referred to these meditations as brain exercises which strengthen the focusing and emotion centres in the brain. Brain links are created through an integration of neural synapses which promote brain development actually regenerating new pathways in an adult's brain (Siegel, 2010). This is called neuroplasticity and is discussed in the section on the effects of mindfulness on the brain in the next chapter.

Focused attention and deliberate noticing, initially on the breath and then the body, is an initial practice in mindfulness (Kabat-Zinn, 1990, 2005; May, 2006). This is followed by a focus on body sensations, feelings and thoughts, and then letting go of the attachment of the mind to any specific focus; practiced often in a *sitting meditation* (Kabat-Zinn, 1990; May 2006).

Mindful eating (Kabat-Zinn, 2005) is a type of meditation where the practitioner is totally focused and aware of the process of eating, particularly noting sensory perceptions. Mindful walking, being mindful of each step and the entire process of walking both in mind and body, and mindful stretching (drawing upon different yoga exercises) are practices of mindfulness in action (Kabat-Zinn, 2005; May, 2006). Sending friendly wishes to different people, as an exercise to develop compassion, is a principal focus of activities designed by Kaiser Greenland (nd) for developing mindfulness with children.

To summarise, all of these exercises focus on improving an individual's abilities to integrate mindfulness practice into their everyday lives. The key elements of mindfulness learned from these exercises include: focused attention and self-awareness, visualisation, calmness, and compassion.

Semple and Lee (2008) discussed 'deliberate' mindfulness practices for children that focus on the senses, such as: mindful listening especially with various types of music, mindful seeing and mindful smelling. The notion of mindful seeing is similar to Richardson's method of focused observation followed by drawing; a teaching strategy described in *Into a Further World* (Richardson, 2001). These exercises help children (and adults, potentially) improve their attention and awareness of their senses, and to notice the transitory nature of each experience, understanding that thoughts, feelings and emotions change moment by moment.

Many of the practices described above illustrate forms of 'meditation' within mindfulness during which the key is noticing the experience, labelling it, actually experiencing it and then moving on in an effortless journey. Each experience, each thought, each feeling, each sensation changes moment by moment as noted above, and is therefore impermanent; freeing individuals to be open to new ideas and to be creative. This awareness of the transitory nature of each event helps reduce anxiety and leads to an even greater openness to new ideas. Therefore, as noted by Davis, Sumara and Luce-Kapler (2000), mindfulness builds attention, focus and the ability to 'notice' which enhances learning capacity.

These practices can be extended to enhance creativity and the learning process, as proposed in the next section which outlines the research of Langer, who has conducted extensive research in cognitive mindfulness, which she proposed builds an individual's awareness to improve learning and skill mastery (1997).

2.4 Cognitive mindfulness

Langer (1989) defined mindfulness as a cognitive process, with attention and awareness of external influences. This enables the individual to learn new concepts and new ideas through paying attention. Cognitive mindfulness is "the process of drawing novel conclusions" (Langer and Moldoveanu, 2000a, p. 1). Langer (2000) used the term 'mindful learning' to describe cognitive mindfulness. Proponents of mindfulness as strictly a cognitive process, rather than a contemplative one, focus on the new knowledge (facts) learned and the creativity that is possible when one uses mindfulness.

Langer (1997) discussed three key principles of mindful learning or cognitive mindfulness:

- continuous creation of new categories
- openness to new information, and
- implicit awareness of more than one perspective (p. 4).

These three elements can be rephrased as engagement, flexibility and novelty seeking and production (Langer, nd) and are important components of a definition of mindfulness.

I contend that these principles of mindful learning are very similar to the attitude and actions of contemplative mindfulness that practitioners described above.

Langer (1989, 2005), though, made a clear distinction between cognitive mindfulness and contemplative mindfulness. She agreed that mindfulness is being open to the moment without judgement to see things in a new way. However, she also stated that improvements in focused awareness and learning can occur by practicing the three principles of cognitive mindfulness without adding any contemplative mindfulness practices such as meditation.

Langer (1997, 2005) examined aspects of cognitive mindfulness in a series of empirical studies over many years. She highlighted a range of benefits including building awareness, learning new skills and creativity. Reduction of stress and anxiety nor emotion regulation were considered important aspects. These studies highlighted Langer's emphasis on the cognitive aspects of mindfulness or mindful learning.

In mindful learning, a mind/body connection is a critical feature which helps the individual become more aware and more involved in the present moment but this is not meditation or contemplation (Langer, 2000). The mind/body connection in mindful learning considers being open to what an individual can learn through his/her senses of touch, smell, hearing and taste. Rather than contemplating or focusing on concepts and ideas constructed in the past, one is made more aware of the present context and draws new conclusions when employing mindful learning.

Other researchers and educators support the notion of cognitive mindfulness as an extension of contemplation or even a feature of engaging in contemplative mindfulness, for example, Hart (2001a). In contrast to Langer, Hart (2001a) noted that contemplative mindfulness practices were the key element for building awareness for learning and helping individuals to be open to new ideas from others. I would argue that cognitive mindfulness extends ideas of contemplative practice into the classroom learning environment, which is supported by Hart's counterargument to Langer.

In the New Zealand context, Langer's concept of mindful learning is evidenced in the works of inspirational teachers such as Elwyn Richardson who promoted creativity and development in language arts, Sylvia Ashton-Warner's organic teaching and key vocabulary, as well as Clarence Beeby's concept of the teacher as an artist infusing the arts throughout the curriculum as discussed in Gibbs (2006). Langer's research in cognitive mindfulness, resonates with the work of these inspirational teachers, and provides a foundation for mindful teaching for beginning teachers.

In reviewing and analysing the research of Langer, Kabat-Zinn, and others, I propose that Langer's notion of present-moment, non-judgemental awareness in the learning process is an extension of contemplative practice. Using Langer's terminology, when an individual demonstrates the ability to 'create new categories' accept new information and consider multiple perspectives, the cornerstones of Langer's mindful learning (1997), I argue that person has extended the features of contemplation to the act of learning. By concentrating on new information to develop new knowledge and understanding through mindful learning, an individual must contemplate the information. Concentration and insight are the goals of both contemplative and cognitive mindfulness; therefore they overlap. An alternative way of describing this would be that, as a result of engaging in contemplative thought through concentration, an individual gains new insights or learns a new concept. Therefore, Langer's concept of mindful learning can be seen as a result or feature of engaging in contemplative mindfulness practices.

Siegel (2007), when comparing contemplative mindfulness and cognitive mindful learning, suggested that although contemplative and cognitive perspectives may not

be directly correlated, they each support each other. For example, mindful meditation (contemplative mindfulness) increased the ability to be alert to distinctions (cognitive mindfulness) (Siegel, 2007). This confirms the applicability of both contemplative and cognitive mindfulness for classroom pedagogical practice. Therefore teachers would need to take note of both perspectives when using mindfulness both personally and with their students.

It is important to look at Siegel's latest definition of mindfulness which is based on his study of the brain and how it works, as well as his own personal experiences with mindfulness. His definition of mindfulness includes observation, openness and objectivity (2010). Observation, he suggested, requires an individual to form an intention and to be attentive to this new information (Siegel, 2010). Objective observation requires each individual to separate awareness from his or her mind in meta-awareness, where the individual is aware of being aware, almost looking inside the mind from the outside. If individuals engage in mindfulness in this way, mindful learning, as described by Langer, could be considered an outcome of mindfulness practice. If one is open to new ideas, observes them, and is objective about the possibilities of what is being observed, then new categories for learning are created as Langer suggested (1997).

In summary, the differences between cognitive and contemplative mindfulness are grounded in the word 'meditation', and related to one's personal beliefs. If a person believes in the benefits of 'meditation', one will focus on 'contemplative' mindfulness. If not, then mindfulness will be seen as strictly a cognitive tool. The main aspects of present-moment awareness and openness to new ideas are integral to both cognitive and contemplative mindfulness. Contemplative mindfulness practitioners include compassion for others and personal emotional regulation as a benefit of that focused awareness.

Whether mindfulness has a contemplative component or not, there are particular subskills or actions that are essential for mindfulness practice. In the next section, the subskills of mindfulness which are analysed in mindfulness assessments were

examined to provide further insight into a more appropriate working definition of mindfulness for this thesis.

2.5 Identifying elements or subskills of mindfulness to construct a definition

The elements or subskills practiced by mindfulness practitioners might suggest component parts of a working definition. One way to identify these elements is through an analysis of mindfulness assessments. Various assessment tools have been used to measure subskills of mindfulness and its potential benefits.

The subskills measured by four of these mindfulness assessments and a meta-analysis of a variety of instruments are summarised in Table 1 on the next page. I review the components of each of these assessments and then combine the key elements as a step to constructing a working definition for this study.

Two instruments (questionnaires) designed to measure mindfulness in individuals are the Mindfulness Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003), and the Mindfulness/Mindlessness Scale constructed by Bodner and Langer (2001). With both of these questionnaires, it was easier to identify *mindlessness*. Bodner and Langer (2001) contended that mindlessness is "the cognitive state in which individuals unwittingly accept a rigid understanding of information" (p.1) which is triggered by thoughts, emotions and behaviours. The effect of this state of mindlessness is a reduction of present-moment awareness of tasks being completed or events occurring.

The MAAS was designed to analyse self-awareness as a determiner of self-regulated behaviour and a positive outlook (Brown & Ryan, 2003). Through cross-validation with other tests of various aspects of mindfulness, and a review of each item on the scale, reliability and validity were noted for both the Mindfulness/ Mindlessness Scale and the MAAS (Bodner & Langer, 2001; Brown & Ryan, 2003). The key features of mindfulness measured in this assessment seem to be related to emotional control as well as self-awareness. In 2004, Langer improved the Mindfulness/Mindlessness Scale into the Langer Mindfulness Scale. The purpose of this scale was to measure Langer's three identified components of mindfulness or mindful learning: flexibility, engagement, and novelty seeking and production Langer, nd).

Table 1 Subskills of Mindfulness

Subskills	Mindfulness Assessment	Researchers
	Tool	
Self awareness	Mindfulness Attention	Brown and Ryan (2003)
Self-regulated behaviour	Awareness Scale (MAAS)	
Positive outlook		
Continuous creation of new	Mindfulness/Mindlessness	Bodner and Langer
categories	Scale	(2001)
Openness to new information	Langer Mindfulness Scale	Langer (nd)
or flexibility		
Engagement		
Novelty seeking and production		
Implicit awareness of more		
than one perspective		
Observing	Kentucky Inventory of	Baer, Smith and Allen
Describing	Mindfulness Skills (KIMS)	(2004)
Acting with awareness		
Accepting without judgement		
Attention:	Attention Network Test	Fan, McCandliss,
Alerting		Sommer, Raz, and
Orienting		Posner (2002)
Executive control		
Non-reactivity to inner	Meta-analysis of a variety	Baer, Smith, Hopkins,
experience	of instruments	Krietemeyer, and Toney
Observing, noticing, attending		(2006)
to sensations, perceptions,		
thoughts and feelings		
Acting with awareness,		
automatic pilot, concentration		
and non-distraction		
Describing and labelling with		
words		
Non-judging of experience		

Baer, Smith, and Allen (2004) developed another mindfulness questionnaire that measured a different set of subskills: "observing, describing, acting with awareness, and accepting without judgment" (p. 191). This KIMS questionnaire has been used in a number of studies of mindfulness programmes (Baer et al., 2004).

Baer (2011) suggested that computer-based measures of attention and other subskills of mindfulness are useful in conjunction with mindfulness questionnaires. Tang, Ma, Wang, Fan, Feng, Lu, Yu, Sui, Rothbart, Fan, and Posner (2007) demonstrated that after only five days with mindfulness training, participants showed significant gains in attention on the *Attention Network Test*, (ANT), a computer-based instrument which was developed by Sommer, Raz and Posner to measure the three functions of attention: alerting, orienting and executive control. As attention is a key component of mindfulness, awareness of these functions are useful in honing a definition of mindfulness. These functions of attention were defined by Fan et al., (2002):

Alerting is defined as achieving and maintaining an alert state; orienting is the selection of information from sensory input; and executive control is defined as resolving conflict among responses (p. 340).

In another study using the ANT instrument, Jha, Krompinger, & Baime (2007), supported the notion that mindfulness training improves both concentrative (specific focus) and receptive (in the present-moment experience) attention. This adds to the idea that attention is a critical aspect of the definition, and also identifies several aspects of mindful attention. These studies suggested that improving focus and attention in specific ways, is the key aspect of mindfulness. Baer (2011) disagreed and contended that simply measuring attention did not necessarily lead to a useful assessment of mindfulness as there are many other subskills displayed by a mindfulness practitioner.

Baer, Smith, Hopkins, Krietemeyer, and Toney (2006) pointed out that awareness is only one of the five components of mindfulness through their study of various mindfulness assessment questionnaires. The five key components they identified were:

- 1. non-reactivity to inner experience
- observing, noticing, attending to sensations, perceptions, thoughts and feelings
- 3. acting with awareness, concentration and non-distraction
- 4. describing and labelling with words

5. non-judging of experience (pp. 34-35).

Baer (2011), in reviewing the assessment tools discussed here, as well as other instruments, identified the following list of subskills of mindfulness:

- awareness of each moment of an experience without ruminating on them
- amount of time spent on automatic pilot or being preoccupied
- acceptance of experiences without judgement
- attention, being observant, and curiosity.

I believe her summary captures the main components of these assessments and is a useful list of skills that can be used to describe mindfulness, and aligns with earlier discussions of cognitive and contemplative mindfulness. The information gleaned from the subskills of mindfulness measured by assessment tools is helpful in determining an appropriate working definition of mindfulness for this particular study of mindfulness.

In the next section, implications for teachers of this knowledge of the nature of contemplative and cognitive mindfulness are discussed and may have application for a definition of mindfulness. The applicability of mindfulness to a teacher's professional development and classroom practice, highlighted in the literature, is addressed to show the potential value of introducing mindfulness within the education sector for teachers themselves and for their students.

2.6 Implications of cognitive and contemplative mindfulness for the field of education

Cognitive and contemplative mindfulness can be used by teachers for stress reduction, as a pedagogical tool and in teaching strategies to enhance classroom practice at all levels including initial teacher education at tertiary level; these are all discussed in this section. It becomes easier to cope with stressful situations and build personal resilience when using mindfulness, which may be very helpful for pre-service and classroom teachers (Kostanski, 2007; Schonert-Reichl & Stewart Lawlor, 2010; Hawn Foundation, 2011; Siegel, 2007). In relation to pedagogical practice, Ritchart and Perkins (2000); Tishman, Jay and Perkins (1993) and others have demonstrated the implementation of mindfulness as part of the cognitive learning process. The teaching strategies suggested also provide further elaboration of different facets of

mindfulness. Reflecting upon these implications provides insights into a fuller working definition of mindfulness for this thesis.

Stress reduction

Several studies confirmed the benefits of stress reduction for individuals practicing mindful meditation and also highlighted mood improvement (Ludwig & Kabat-Zinn, 2008; Siegel, 2007, 2010; Cahn & Polich, 2006; Stewart Lawlor, 2005; Speca, Carlson, Goodey, & Angen, 2000). In a book specifically designed for teachers, Schoeberlein (2009) offered a series of cognitive and contemplative mindfulness practices for teachers, including an analytical meditation to promote job satisfaction and a short reflection for the teaching day to promote career retention. This impact on stress reduction may be particularly beneficial for beginning teachers dealing with the stress of the first years of teaching. With both contemplative and cognitive mindfulness, individuals focus on *being* (experiencing) each moment rather than reacting to events or difficult situations that might occur in the classroom. Mindful practitioners, with heightened awareness, are more able to respond with acceptance rather than react without thinking; a useful skill for teachers dealing with classroom pressures.

Mindfulness as a pedagogical tool and for teaching strategies to enhance classroom practice

Salomon and Globerson (1987) extended this concept of experiencing each moment, rather than reacting to it, by testing responses within the classroom environment, to demonstrate that responding through mindfulness increases motivation, cognition and learning. Mindfulness, they suggested requires cognitive effort when engaging in learning rather than mindless, automatic responses; and it is this extra effort that improves learning (Salomon and Globerson, 1987). Teachers who encouraged students to engage in mindful learning as described in the previous section might notice more engaged thinking and openness to new ideas. Teachers themselves would learn more about their students and the subject matter by not teaching on automatic pilot.

If a teacher is able to respond in non-habitual ways and avoid being on automatic pilot, then his or her teaching style is likely to complement Langer's mindful learning principles discussed earlier. Wenk-Sormaz (2005) noted that meditation gave people a

greater ability to avoid this habitual, automatic thinking, and to consider new solutions to problems or new perspectives for challenging situations, as measured in a series of cognitive tasks. This enhanced ability to respond in new ways seems to me to be useful for the beginning teacher when thinking of ways to address the needs of individuals in the classroom.

Ritchart and Perkins (2000) proposed that rather than using mindfulness for a specific lesson, creativity, curiosity and enthusiasm flourished when students developed the habit of mindfulness in a classroom that encourages mindfulness exercises and mindful engagement throughout the day. They argued that students and teachers learn how and when to utilise these traits of mindfulness in the classroom, and noted a meaningful, long term effect on the learning. Exploration of creativity, curiosity and enthusiasm might then compliment the development of the trait of mindfulness and mindful learning as suggested by Ritchart and Perkins above (2000). Tishman et al. (1993) developed this idea further and suggested the following dispositions need to be present to develop mindfulness, critical thinking, and creativity:

- 1. the disposition to be broad and adventurous
- 2. the disposition toward sustained intellectual curiosity
- 3. the disposition to clarify and seek understanding
- 4. the disposition to be planful and strategic
- the disposition to be intellectually careful (precise, organised, thorough)
- 6. the disposition to seek and evaluate reasons
- 7. the disposition to be meta-cognitive (be aware of one's own thinking, to control it and reflect upon it) (p. 148).

These practices suggested, to me, a connection between cognitive mindfulness and critical thinking, but do not include a contemplative component. Other cognitive mindfulness practices that link to critical thinking include those promoted by Ritchart and Perkins (2000), who challenged students to "look closely" by focusing on what is taught, asking probing questions and seeking justifications, rather than simply absorbing information as it is presented without giving it any thought. Teachers could practise these mindfulness skills when engaged in professional development and

lesson planning to enhance teaching skill development. This mindful process could be used by teachers when observing students or colleagues in an attempt to refine their own teaching practice. By paying attention now, stopping, looking and listening to the present moment, possibilities for expanded learning for teachers and students result (Langer, 2000; Hart, 2001a; 2001b).

Mindful teachers noticed how each student interacts with new information and what each individual's learning needs might be (Brown & Langer, 1990). Teachers not only need to help students notice what they had observed and to be flexible in their responses, but mindfully aware teachers also examine the reactions of students to questions and topics, to plan next steps, enhancing the mindful learning session (Davis et al., 2000). Relationships with learners may also be improved as teachers become more aware of students and their needs. By incorporating these principles into their teaching practice and approaching the students mindfully, the classroom learning environment might be improved and the teachers might report positive personal benefits as well.

'Conditional teaching' is a pedagogical strategy that promotes mindful learning, encouraging students to focus on learning as novel ideas capture their attention. Langer (1989, 1997) suggested conditional teaching leads to greater retention of information. Concepts expressed in a conditional or tentative manner (*it might be*) rather than *this is the exact way*, require deeper thinking for students (Langer, 1989, 1997). This type of mindful learning is one pedagogical feature of New Zealand's Numeracy Project (Ministry of Education, 2008), as students are asked to use their own strategies to solve mathematics problems, and teachers share strategies that *might* be helpful to find answers. Siegel (2007) agreed that use of this conditional presentation of information (*this may or may not be; this might be* rather than *this is*), deepens learning potential. Therefore, teachers who use 'conditional teaching' could be improving their teaching practice; an added benefit. Teachers could also extend this approach to be more open and flexible in communication with colleagues and parents, and in considering other's perspectives as solutions that *may* work.

In summary, several ideas about features of mindfulness have emerged from this discussion of the implications for teachers including: stress reduction, development of curiosity, experiencing each moment, responding with acceptance rather than reacting, more focused thinking and less automatic pilot, and the importance of being open. With these features in mind, I next turned to identifying my ontological beliefs about mindfulness in order to conclude with a working definition.

2.7 My ontological beliefs and a working definition of mindfulness

My beliefs following this review of the literature

I came to believe that by engaging in cognitive mindfulness or mindful learning, an individual may promote the development of mindfulness as a habit for teachers and students. Teachers practicing contemplative mindfulness exercises described earlier may also enhance their own day to day mindfulness and perhaps cope better in the classroom. Siegel (2010) believed that the reason his patients had improved mental health, and were more alert to new ideas, is that they had developed both cognitive and contemplative mindfulness as an ever present trait. Mindfulness as a trait, rather than a state that lasted for only a few moments throughout the day, was an ambitious goal. It was displayed through regular intentional observation and attention, objectivity (awareness of experiences but understanding that those experiences are not who the individual 'is') and openness (accepting what is, and not being caught up in the experience or the emotion nor being judgemental) (Siegel, 2010).

My conclusion from the literature is that a person who has the trait of mindfulness combines contemplative practice with mindful learning. Contemplative and cognitive mindfulness therefore need not be considered separate entities. The trait of mindfulness helps individuals to notice what is present sooner than they would if not being mindful, and then to respond and live that moment fully, rather than react to it.

In my opinion, the goal would be to practice mindfulness (noticing) effortlessly through daily experiences, and deliberately through meditation and other activities, with every attempt made to monitor emotions and judgements through compassion, curiosity and openness. To summarise key aspects of the definition of mindfulness, Shapiro, Carlson, Astin, and Freedman (2006) noted the following key elements of the

process of mindfulness: attitude, attention and intention. These three components align with the key subskills of mindfulness.

Attitudes of patience, trust, acceptance and non-striving are important along with focused, sustained attention (Shapiro et al., 2006; Kabat-Zinn, 1990). Intention relates to the purpose for practicing and to the intention to continue to remain focused in the moment in everyday life (Burke, 2010). For teachers, intention means these things as well as awareness of their intention for each child, each lesson and each moment in the classroom.

I believe that the concept of 'flow' is another way to describe an intense presence in the moment. Csikszentmihalyi (1988) defined 'flow' as "a holistic sensation that people feel when they act with total involvement" (p. 36). Mindfulness is present-moment awareness of and concentration on, whatever comes up with total acceptance. 'Flow' is also characterised by present-moment awareness and concentration, but on a particular problem or subject or activity, accepting or rejecting, and therefore judging solutions for only that particular focus of concentration (Komagata & Komagata, 2010).

The experience of 'flow' is intensified by its lack of awareness of ideas, emotions or thoughts not targeted specifically to the problem or issue being considered (Komagata & Komagata, 2010). 'Flow' has some application to both cognitive and contemplative mindfulness. Mindfulness bears some similarity to Csikszentmihalyi's concept of 'flow': intense concentration, complete (focused) experience, curiosity and openness. There are significant differences, though. 'Flow' suggests total absorption in the activity engaged in, to the exclusion of self-awareness and limited awareness of other individuals or other simultaneous actions which would disturb 'flow' (Nakamura & Csikszentmihalyi, 2002). Mindfulness and 'flow' do overlap in the aspects of intense concentration and completely experiencing an object in a particular moment, with curiosity. The difference is the open awareness of mindfulness, without judgment that would interrupt the total absorption, single minded focus of 'flow'.

My operational definition for this study

I have drawn upon Carmody's (2009; 2010) definition of 'noticing', Siegel's focus on observation, openness and objectivity and the concepts of attitude, attention and intention (Shapiro et al., 2006). I saw the state of being mindful as sharing some similarities to Csikszentmihalyi's (1988) concept of 'flow' coming from intense involvement in a particular activity, in the moment; with the outcome of a combined state of mindful flow being creative, critical thinking in study and everyday living. The essence of Kabat-Zinn's (2005) definition of mindfulness as present-moment awareness with compassion has also influenced my working definition.

I have reflected on my review of the literature to develop my working definition of mindfulness. The literature review highlighted different perspectives of mindfulness from eastern and western traditions as well as indigenous populations. The subskills of mindfulness outlined also helped me to focus on component parts of the definition. I have shown how contemplative mindfulness included cognitive mindfulness but also incorporated 'meditative' thought, emotion regulation, and compassion. I believe that my definition falls within the 'contemplative' mindfulness paradigm recognising cognitive applications to learning.

My definition for mindfulness is as follows:

Mindfulness is noticing (focusing attention) and completely experiencing an object or subject as it is, in the particular moment, with compassion, curiosity and openness (non-judgement).

In the next chapter, the literature review is extended to an overview of mindfulness research in the health and education sectors, as an avenue for identifying both what is known, and the gaps that exist in the literature; hence providing a rationale for this study.

2.8 Mindfulness (poem)

Breathing,
Each in breath and out breath
The ever continuous flowing
Gardening as creation
Actually noticing the growth process

Walking along the beach

Aware of all the people around

Their lives as complicated as mine

Scanning the body
Falling asleep yet again
Awakening to the moment

Chapter 3 Mindfulness in action and research

- 3.1 Introduction to mindfulness research studies
- 3.2 The 'fix-it' and 'good health' models
- 3.3 Benefits resulting from the 'fix-it' model approach
- 3.4 How mindfulness affects the brain
- 3.5 Research from the 'good health' model in the education field
- 3.6 Analysis of gaps in the literature leading to my research question

3.1 Introduction to mindfulness research studies

Research in mindfulness in the health and education sectors has grown exponentially in recent years. Black (2010) confirmed this in his meta-analysis, demonstrating that the average number of books and journal articles has risen from fifty per year, prior to 2009, to over 350 per year in 2009 and 2010. From this body of research, I identified thirty key articles on the health benefits, and a number of books by Langer, Kabat-Zinn and Siegel. In the education arena, I examined thirty articles, and fully reviewed twelve research studies in tertiary education, five in initial teacher education, and another eleven in professional development programmes.

This chapter first addresses a review of key healthcare research from the 'fix-it' model approach outlining potential benefits for patients. Table 2, on pages 52-53, summarises the reported benefits from twenty-five different research studies. There has been a significant increase in the research in the area of the neuroscience related to the effects of mindfulness on the brains of young people under 25 and adults (Williams & Kabat-Zinn, 2011; Black, 2010). I have provided a brief introduction to these developments in neuroscientific research about the child and the adult brain which supports the findings in the 'fix-it' approach studies.

I have then detailed research in the 'good health' model used in a number of studies, demonstrating the use of mindfulness for improving general well-being. Studies in the tertiary sector including initial teacher education classes are explored first. In order to illustrate the increasing implementation of mindfulness programmes and the results achieved, studies in the school sector and with pre-school children are also included. A discussion of practices in early childhood and school sectors has been included to

demonstrate the current wide ranging integration of contemplative practices in classroom settings and the emerging mindfulness curriculum programmes.

From this review of research, I consider the implications of this literature for my study including my reasons for embarking on this research. And finally I identify the gaps in the literature, particularly the limited research in initial teacher education, which provided the pathway to my research and the underlying question: What is the 'lived professional experience' for beginning teachers who have been introduced to mindfulness?.

3.2 The 'fix-it' and 'good health' models

The research in the health field often takes a 'fix-it' approach (as described in chapter 2 on pages 26-27). These empirical studies have shown patients' improved ability to deal with their emotions, particularly anxiety, by seeing thoughts as simply thoughts not reality. The reporting of reduced stress has also been a key feature of the findings. Health practitioners used this approach to improve the symptoms or mental outlook of patients with particular conditions. The 'fix-it' model, or epistemological position (way of knowing), to provide support for individual patients, is evident in the health sector research. This approach highlights the effects of mindfulness as an alternative to traditional interventions (eg. Siegel, 2007; 2010; Britton, Haynes, Fridel, & Bootzin, 2010; Ludwig & Kabat-Zinn, 2008). Although I recognise that there is movement in the psychology field towards a focus on positive qualities, general well-being, and prevention or positive psychology (Seligman & Csikszentmihalyi, 2000), the health sector seems to remain focused on improving a patient's specific symptoms rather than extending mindfulness to benefit the patient's general well-being.

This trend in the research demonstrating positive results in the health sector has led educators to incorporate mindfulness practise into their teaching and counselling. Noting the potential benefits of mindfulness as an intervention tool in the health sector, educators began to explore the use of mindfulness from a different epistemological perspective. Educators started to use mindfulness personally and professionally (Kinder, 2008a; 2008b; Boyce, 2007; Kostanski, 2007). In contrast to a 'fix-it' approach, my analysis indicated a different approach to mindfulness, with its

introduction to whole groups of children or students, not just individuals in need. A 'good learning' model or 'good health' model to promote positive well-being for all, is frequently used within the education sector. Studies of mindfulness in the educational arena highlighting the 'good health' model include: Shapiro, Schwartz, and Bonner (1998); Kozik-Rosabal (2001); Brown (2002); and Hart (2001a; 2001b). In this model, teachers focused on the practice of mindfulness exercises in the classroom to enhance the classroom environment as well as the mental and emotional health and everyday life of each individual student, rather than addressing a specific issue as had generally been the case in the health sector.

Studies in both the health and education arenas used various measurement tools, particularly surveys of mindfulness skills and behaviours; many of which demonstrate an over-reliance on self-reporting. Self-reports are a critical form of data collection because, if the participant perceives or notices improvement, this indicates greater self awareness, and then that in itself is significant. In addition, when an individual notices that mindfulness is having a positive effect, he/she is encouraged to engage in the practice more. While self-reporting has been the main indicator of success, the outcomes are often corroborated by other useful and important data including biological testing, questionnaires, and interviews. The use of quantitative assessment instruments related to specific benefits to support self reporting provides additional data. Other ways to measure the influence of mindfulness include:

- 1. tests that indicate increased attention,
- 2. biological tests that show changes in neurotransmitters related to attention and emotion control, or
- 3. reduced production of hormones related to anxiety.

Biological tests should be seen as complementary sources of information, and should not be viewed as negating the value of self-reporting. The neurological indicators, assessed in these biological tests, are discussed more thoroughly in this chapter in the section on the effects of mindfulness on the child and adult brain.

Research in the 'fix-it' and 'good health' paradigms, utilising these various assessment tools, have demonstrated positive results for mindfulness practitioners. The focus on biological and medical testing and longitudinal studies in both the health and

education sectors is relatively recent (Black, 2010; Williams & Kabat-Zinn, 2011). Therefore in my critique of these studies I have suggested two things:

- to further substantiate results with biological and medical testing and
- to continue the studies using self-reporting over a longer period of time.

3.3 Benefits resulting from the 'fix-it' model approach

As mentioned in chapter 2, Kabat-Zinn (2003) opened The Mindfulness Based Stress Reduction (MBSR) Clinic in 1979 at the University of Massachusetts Medical School. The purpose of the clinic was to offer terminally ill patients, and others, guidance in mindfulness as an alternative form of treatment to complement traditional medical interventions (Kabat-Zinn, 2003). Siegel (2010), another researcher of mindfulness, reported that his patients felt safer and less anxious, had deeper clarity, and developed a generally more positive sense of well-being.

Other benefits of focused meditations through mindfulness have included positive mental health, greater understanding, the ability to slow down (Burack, 1999), and the development of different perspectives on daily experiences (Varela et al., 1991). These researchers, from outside the health arena, suggested that the benefits are the result of non-judgemental noticing, and labelling and moving on during meditation (Varela et al., 1991). Meditation allows the practitioner to focus attention without dissecting each little event over and over again, or without responding in automatic or habitual ways (Varela et al., 1991).

The goal of meditation and other contemplative practices taught at the MBSR clinic has been to integrate mind and body (Kabat-Zinn, 2005). Mind/body connections determine the specific way an individual pays attention, and their present-moment awareness, which affects body and brain function, mental health, thoughts, feelings and relationships (Siegel, 2007).

Most studies of mindfulness in action have featured adult participants introduced to mindfulness through programmes based on Kabat-Zinn's MBSR, and have reported

health improvements, pain reduction, anxiety reduction and increased attention (Kabat-Zinn, 2005; Siegel, 2007). Brown et al. (2007) discussed the mental and physical health benefits, particularly noting improvements in behavioural regulation and interpersonal relationships. In previous work, Brown and Ryan (2003) indicated the validity of these findings, based on a significant number of studies using scales of mindfulness as assessment tools.

The noted benefits, related to issues that beginning teachers face and therefore link to my research, are summarised in Table 2 on pages 53-54. These include reduction in stress and anxiety (Ludwig & Kabat-Zinn, 2008; Eppley, Abrams, & Shear, 1989; Tang et al., 2007), greater emotional regulation (Zyklowska et al., 2008; Langer & Kaplan, 1998), improved sleep patterns (Ludwig &Kabat-Zinn, 2008; Yook, Lee, Ryi, Kim, Bhoi, Suh, et al., 2008; Britton et al., 2010) and positive mental outlook (Brown & Langer, 1990; Davidson, 1992; Wenk-Sormaz, 2005).

I found one published article about mindfulness programmes in the health sector in New Zealand. The article is discussed here to highlight its contextual significance and is not included in Table 2. This Waikato-based research focused on a wait-list controlled, random assignment study of patients with chronic physical illnesses (Simpson & Mapel, 2011). Reductions were noted by participants in depression and anxiety and improvements in personal ratings of mindfulness in everyday life. The Kentucky Inventory of Mindfulness Skills (KIMS) survey (Baer, et al., 2004) was used in the Simpson and Mapel study. The Waikato research was a small but significant local study, and included a six month follow-up that demonstrated benefit retention for at least this short period of time. The qualitative research in the medical field might also be usefully complemented and corroborated by the quantitative results of biological and neurological measurement.

The twenty-five studies summarised in Table 2 (pages 52-53) are a sample of the ever expanding research base that has noted the benefits for mindfulness practice. Five of these studies included control groups in the research methodology; the control groups did not experience the same positive results as those practicing mindfulness (Slagter, Lutz, Greischar, Francis, Nieuwenhuis, Davis, & Davidson, 2007; Ludwig & Kabat-Zinn,

2008; Yook et al., 2008; Tang et al., 2007; Jha et al., 2007). The minimum number of participants in these studies was twenty, and the largest numbers in a single study were in the two groups of one hundred twenty and ninety studied by Wenk-Sormaz (2005). One significant feature of almost all of these studies was the positive results reported by all of the actively mindful participants.

Kabat-Zinn, Massion, Kristeller, Peterson, Fletcher, Pbert, Lenderking, and Santorelli (1992) reported reduced stress for twenty out of the twenty-two participants. Of the twenty-four adult participants and eight adolescents, all with attention deficit disorders, in the Zyklowska et al. study (2008), seventy-eight per cent reported a reduction in their anxiety and other symptoms related to their medical condition. Sixty-five per cent of the one hundred nine participants reviewed by Ludwig and Kabat-Zinn (2008) showed improved mood; significantly higher than results from the control group. Control groups were used to provide robustness.

My conclusion is that these results, replicated in several studies, indicate evidence of the potential value of mindfulness as an intervention tool.

Table 2
A summary of benefits

Benefits	Reference	Key features	Critique
Reduced stress and anxiety and greater emotional regulation	Ludwig and Kabat-Zinn (2008)	A meta-analysis of several studies	A large number of studies point to similar results; longitudinal studies over time would be useful for projecting duration of the benefits
	Kabat-Zinn et al. (1992) Siegel (2007; 2010) Eppley et al. (1989) Wall (2005) Willis (2007) Tang et al. (2007) Marcus, Fine, Moeller, Khan, Pitts, Swant, and Liehr (2003) Fogarty (2009) Lazar, Kerr, Wasserman, Gray, Greve, Treadway, McGarvey, Quinn, Dusek, Benson, Raugh, Moore, and Fischl (2005) Cahn and Polich (2006)	Several instruments and corroborated studies Quantitative measures: reduction in stress- cortisol levels, an enzyme found in saliva; increased activity and thickness in the pre-frontal cortex associated with emotional regulation	Biological tests, self-report measures and therapist reports for collaboration Potential further research could involve participants using mindfulness and medication compared to other groups of participants using mindfulness alone or medication alone
	Zyklowska et al. (2008) Langer and Kaplan (1998) Slagter et al. (2007)	Studies with individuals with Attention Deficit Hyperactivity Disorder (ADHD);	More studies needed to confirm effectiveness with ADHD
Improved sleep patterns	Ludwig and Kabat-Zinn (2008)	interactions Lifestyle changes evidenced; and also showed reduction in pain severity	Further study with randomisation and a control group would be useful
	Yook et al. (2008)	Participants were not randomised, but questionnaires did show improved sleep patterns	Multiple studies across different countries might be useful and with a larger sample size

Benefits	Reference	Key features	Critique
Improved sleep	Yook et al. (2008)	Participants with	Statistically sound
patterns	Britton et al. (2010)	depression showed	due to use of
continued		improved sleep	randomised control
		continuity	group
Improved attention including concentrative (specific) focus	Tang et al. (2007) Jha et al. (2007)	Attention Network Test, ANT (Rueda, Fan, McCandliss, Halparin, Gruber, Lercari & Posner,	Several small-scaled studies corroborating similar information; the need for more males to be part of
and receptive (present- moment) attention		2004) used	the research; combination of self- reporting and use of computer assisted testing
	Valentine and Sweet (1999) Kabat-Zinn (2005) Eppley et al. (1989)	Superior sustained attention for meditators and the greatest attention span was noted in those who had been meditating for many years.	Varying lengths of time of mindfulness training, so would be good to measure results with groups having short term versus longer term interventions
	Zyklowska et al. (2008) Semple and Lee (2008) Langer and Kaplan (1998)	By focusing on the present moment, helps individuals with focusing and attention issues to avoid getting stuck in 'automatic pilot'	Larger groups of participants needed
	Slagter et al. (2007)	Cognitive skills improve as a result	
Improved frame of mind, positive mental outlook, and ability to	Brown and Langer (1990)	In a very stressed environment (pre and post surgery)	Control groups used in these studies
think of new solutions	Davidson (1992)	Brain scan data	Possible longitudinal study with people who have practiced for various lengths of time would be useful; analysis of variance related to types of meditation used
	Wenk-Sormaz (2005)	Based on a series of cognitive tasks and skin tests	Useful to coordinate with brain scan data and biological tests

Other benefits of mindfulness intervention have been noted in the research, including the regulation of emotion which comes from the mindful aspects of openness, acceptance and compassion. Improved regulation of emotion has been noted in two recent studies, one in Australia (Hede, 2010) and one in Europe (Modinos, Ormel, & Aleman, 2009) that used MRI scanning. Hede (2010) created a complex model to show the connections between mindfulness, emotional triggers and reactivity, and management of emotions. This research is significant, as participants noticed greater ability to manage emotions; a crucial factor in living life with reduced stress, and thus possibly increasing efficiency and productivity.

One might assume that the more one engages in mindfulness exercises, the more likely one would be focused and aware in every present moment. However, in a limited study, Thompson and Waltz (2007), who were themselves surprised by the results, found no evidence of a relationship between everyday mindfulness and mindfulness during meditation. Those who were more mindful during meditation were not necessarily more mindful in their general daily lives (Thompson & Waltz, 2007). This suggests that each individual would need to make a conscious effort to apply mindfulness in everyday activities. Limitations of this study would be that the subjects were young (average age of 19) and had been meditating for only two years or less. Observations of individuals by others might be a different tool to use to measure everyday mindfulness as individuals may not be 'meta-aware' of their own present-moment awareness and compassion.

Fogarty (2009) in New Zealand, Schonert-Reichl and Stewart Lawlor (2010) in British Columbia, Canada, and other researchers have measured reductions in stress-cortisol to show the benefits of mindfulness. Participants in the New Zealand study were adult mindfulness practitioners; in British Columbia, Canada, the participants were children. In both studies, it was believed that stress-cortisol reduction was a good indicator of a successful programme. This may be true, but levels of stress cortisol, at a particular moment, do not necessarily indicate whether mindfulness has been incorporated into an individual's daily life, but rather that stress has been reduced. Therefore, reduction of stress could be seen as a by-product of mindfulness, and therefore one component of mindfulness.

To notice differences in regulation of emotions and other related benefits of mindfulness, Siegel (2007) suggested that one critical factor is to encounter life's experiences with "COAL: curiosity, openness, acceptance and love" (p. 332); all aspects of mindfulness. He added that when adopting this COAL attitude, there are no self putdowns; enhancing the relationship an individual has with him or herself and thus improving general well-being (Siegel, 2007). The COAL approach emanates from mindfulness practice and helps individuals become aware of improved intrapersonal and interpersonal relationships, a critical factor in job satisfaction.

In conclusion, the research suggested to me that whether individuals apply mindfulness to thinking patterns, improving attention, or emotion regulation, it appears to help to slow them down and enhance their mental health which links to the 'good health' model and indicates the potential value of mindfulness in educational programmes. In addition, there is a growing, though recent, body of evidence in neuroscience that points to the positive influences of mindfulness being actually empirically measurable through modern techniques for assessing neural activity and responses.

3.4 How mindfulness affects the brain

Observing the physical changes in the brain for mindfulness practitioners, has provided scientific and medical evidence of the potential benefits and complements the data from qualitative self-reports of surveyed participants. The intention of using meditation and other contemplative practices has been to integrate the body and the mind. "The mind is both embodied, (involves a flow of energy and information that occurs within the body, including the brain), and relational, the dimension of mind that involves the flow of energy and information between people" (Siegel, 2007, p. 5). The role of the brain is to monitor and adjust the flow of energy and emotion, which is enriched through mindfulness, promoting well-being for all people (Siegel, 2010).

In this section, I have recorded the effects of mindfulness on a child's brain and a more detailed looked at what happens in the developed adult brain as outlined in the literature. "Popular discussion of neuroplasticity, the ability of the human brain to change as a result of one's experience, have educated the general and the academic

community about the role of disciplined practice in developing cognitive and emotional capacities" (Bush, 2011, p. 196). The relatively recent understanding of the positive effects of mindfulness on increased neuroplasticity and the physical development of the brain highlights the importance of further mindfulness research.

The effects on the developing brain (under 25 years old)

The pre-frontal cortex of the brain, which helps regulate emotions, is not fully developed until age twenty-five (Garrison Institute, 2005a). As many student teachers and beginning teachers are under twenty-five years old, it is important to understand this, when working in initial teacher education.

Diamond (2002) discussed the importance of the development of the prefrontal cortex which is used when paying close attention, holding key information in one's mind, and attending to tasks without distraction. All of these skills are important for building mindfulness. Research into the effects of mindfulness programmes for children has shown improvements in executive function and self-regulation; indicators of prefrontal cortex development (Brown, Roderick, Lantieri, & Aber, 2004; Schonert-Reichl & Stewart Lawlor, 2007a; Saltzman & Goldin, 2008; Flook, Smalley, Kitil, Cho, Kaiser-Greenland, Locke, & Locke, 2008; Kinder, 2008a).

The effects on the developed adult brain

With this foundational information for brain development before age twenty-five as a starting point, what the research shows is the positive effects of mindfulness on the adult brain. The indications point to enhanced neuroplasticity within the brain forming new connections and stimulating growth in the pre-frontal cortex (Siegel, 2010). In addition, mindfulness appears to stimulate neurotransmitters, chemical messengers in the brain, such as: dopamine, which is associated with positive feelings; adrenalin linked to attention and emotions; and serotonin, which affects mood changes, while it also reduces stress hormones such as cortisol (Siegel, 2010; Hawn Foundation, 2011). This information is important for student teachers to help them understand their own brain development.

Siegel (2010) confirmed that focused awareness stimulates acetylcholine secretion which improves neuroplasticity in the brain, promoting the growth of new synapses that improve functioning. This was identified through the blood flow and creation of new neurons in activated regions of the brain. The neuroplasticity, resulting from the focused awareness of mindfulness, helps to enhance the integrated processes and coordination of the functions of the pre-frontal cortex advancing what he refers to as FACES: flexibility, adaptability, coherence, energy and stability, which are benefits of mindfulness practice (Siegel, 2010).

In two other studies, one conducted by Lazar et al. (2005), and another one by Cahn and Polich (2006), meditation practices such as mindfulness showed an increased activity in thickening of the prefrontal cortex. The thickening of the prefrontal cortex following mindfulness interventions indicates that the functions of the prefrontal cortex, including regulation of emotions, improved. In addition, Tang et al. (2007) and Jha et al. (2004) noted that all three key aspects of attention centred in the prefrontal cortex, improved with mindfulness, as measured by the ANT test described in the previous chapter (page 37).

Davidson (1992) showed in a previous study that brain scan changes of cortical thickening were indicators of increased positive emotions. This idea was extended in a later study in which brain activity was higher during periods of positive emotion, as demonstrated in a group introduced to mindfulness meditation versus a control group (Davidson, Kabat-Zinn, Schumacher, Rosenkranz, Muller, Santorelli, Urbanowski, Harrington, Bonus, & Sheridan, 2003).

I have described how mindfulness improves emotional regulation and can also increase a person's ability to focus attention. According to Siegel (2010), mindfulness enhances a biological process that trains the brain to integrate functions, so individuals can use this improved ability to focus attention to make decisions. In this way, each person faces each day with less stress, resulting in emotional balance. This mind/brain symbiosis reflects the specific way an individual pays attention; affecting body and brain function, mental health, thoughts, feelings and relationships (Siegel, 2008).

To sum up, regular focused awareness mindfulness exercises promote integrated processing in the brain and improved emotional regulation for those beginning teachers under twenty-five whose brains have not fully developed. In addition, beginning teachers, over twenty-five, experience similar benefits as new growth has been evidenced in the fully developed adult brain. For all beginning teachers, the changes in the brain indicate that mindfulness has the potential to become a trait, or ever present, and available for maintenance of good mental health, rather than something that is only present when engaging in specific exercises. The positive impacts on the brain in the research highlighted in this section complement the results of the benefits suggested in the 'fix-it' studies of mindfulness predominating in the health field; and strengthen the assertions made.

3.5 Research from the 'good health' model in the education field

Research from the 'good health' model (described earlier in this chapter on page 48) has been conducted in the education sector over the past twelve years. It has touched on all levels of education. In this section of the literature review, I have described research on programmes in three areas of tertiary education:

- 1. courses in initial teacher education syllabi,
- renewal programmes available as part of professional development for teachers, and
- 3. the wider arena of tertiary education including professional development for non-teachers.

The literature highlighted the perceived benefits for participants from these contemplative programmes. Following the discussion of tertiary programmes, I have included information related to programmes in early childhood and school sectors.

An overview of this section

The research in the literature on mindfulness in tertiary and adult education or professional development is only just emerging. The first publications I noted were Shapiro et al. (1998) followed by a collection of research studies edited by Hocking, Haskell and Linds (2001) after a conference in Vancouver, British Columbia. This research suggests that engaging in mindfulness practice may be a way to promote positive well-being and good health for all students and teachers. Positive results have been reported by various educators when implementing contemplative and cognitive

mindfulness approaches to education practices in tertiary study (Zajonc, 2006; Shapiro et al., 1998) and, more specifically, in teacher education (Kozik-Rosabal, 2001; Boyce, 2007).

Educators in the tertiary education field, who have used mindfulness with their students, do so for a number of reasons: to reduce test anxiety, to build emotional awareness and resilience, and to increase attention to build learning potential. One study, conducted by Hyland (2010), concluded that using mindfulness exercises in tertiary education appeared to boost learning by establishing strong connections between the cognitive and affective domains of education, which is important for academic achievement.

In a review of contemplative programmes in tertiary education, Bush (2011) suggested that the rationale for the increased use of mindfulness in these courses can be attributed to initial studies indicating that mindfulness led to students being calmer, quieter and more focused. Indeed, after 2008, Bush (2010) claimed that it became impossible to keep a record of all of the tertiary programmes that included mindfulness.

I have included literature from the early childhood and school sectors because it demonstrates the spread of mindfulness within the context of teaching. The increasing use of mindfulness programmes for children demonstrates teachers' beliefs in the value of social-emotional learning programmes for building emotional intelligence for students, and therefore perhaps for themselves. When teachers engage in mindfulness practices with children, teachers and children alike may experience similar positive benefits. This information regarding early childhood and school sector programmes may be important for teachers in the early stages of their careers for two additional reasons. Firstly, beginning teachers may find it difficult to separate the children's well-being and behaviour from their own personal mental health, and ability to cope with the teaching day. In addition, this research indicated possible ways that mindful teachers were more effective in their teaching methods and in their relationships with students.

Another reason for reviewing the research with children is that teachers of mindfulness, according to Kabat-Zinn (2005), need to establish a personal practice for themselves for such programmes to be effective. This notion is currently being researched in British Columbia with teachers implementing the MindUp programme, a mindfulness curriculum for children (Hawn Foundation, 2010).

Initial teacher education

With a developing understanding of mindfulness and its possible effects on the body, the brain and learning, I sought research that suggested that mindfulness might be taught in initial teacher education. Beginning teachers would then be able to use the strategies learned during their first years in the classroom to cope with the demands of the job. The need for assistance is evident from the numerous studies that recounted the difficulties and stress associated with the first year, and especially the first six months of teaching (Klug & Salzman, 1991; Kelchtermans & Ballet, 2002; Molner Kelley, 2004; Findlay, 2006). Cameron's (2007) extensive review of induction programmes confirmed that these overseas findings also related to beginning teachers in New Zealand. "Too often they are thrown in at the deep end, and while they may survive to teach another day, their dropout rate is worrying" (Cameron, Lovett, & Berger, 2007, p. 32).

Pastoral support and assistance for personal and emotional issues are rarely addressed in teacher education or mentoring programmes, even though these factors have potentially significant impacts on resilience, performance, job satisfaction and retention for beginning teachers. This was confirmed in a Colorado study, (Molner Kelley, 2004) and in a similar study in California (Gless & Moir, 2004) which both reported that, with a structured mentoring programme that included personal and emotional support, higher retention and greater teacher self efficacy were achieved in nearly every teaching context. This section of the literature review focuses on those initial teacher education programmes that include mindfulness as a tool for coping with the stress and demands of the teaching role.

The mental health of beginning teachers has a major impact on their ability to cope in the classroom. Kostanski (2007) reviewed the state of the mental health of two

hundred sixty-eight pre-service teachers in the initial assessment; one hundred fifty-eight of those completed the follow-up assessment. The pre-service teachers participated in the study during a high stress period at Victoria University in Melbourne to determine if those who displayed characteristics of mindfulness were less stressed and generally felt healthier. Participants completed self-report surveys twice (nine months apart) using the MAAS (Mindfulness Attention Awareness Scales) mindfulness scales inventory, described in the previous chapter, alongside surveys of personality characteristics, optimism and stress (Kostanski, 2007).

Results indicated that those who identified lower levels of mindfulness skills in their daily lives, on the MAAS, also expressed heightened stress and illness in other parts of the survey (Kostanski, 2007). On the other hand it was also noted that those with reduced stress and illness indicated higher levels of mindfulness (Kostanski, 2007). This study is particularly significant because of the limited number of research projects on mindfulness for teachers in the literature. Although the study did not control for specific stressful issues (home-related or student teaching practicum-related) which could have had an additional effect, the results may signify a relationship between increased mindfulness and reduced stress.

My search of the literature revealed three other studies with teacher trainees who have been introduced to mindfulness programmes: Poulin, Mackenzie, Soloway, and Karayolas (2008), [reviewed again in Soloway, Poulin & Mackenzie, 2010]; Boyce (2007); and Kozik-Rosabal (2001).

Poulin et al. (2008) analysed the effects of a specially designed mindfulness programme for a group of teacher trainees and included a control group for comparison. A thirty-six hour course of study, as part of their initial teacher education programme, had been designed to address stress and burnout that had resulted in teachers leaving the profession. During this course, the participants were introduced to mindfulness strategies, how to promote general wellness for themselves and their students, and ways to respond rather than react to student behaviours. They found the teacher trainees in the mindfulness programme noted specific benefits in self efficacy as compared to the control group. Although this was a

small sample, the results were replicated with a second group using pre and post quantitative scales. Five of the participants were interviewed again after their first year of teaching, noting the benefits of applying what they had learned to their personal and professional lives, even though they had not continued with regular mindfulness practice (Poulin et al., 2008; Soloway et al., 2010).

A significant historical event in the history of contemplative education was the opening of the Naropa Institute in Boulder, Colorado in 1974, founded on Buddhist principles and Contemplative Education (Bush, 2011). Now known as Naropa University, this tertiary institution offers a teacher education programme where the second study cited was conducted. The goal, in setting up this academic programme, was to create a learning environment in which awareness, insight and compassion were developed through contemplative practices. Initial enrolments were three times the expected number totalling over 1300 (Bush, 2011). The University continues to thrive and provides a template for other institutions considering implementing a contemplative education programme. In the teacher education study conducted by Boyce (2007) at Naropa University, meditation as a part of the curriculum, promoted new learning and personal development and enhanced the learning relationships between teachers and students.

In the third study, Kozik-Rosabal (2001) reported success with a personal transformation exercise for teacher trainees, in another mindfulness-based teacher education course. These students engaged in mindfulness meditation through awareness of present-moment thoughts, feelings and body sensations as a way to meet personalised practicum goals which also assisted them in handling difficult teaching situations (Kozik-Rosabal, 2001). This programme was highly successful, and my only critique would be to question whether or not these results could be replicated with a different lecturer in a different context. This study does provide a possible template for the use of mindfulness meditation in tertiary education for lecturers who find resonance with this method of teaching.

Professional development programmes for teachers

Alongside courses within teacher education programmes, there are a number of professional development programmes for teachers that have included mindfulness as an antidote for teachers under stress or before burnout sets in. Intrator and Kunzman (2006a) reported on Parker Palmer's *Courage to Teach* seminars in Washington State, USA, and noted greater satisfaction from participants with their own teaching, and improved relationships with students as a result of participation in these renewal programmes that included mindfulness. Although professional development programmes are designed for experienced teachers rather than those at the beginning of their careers, the results may have some resonance for my study.

Next I have reviewed four mindfulness professional development programmes for teachers: Mind and Life Institute (2007); Gold, Smith, Hopper, Herne, Tansey, and Holland (2009); Jennings, Snowberg, Coccia, and Greenberg (2011); and Mañas, Justo and Martínez (2011).

The Mind and Life Institute (2007) began a research study on the effectiveness of training teachers with mindfulness techniques in an eight-session programme at the University of California, San Francisco called *Cultivating Emotional Balance*. Although anecdotal evidence from these professional development programmes indicated that teachers felt regenerated and believed their teaching was enhanced, there was a lack of published research on the effectiveness of each of these programmes.

In the Gold et al. study (2009) of a mindfulness professional development programme for eleven teachers in a suburban school district, who had identified concerns with depression and stress, a series of quantitative measures were used including only one self-reporting tool: the Kentucky Inventory of Mindfulness Skills (KIMS) survey. The tests focused on stress levels, anxiety and depression, as well as any impact on the ability to be more aware. Results indicated statistically significant improvements in levels of stress and depression, but no change in anxiety (Gold et al., 2009). Participants commented on how mindfulness increased their ability to cope with the stress of teaching. This improved self efficacy is significant, particularly if the results can be repeated elsewhere. In the study, the small sample size included only one male

participant. There was no control group. Another critique would be that participants' stress levels may have increased simply because they were now more aware of what it means to be mindful (and therefore more aware of their own stress) when completing the second round of tests.

Jennings et al. (2011) reviewed the results of a similar programme, Cultivating Awareness and Resilience in Education (CARE), in two pilot studies in different socioeconomic settings, one urban and one suburban, each with a control group. In each case, participants attended two weekend sessions with follow-up support. In the urban setting, positive results showed increased self regulation, attention and nonjudgmental awareness; key mindfulness skills (Jennings et al., 2011). The thirty-one participants noted 97% improvement in self-awareness, 93% improvement in wellbeing, and 83% improvement in their ability to manage their classroom. As an ancillary effect, teachers noted that they were providing increased emotional support for their students, and had introduced mindfulness into their classroom lessons (Jennings et al., 2011). In the suburban study, student teachers accompanied their mentor teacher, which may have affected the results, and these teachers did not note reduced stress contradicting the positive results reported previously by Gold et al. (2009). The suburban participants in this study did note their satisfaction with their mindfulness training, and the importance and value of the programme (Jennings et al., 2011). It is possible that mindfulness intervention may be more useful in stressful urban settings rather than in suburban schools, but further research would be needed to see if this is true.

Personal satisfaction and self-reporting are good indicators of the success of mindfulness programmes for teachers. In a different study, Mañas et al. (2011), following a mindfulness training programme for sixteen secondary school teachers in an experimental group, participants noted reduction in stress levels compared to those in the control group. As another indicator of positive results, these researchers included a review of the number of sick leave days taken by participants and found a significant reduction for those in the mindfulness group (Mañas et al., 2011). This might be an important study to replicate as supporting staff members with a low cost

mindfulness programme that leads to reductions in sick leave days could potentially save money for schools.

Tertiary education and professional development programmes for others

I identified a dozen other studies in the wider field of tertiary education (eg. Gravois, 2005; Zajonc, 2006; Chang, Palesh, Caldwell, Glasgow, Abramson, Luskin, gill, Burke, & Koopman, 2004) that resonated with the results noted above. The mindfulness programmes studied were adapted for participants in other stressful fields such as nursing (Cohen-Katz, Wiley, Capuano, Baker & Shapiro, 2005a; 2005b; Beddoe & Murphy, 2004) and occupational therapy (Stew, 2011). Other similar studies (eg. Galantino, Baime, Maguire, Szapary, & Farrar, 2005) have been conducted with large sample sizes of healthcare professionals. The benefits noted by the participants in these programmes confirmed the research findings in tertiary settings and professional development programmes for teachers. Bush (2011) confirmed the rise in contemplative courses in tertiary institutions (not always taught by Buddhist scholars) and opined that the reason for this increase may be that mindfulness provided different ways of *seeing* so students and lecturers were not stuck in traditional ways of knowing, acting, teaching, and learning.

Academics who used contemplative exercises in their tertiary classes note positive reaction from students. Gravois (2005) concurred with Hart's (2001a, 2001b) contention that 'transformative education' through contemplative practices enhanced his students' learning. Boyce (2007), in a review of several contemplative education programmes in North America, found that improved metacognition resulted, allowing students to stop and reflect, gain new perspectives, and make choices.

In a study of forty-three tertiary students in a general education pre-degree course, positive results were identified in stress reduction and improved state of mind (Chang et al., 2004). The outcomes also complemented the goals promoted by Langer for mindful learning (cognitive mindfulness) highlighted in chapter 2. While self-awareness, improved emotional intelligence and social skills are additional positive outcomes of these programmes (Garrison Institute, 2005a), these reports were based solely on teacher observation, and did not include self-reports that might have

provided useful objective information. Teacher observation and perceptions were critical in determining the success of these programmes.

Zajonc (2006) conducted a study with his tertiary students, studying physics at Amherst College in Massachusetts, and noted high satisfaction with his transformative, affective education. His approach mingled contemplative mindfulness practices with cognitive exercises. Contemplative inquiry, as a component of the curriculum, according to Zajonc (2006, pp. 1746-1748), has eight key aspects:

- 1. respect,
- 2. gentleness (soft focus attention),
- non-judgemental intimacy with nature rather than stepping back (like objective observation in science),
- 4. participation with what is happening in that moment,
- 5. vulnerability (it is acceptable to not know or to be uncertain, in order to be open to multiple perspectives),
- 6. inward transformation,
- 7. education as a formative process, and ultimately,
- 8. insight.

Incorporating all eight of these aspects may be difficult within a tertiary setting focused on content acquisition. Zajonc (2009) adapted these eight components to a contemplative research model which was drawn upon for this study. This research model is discussed in the methodology chapter, Chapter 4.

Quoting from students' assignments, Zajonc (2006) described their personal growth toward deep levels of contemplation, and noted that students were meta-cognitively aware of personal positive changes resulting from his approach which reflected the eight aspects noted above. These positive results, particularly in the area of stress reduction and reduced psychological distress, were also noted in a study of medical students who had been introduced to mindfulness and then again replicated with the wait-listed control group (Shapiro et al., 1998).

Holland (2006) highlighted three issues to be aware of:

1. contemplative education can become a monotonous routine;

- 2. the teacher needs to assume the role of student, and
- meaningful, measurable assessments are needed to validate results.

I agree with his observations, including the need for teachers to be contemplative practitioners, but I also suggest that qualitative research, based on personal observations and reflections, might be valuable.

In a qualitative study, Stew (2011) explored the lived experiences of occupational therapy students introduced to mindfulness in four ninety-minute sessions. His research design included hermeneutic phenomenology as the methodology and interviews, questionnaires, emails and journals for data collection. The findings that emerged were:

- students were able to use the techniques when confronted with stressful situations;
- 2. many obstacles to formal practice were identified;
- 3. informal practice in everyday tasks such as gardening or washing the dishes was preferred over formal sitting meditation;
- 4. students did recognise and appreciate moments of stillness;
- 5. self-awareness improved significantly; and
- 6. a greater understanding of habitual thought patterns was noted (Stew, 2011).

In addition to these studies of university programmes, I found eleven articles related to mindfulness education programmes for adults that have been incorporated as part of professional development programmes. A number of these studies were with nurses or nursing students in which the participants noted improvements in stress and burnout (Cohen-Katz et al., 2005a, 2005b; Beddoe & Murphy, 2004); and some had been conducted with other health care professionals (Shapiro, Brown, & Biegel, 2007; Galantino et al., 2005). Focus group data included comments of being more fully present with individuals, more confidence in abilities at work, and paying more attention to the individual patient in the moment (Cohen-Katz et al., 2005b). To validate their results, Cohen-Katz et al. (2005a) used a series of quantitative instruments to corroborate the findings from self-reports. The reduction in symptoms

for a wait-listed control group replicated the results, and most significantly, found the benefits were still evident three months later.

In contrast to Cohen-Katz et al. (2005a) who used a small sample size, Galantino et al. (2005) led eighty-four health care professionals in an eight week mindfulness programme, in which improvement in self-reported mood assessments was noted, but no measurable physiological changes were apparent. Self-reports were also the feature of a smaller sample of sixteen nursing students conducted by Beddoe and Murphy (2004) in pre and post study questionnaires. The key finding in this study was that those who practiced at home showed greater stress reduction, and 75% reported greater self confidence (Beddoe & Murphy, 2004). I believe that even if no physiological changes were noted, perceived mood change and stress reduction may have been significant in that if the participants think they feel better, they may actually begin to feel better and provide more focused attention for the client or patient. Self-reporting could be balanced with reports from others' perceptions including patients and clients served by the health care professionals.

In two studies of nurses, Shapiro et al. (2007) noted improvements on mindfulness quantitative scales in stress, anxiety and self compassion, confirming results from the other studies mentioned above. The participants in a study of nurses conducted by Poulin et al., (2008), described reductions in emotional exhaustion. These wide ranging positive results for health care professionals supports the value of further testing within tertiary education, including initial teacher education, and professional development programmes.

To summarise, in this section of the literature review, I considered studies of mindfulness programmes for adult students (eg. Gravois, 2005; Zajonc, 2006; Chang et al., 2004; Stew, 2011, Shapiro et al., 2007; Jennings et al., 2011). The participants ranged from those in tertiary education settings to individuals already engaged in employment who attended professional development courses. The positive results were measured by various tools including quantitative instruments, as well as journal reflections, self-reporting and programme evaluation by students and the lecturers themselves. Further study could be conducted over time to review results using mindfulness questionnaires and assessment instruments other than self-reporting.

In the next section, mindfulness programmes in early childhood and school settings are reviewed and indicate similar potential benefits for different age groups.

Mindfulness Programmes for Learners in the Pre-School and School Settings

Using mindfulness to engage learners, Hart (2001a) recommended transformative education to bring out the knowledge and creativity which already exists within each person. In his research, students felt an emotional connection, relevance and resonance which made them more alert and enriched their consciousness of the classroom programme. Students, Hart (2001a) contended, should 'meditate' on answers, digest multiple perspectives, and visualise possibilities. This complements Langer's mindful learning theories discussed earlier in chapter 2. The awareness process isn't difficult; it comes from a calm, uncluttered mind, and is cultivated through such practices as meditation, focusing activities, and journal writing (Hart, 2001b). In assessing the importance of contemplative education programmes, Hart (2001a; 2001b) concurred with Varela et al. (1991) that wisdom is generated from waking up from mindlessness to consciousness through non-judgmental awareness, to become fully present with what is happening in the present-now.

Brady (2004) concurred with Hart's emphasis on contemplative practice in education; he suggested that by practicing contemplative exercises, the frequency of healthy thoughts increases and negative thoughts were viewed with less anxiety, giving more opportunity for focused awareness and learning, particularly with secondary school students. Students became aware of thoughts, feelings and actions while engaged in learning, but did not get caught up in them. Once they reached this level of awareness, students actually noticed, for themselves, the benefits from mindful learning practices. Lantieri (2008) discussed the importance of active participation in her mindfulness intervention programmes which helped participants to quiet the chatter in the brain, and to slow down to focus on what was happening in each moment.

I have read twenty-three articles or books about mindfulness programmes for early childhood and school settings. I could not find any articles related to programmes in these sectors in New Zealand. Many of the articles refer to the author's own classroom

research. Other studies I reviewed focus on six main programmes; all of which are located in the USA:

- 1. The Hawn Foundation's MindUp Programme (Hawn Foundation, 2010),
- 2. InnerKids (Kaiser Greenland, 2010),
- 3. Wellness Works (Kinder, 2008a),
- 4. Still Quiet Place (Saltzman & Goldin, 2008),
- 5. Inner Resilience (Lantieri, 2008), and
- 6. Attention Academy (Napoli, Roch Krech, & Holley, 2005).

In the next section, I have described studies from these six mindfulness programmes for children I identified in the literature. Each description included the programme components and the assessment instruments used to demonstrate the effectiveness of the mindfulness interventions. As the results from these studies corroborated each other, greater credibility for the value of mindfulness programmes for children can be noted.

Programme #1: The MindUp Programme

The Hawn Foundation (2011) of British Columbia, Canada, developed the MindUp Curriculum which is published by Scholastic. Teachers in the Vancouver School Board were trained to implement this curriculum or its previous iterations in their classrooms as part of the Social Emotional Learning programme (Schonert-Reich & Stewart Lawlor, 2010). The goals of the programme include: improved self-awareness, memory, regulation of emotions and executive functions of the pre-frontal cortex of the brain (Willis, 2007). Schonert-Reichl and Stewart-Lawlor (2007a; 2007b) have conducted studies of the MindUp programme across four schools with a total of two hundred forty-six students and noted gains in several of the goal areas. Three different quantitative measures were used, alongside teacher reports that demonstrated these positive results. A reduction in stress-cortisol was noted in a randomised controlled trial of the MindUp programme (Stewart Lawlor, 2005; Stewart Lawlor, Fischer, Schonert-Reichl, 2006) which corroborated studies by Tang et al.(2007) and Marcus et al. (2003) confirming the use of salivary cortisol as a reliable indicator of stress reduction.

Programme #2: InnerKids

Teacher reports were also used in two studies conducted with the support of the Mindfulness Awareness Research Center at the University of California, Los Angeles following implementation of the InnerKids Foundation programme (Flook et al., 2008; Flook, Smalley, Kitil, Galla, Kaiser-Greenland, Locke, Ishijima, & Kasari, 2010). The InnerKids programme included focusing exercises, sitting meditation, and compassion exercises such as sending out good messages to specific people (Flook et al., 2008; Flook et al., 2010; Kaiser Greenland, nd; 2010). Control groups were used in these studies of pre-school and school age children. In the study of school age children, parents and teachers of the sixty-four students reported improvements in attention and behaviour (Flook et al., 2010). Results of testing showed improved executive function (memory, planning, metacognition, self regulation), even after only limited exposure to the techniques encouraging the use of mindfulness in classrooms (Flook et al., 2008; Flook et al., 2010).

Programme #3: Wellness Works

Another school intervention was undertaken in Lancaster, Pennsylvania which combined mind/body activities including yoga, breath work, attention building skills and compassion exercises (Kinder, 2008; 2008a; Desmond & Hanich, 2010). The forty students in this study assessed their own progress, and indicated improvements which were also noted by their teachers and the school principal. An overall improvement in mental, emotional, physical and social competencies was measured by a behaviour rubric completed by teachers; these results were duplicated in three other Lancaster school settings and at the Lancaster County Youth Intervention Center in a randomised control study (Kinder, 2008; 2008a; Desmond & Hanich, 2010).

Programme #4: Inner Resilience

This programme was designed to assist children and teachers who had been affected by the events of 9/11 in New York City. Mindfulness techniques, including mindful stretching or yoga, focused on relaxation, self-care and stress management (Lantieri, 2008; Metis Associates, 2011). Self assessment was used in this study of sixty participants (Lantieri, 2008), and in a replicated study of twenty-nine teachers and their students trained in the Inner Resilience Programme and twenty-eight teachers

and their students in a randomised control group. The principals in these schools also completed online questionnaires in this second study. Improvements were noted in coping skills, stress management, general well-being and feelings of autonomy (Lantieri, 2008; Metis Associates, 2011).

Programme #5: Still Quiet Place

Amy Saltzman developed a programme for children based on various mindfulness practices. The 'still quiet' place is the place that children can go to in their minds to become calm (Saltzman & Goldin, 2008). The study included twenty-four families who attended sessions over eight weeks in Palo Alto, California and demonstrated improved attention and focus scores on the ANT test (Fan et al., 2002) rather than through self-reporting (Saltzman & Goldin, 2008).

Programme #6: The Attention Academy

The last study discussed in this literature review was conducted in schools in Arizona by Napoli, Roch Krech, and Holley (2005). Following an attention training class which included body scan, breath focus, mindful movement and sensori-motor activities, participants showed greater improved attentional awareness compared to a control group. These results were replicated several times with two hundred fifty-four students and showed a decrease in test anxiety. Fewer behaviour issues were noted by the teachers, so learning time was increased and teachers recognised the importance of the mind/body connection through physical activities (Napoli et al., 2005).

To review, the research studies of these six mindfulness programmes for children reported positive benefits which included improvements in:

- 1. stress reduction and coping,
- 2. executive function,
- 3. social-emotional competencies,
- 4. attention, and
- 5. general well-being.

Franco, Mañas, Cangas and Gallego (2010) conducted a study of a programme similar to these USA-based programmes across three high schools in Spain, and noted comparable results including significant gains in academic performance and feelings of positive self worth along with reduced anxiety in students, compared to a control group.

Mindfulness is practiced around the world in Krishnamurti Schools in the United States, the United Kingdom, Spain and India. Krishnamurti (1953) claimed that intelligence and learning improved with awareness of thoughts, feelings and personal observations, and mindful awareness of others. A few schools in the United Kingdom have added mindfulness and/or meditation to curricular programmes, and these schools have signalled possible positive effects on academic achievement (Levete, 2001). In state schools, Levete (2001) noted that practices were limited to breath and visualisation meditation, while more flexibility in techniques used were possible in independent schools.

One feature of several of these studies (Schonert-Reichl & Stewart Lawlor, 2007a, 2007b; Flook et al., 2008; Kinder, 2008a, 2008b) was the inclusion of teacher reporting; possibly a more accurate, reliable tool than self-assessment by young children. Schonert-Reichl and Stewart Lawlor (2010) pointed out limitations of their most recent study, which may also be relevant to the other studies reported upon in this section. Relying only on student-self reports and teacher observations of students rather than independent observations of student behaviour does not always result in accurate information, especially when the benefits are not reviewed over time to explore lasting effects (Schonert-Reichl & Stewart Lawlor, 2010).

It is important to remember that the noted improvements for students may have an impact on the mindful behaviour of teachers, especially beginning teachers, whose personal well-being is closely linked to that of the children and their behaviour in the classroom. There are several experiments currently being trialled and evaluated, and longitudinal studies being conducted, so the body of research of mindfulness for children will continue to grow.

3.6 Analysis of gaps in the literature leading to my research question

In this final segment of the literature review, I have highlighted the gaps in the literature, and the implications of this literature for my study which led to the research question. I have explained how the literature review has impacted on, and charted the journey for my research with beginning teachers.

Implications from the literature for beginning teachers and this study

In this literature review, I described a variety of benefits that may improve beginning teachers' perceptions of and their ability to cope with the stresses of the first years of teaching; a 'fix-it' for these stressed-out professionals. The benefits from the 'fix-it' paradigm included: reduced stress and anxiety, greater emotional regulation, improved sleep patterns, improved attention including concentrative (specific) focus and receptive (present-moment) attention, improved frame of mind, positive mental outlook, and the ability to think of new solutions.

The 'good health' paradigm studies in the educational sector discussed above complemented the health related studies, and corroborated the potential benefits of mindfulness; particularly mindfulness as a tool for supporting the development of a positive outlook and emotional stability. Studies related to improved physical health benefits may have relevance for beginning teachers because stress-related illness seems to increase in the first years of teaching. The potential of mindfulness to reduce illness was noted in one study (Mañas et al., 2011) that found teachers required less sick leave after engaging in a mindfulness professional development programme.

Three aspects of the research on brain development of people younger and older than twenty-five are useful for beginning teachers as this information helps them understand their own, and their students' responses to day to day events in the classroom. First, an individual's brain, and particularly the pre-frontal cortex (emotion regulation centre) is not fully developed until age twenty five. Further, information gleaned from the studies of brain thickening (Davidson, 1992) and hormonal and neurotransmitter regulation in the brains of mindfulness practitioners links to understanding the effects of mindfulness on emotional (mental health) and biological (brain development) (Hawn Foundation, 2011). Additionally, Siegel (2010) mentioned

the positive characteristics developed from mindfulness practice (flexibility, adaptability, stability); all useful strategies for beginning teachers for facilitating student learning and regulating their stress in the classroom. When a teacher is aware of this information, it may be helpful for personal development and stress management. This knowledge of brain development may also be useful for understanding the dynamics of the classroom environment, and for designing a classroom pedagogy and curriculum that facilitates brain development.

Teacher retention rates are also important information when designing research to review aspects of the beginning teacher's first year on the job. Elvidge (2002), in a report for the Demographics and Statistical Analysis Unit of the Ministry of Education in New Zealand, noted that within the first three years in the education field, 37% of teachers decided not to continue in the profession. This complements data from the USA which indicated that 40% of teachers leave before they have completed five years in the profession (Viola, 2009). Although this may indicate the need for greater care in recruitment, these statistics also suggest the need for programmes to support beginning teachers to cope with the stress and challenges of the first years of teaching.

Mindfulness, Viola (2009) suggested, provides an effective tool for teachers to manage their emotions, reduce stress and maintain focus, and therefore, help to increase career satisfaction. It was suggested that pastoral care might provide the personal support to promote self esteem and self efficacy generated from the stress and isolation prevalent in the first year (Klug & Salzman, 1991; Kelchtermans & Ballet, 2002; Molner Kelley, 2004; Findlay, 2006). Introduction to mindfulness, as a component of teacher induction and/or initial teacher education, may offer a way to provide pastoral care and emotional support needed to promote teacher retention. Further research would be useful.

More and more countries recognise the importance of mentoring or support programmes for beginning teachers, but no clear evidence in the literature emerged on the essential components of programmes that support mental health or promote job retention. The benefits noted in burnout and stress reduction for health

professionals (Shapiro et al., 2007; Cohen-Katz et al., 2005a) may have implications for teachers and teacher trainees who are also in a helping profession.

The research indicated that improved teaching practice was noted for mindful teachers as a result of the ability to slow down to be more aware of students. This provides further justification to consider the importance of mindfulness for beginning teachers. In addition, beginning teachers often see their well-being as derived from their students' well-being; therefore, taking a brief look at the effects of mindfulness programmes in early childhood centres and schools further broadened my perspective on the importance of mindfulness in education. If children experience positive benefits from mindfulness, there is a trickledown effect for teachers.

The literature review highlighted research that indicated possible ways that mindful teachers in all sectors are more effective in their teaching methods and in their relationships with students, providing further rationale to support my research into the effects of mindfulness in initial teacher education.

Gaps in the literature

The review of the literature highlighted the limited research about mindfulness programmes in teacher education (five articles), or professional development and renewal retreats for classroom teachers (an additional eleven). Kostanski's (2007) study signalled the possibilities of researching the benefits of implementing mindfulness in pre-service training. Studies by Gold et al. (2009) and Poulin et al. (2008) indicated improved well-being for teachers and nursing trainees, and emphasised the value of mindfulness in teacher preparation courses.

The positive results revealed from the limited research I have found and reviewed indicated to me the possible potential influence of using innovative techniques to build mindfulness in initial teacher education. The findings from Kostanski (2007), Gold et al. (2009), and Poulin et al. (2008) align with Kozik-Rosabal's (2001) assessment of a group of beginning teachers, showing personal and professional growth after engaging in mindfulness.

The limited research related to mindfulness or any other specific strategies to address the personal and emotional issues that may be experienced by first-year teachers highlighted a gap in the literature. In the absence of such pastoral support in mentoring programmes and initial teacher education, I believe mindfulness may provide effective support. Finally, I could only find two studies of mindfulness in New Zealand: Fogarty's (2009) master thesis demonstrating reduced stress cortisol in mindfulness practitioners, and the small study of the benefits noted by chronically ill patients completed at Waikato University (Simpson & Mapel, 2011); but none with teachers.

The one study discussing the positive benefits for beginning teachers who have been introduced to mindfulness in their teacher preparation courses (Soloway et al., 2010) and the hermeneutic phenomenological study with occupational therapy students (Stew, 2011) were key signposts to me of the value of this research that I have reported in this thesis. In Stew's hermeneutic phenomenological study of twenty occupational therapy students, the importance of being fully present with a patient was stressed. Being fully present (with students) would be equally important for teachers. It would be worthwhile to repeat Stew's study, to see if his findings could be replicated, which points to the possibility of hermeneutic phenomenological study of the efficacy of mindfulness practice for beginning teachers. This kind of research might begin to address the lack of literature on mindfulness for beginning teachers.

In my analysis of the literature related to mindfulness, and particularly mindfulness in teacher education programmes I identified five main gaps in the literature:

- very few studies of initial teacher education programmes, that include mindfulness, to consider whether mindfulness might promote teacher retention, stress reduction and resilience in the classroom
- limited research of the impact of mindfulness on experienced teachers exists, and there are even fewer studies of the effects of mindfulness on the professional lived experiences of beginning teachers, particularly after employment in the profession

- 3. no phenomenological studies detailing a beginning teacher's first year experiences after they have been introduced to mindfulness as a component of their initial teacher education,
- limited research of any kind related to mindfulness in New
 Zealand, and
- 5. not only was there not enough in the literature about mindfulness programmes for beginning teachers, what exists has no definitive answer to the question about the right time to introduce mindfulness. Is it during training or in professional development courses?

I believe that further study of the benefits of introducing mindfulness to beginning teachers would elicit new knowledge to bridge these gaps in the literature.

The actual question and the research study

These gaps led me to conduct a phenomenological study to describe beginning teachers' experiences with mindfulness personally and professionally. The potential benefits of mindfulness as a way of being for teachers was suggested in the literature from studies in the health and education sectors. These benefits include improved awareness in the moment to help meet individual student needs, reduction in stress, and possibly greater resilience. These notions led me to personally include mindfulness practices in my teaching in pre-service teacher education. I decided to do this research to more fully inform my teaching practice and my decision to include mindfulness in the curriculum. I also wanted to contribute to the growing literature on the effect of mindfulness as a tool for beginning teachers coping in the classroom.

For these reasons, I embarked on this pathway of doctoral research study considering this question as noted on page 5 in the Introduction:

What is the lived professional experience of beginning teachers who have been introduced to mindfulness during initial teacher education? The question had two key components:

 What effect does mindfulness have on the personal and professional resilience of these beginning teachers in their individual contexts? Would introducing mindfulness lead to greater ability to cope with the demands of the first years of teaching, and would it possibly lead to improved academic achievement and social relationships for students?

Chapter 4 Philosophical Underpinnings and the Research Design

- 4.1 Introduction
- 4.2 Ontological beliefs
- 4.3 Epistemological beliefs
- 4.4 Quantitative and qualitative research
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- 4.12 Quality in a Phenomenological Hermeneutic Mindfulness project
- 4.13 Summary thoughts on philosophy and methodology
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4.1 Introduction

According to Crotty (1998), when engaging in a research study, the researcher must first consider his or her beliefs about ways of being (ontology) and how those are linked to ways of knowing (epistemology); and from such an understanding, a pathway or methodology to find answers to questions can be designed.

In this chapter, I have discussed the literature supporting and leading to my ontological and epistemological beliefs which are based on the essence of mindfulness. The essential elements of mindfulness are: present-moment, non-judgemental awareness, and compassion for others (Nyanaponika, 1962; Kabat-Zinn, 2005; Kaiser Greenland, 2010; Gilbert, 2009). These elements are the foundation for both my ontological beliefs (my answers to the question: who am I as a 'being'), and my epistemological perspective (how I come to know), and also align with my working definition for mindfulness at the end of chapter 2. For me, this mindfulness perspective is connected to, and difficult to separate from, two other ways of knowing: phenomenology - focused observation of an object or lived experience to explain a phenomenon (Husserl, 1976/1985; Heidegger, 1953/1996; 1962/1985) and hermeneutics - the art of interpretation (Dilthey, 1900/1976; Dowling, 2004).

Drawing upon mindfulness, phenomenology and hermeneutics as ways of knowing or understanding new information, I explain and justify the methodology used for this study. Heidegger (1953/1996) described phenomenology as an interpretation of the lived experience of a 'being' (*Dasein*). The methodology for this study, considers the experiences of the 'beings' (*Dasein*); the beginning teachers.

Following the description of the methodological design, I outline the methods or tools and techniques used to gather data from the participants. For the data interpretation, I returned to mindfulness to assist in developing the phenomenological hermeneutic descriptions. I drew upon Zajonc's (2009) epistemology of love which is described and compared to my own reflective process. The notion of what constitutes 'quality' in this type of study is important to consider, so the chapter concludes with a discussion of aspects of 'quality' as it relates to the research design.

4.2 Ontological beliefs

My view is that by practicing mindfulness as a way of being, a way of living, individuals can more fully experience life and therefore make more conscious decisions and choices. By engaging in mindfulness in everyday life, each individual is able to bring the unconscious to consciousness by being in the present moment, noticing and experiencing through awareness of the senses, emotions and the mind/body (Nyanaponika, 1962; Kabat-Zinn, 2005; Nhât Hanh, 1987; 2007). With a clear understanding of thoughts, feelings and emotions, each individual can more calmly make decisions. Nhât Hanh, (1987; 2007) noted that this 'way of being' brings calmness and clarity to the mind that tempers each individual being's responses to the 'self' and to 'others'.

For me, the most difficult aspect of mindfulness as a way of 'being', is the concept of 'non-judgement'. When living mindfully, I try not to judge others and consider their interpretations when trying to develop my own conclusions. Gilbert (2009) described the concept of 'non-judgment' in mindfulness stressing that 'non-judgement' does not mean 'non-preference' or that anything and everything is acceptable. He added that an individual will continue to have biases, but recognises when those are influencing thoughts or perceptions without judging others' perceptions.

I (the self) see myself as a 'being', a physical body (a receptacle for body sensations) and sustained by breath; a heart body (a receptacle for emotions); a mind/body (a receptacle for thoughts); and a spiritual body that in this 'time' is connected to a particular physical, heart, mind and body. And, I believe that I am able to know and gather information through each of these receptacles. Thus my ontological beliefs merge in to my epistemological beliefs.

Dasein ('being') 'is' because in its essence, 'being' understands and interprets the world; understanding the world comes from interpreting what is dwelling in unconsciousness (implicit) to become explicit in consciousness (Heidegger, 1953/1996). When the experiences that are 'lived' are reflected upon, meditated upon and thought about, new knowledge is gained for the 'being', for Dasein. "Natural cognition begins with experience and remains within experience" (Husserl, 1913/1982, p. 1). Experience and pre-understandings assist Dasein in interpreting the essence of something (an experience or object). This epistemological perspective comes from the ontological belief that a 'being' exists, to experience, and from those experiences, pre-knowings are developed often hidden in unconsciousness to interpret something in the world as something. To be interpreted as something, the experience or object, in its essence, has a purpose. This process of studying lived experiences of Dasein to interpret the world is called 'phenomenology' (Heidegger, 1953/1996)

I believe that each implicit event or object is experienced in the breath, body, emotions and mind/body receptacles, and thus is interpreted by the 'being' to be brought into consciousness. The experience and the interpretation are impermanent and ever changing over time. The concept of impermanence is also an important aspect of mindfulness (Nyanaponika, 1962; Kabat-Zinn, 2005) as I (the 'being') realise that change is inevitable and will influence what I understand and how I come to understand. Understanding, knowledge and interpretation change through time (Heidegger, 1953/1996).

4.3 Epistemological beliefs

Mindfulness meditation or contemplative thinking is how I come to know and understand. This personal belief is reinforced in the literature. Mindfulness, the

westernised version of a Buddhist practice (Kabat-Zinn, 2005), suggests that I am the breath, the body sensations, the feelings, and the mind (thoughts). And it is through all of these that I come to know and am able to understand my experiences, and to accept what is happening in life in order to make daily decisions. Mindfulness brings into consciousness thoughts, feelings, and body sensations (Davis et al., 2000).

I believe that an object or experience can be observed and interpreted to describe its essence and to understand. Husserl (1913/1982) explained the epistemological perspective (way of knowing) for a phenomenological researcher as the perception of the essence of an object or experience, beyond simple matters of fact, through a clear, vivid process of intuition and perception. "The Eidos, *the pure essence*, can be exemplified for intuition in experiential data—in data of perception, memory and so forth" (Husserl, 1913/1982, p. 11).

Dasein ('being') ponders, thinks about, the essence of objects and experiences through answering specific questions to begin to understand the 'being' (him or herself) and his or her experiences through direct insight (Heidegger, 1953/1996). Direct insight is influenced by interaction with others and their perceptions of the experience and my own individual context including previous experiences and biases. I (the self) am only this 'self' in relation to the 'other' or other 'selves' (Heidegger, 1953/1996; 1923/1999). Therefore who I am and how I come to know is deeply connected to the other 'beings' in this world that I encounter. Each 'being in time' is an impermanent entity interacting with others and the world (Heidegger, 1953/1996) who influence my 'being'; who I am and what I know.

My understanding of each experience changes with every interaction. Husserl (1976/1985) concluded that if what an individual instantly perceived in his or her mind signified understanding then interpretation and meaning would be the same and remain consistent. By practicing mindfulness, when I encounter 'others' and the world, I am aware of body sensations, emotions and thoughts and can take the time to respond as needed rather than reacting to others based solely on my emotions to gain knowledge from our meeting and our conversation.

Phenomenology, as a way of knowing, "is the study of lived, human phenomena within the everyday social context in which the phenomena occur from the perspective of those who experience them" (Titchen & Hobson, 2005, p. 121). When using phenomenology, I believe that journals completed by the 'others' that I can read and interpret, alongside interviews of the 'others' are useful tools to collect information about their perspective of their individual lived experience. Therefore, an epistemological foundation for this study is that interviews and journal writings are a pathway to knowledge. In an interview, the interviewer and interviewee construct knowledge for that individual context (Kvale, & Brinkmann, 2009). Knowledge is gained through a back and forth discussion to describe the essence of the experience.

Mindfulness, as a way of knowing for me, joined with phenomenology in this qualitative study, so that I was able to gain new knowledge to describe the lived experiences of the beginning teachers who use mindfulness.

4.4 Quantitative and qualitative research

Crotty (1998) suggested that new knowledge for researchers in the quantitative paradigm comes from objective reporting and analysis of information, and that data is collected for this analysis by coming up with answers to questions based on a positivist approach. Alongside the quantitative, positivist approach, a qualitative way of knowing can bring a more descriptive, richer picture to complement the quantitative knowledge.

Heidegger (1975/1992) described this thinking process for qualitative inquiry as contemplative rather than the calculative thinking for quantitative study. "Calculative thinking computes: we can count on definite results" (Heidegger, 1975/1992, p. 46) rather than being open to possibilities.

With such a qualitative approach, if one becomes aware of sensations, emotions, thoughts and encounters, a richer, more encompassing description can be revealed. These descriptions of individual contexts, where knowledge is subjective, describes a relativist position based on the experiences of the 'being' (Olafson & Schraw, 2006). Qualitative inquiry presents opportunities to reflect on multiple realities, as opposed

to the one single reality of quantitative study (Creswell, 1994). I believe that such a relativist position gives a fuller and more detailed picture, enhancing our understanding of the research questions and the emerging insights.

In this study, I describe the individual context of the beginning teachers and report their perspectives to create a subjective relativist discussion. The research dwelt within an interpretive paradigm as the goal was to try to understand the participants' experiences and what the participants seem to describe as significant for them (Denzin & Lincoln, 1994; Grant & Giddings, 2002). "Qualitative research is based on interpretivist epistemology...social reality is seen as a set of meanings that are constructed by the individuals who participate in that reality" (Gall, Gall & Borg, 2005, p. 305). The theoretical foundation for this qualitative inquiry was constructionism; meaning is created from the lived experiences of research participants, and each person will construct meaning in their own way about the same phenomenon (Crotty, 1998).

From this study of the beginning teachers, I was able to develop or construct with them a description of their lived experiences using mindfulness in their first year of teaching. Denzin and Lincoln (1994) stated that this type of interpretive study rests in constructionism where 'truth' or knowledge comes from construction of ideas in transaction with the participants. The social constructions are unique for each group and shed light on the nature of the phenomenon in a particular context (Denzin & Lincoln, 1994). Gadamer (1975/1985) referred to this transaction in the interpretation process as a hermeneutic circle between the participants and the researcher.

In this study, I looked at the phenomenon of beginning teachers who have been introduced to mindfulness by engaging in interpretive discourse with the participants to understand how this knowledge had impacted on their first year of teaching. I focused on the comments and actions of the participants discussed in the interviews and compiled in their journals to look for key words, significant revelations or comparisons. Schwandt (1994) concluded that the result of a constructivist, interpretive study demonstrates "understanding of the complex world of lived experience from the point of view of those who live it" (p. 118).

In qualitative inquiry, the goal is to contribute a thorough, complete description of what might have previously not been considered. This description evolves from an interpretation co-constructed by the participants and the researcher. In writing about this phenomenological experience, the researcher interprets the insights of the participants using hermeneutics (van Manen, 2006; Grant & Giddings, 2002).

Heidegger (1959/1966) referred to the value of this type of contribution to knowledge: "If releasement toward thinking and openness to the mystery awaken within us, then we should arrive at a path that will lead to a new ground and foundation. In that ground the creativity which produces lasting works could strike roots" (pp. 56-57). From this interpretive, constructionist foundation, my phenomenological study evolved to consider the main research question: What is the lived professional experience of beginning teachers who have been introduced to mindfulness during initial teacher education?

4.5 Mindfulness in research

When mindfulness guides a way of knowing, the first step is 'bare attention', that is, concentrating on a specific object, experience, or emotion to understand and describe what I want to know about (Snelling, 1991; Nyanaponika, 1962; Zajonc, 2009; Nhât Hanh, 1987). 'Bare attention' in meditation is referred to as concentration (samatha), and then the next step, to go deeper to reveal insights, is (vipassana) (Nyanaponika, 1962; Zajonc, 2009; Nhât Hanh, 1987; Gunaratana, 1991; Thurman, 2006) as discussed in chapter 2. Zajonc (2009) combined these two contemplative practices into a way of knowing, or a way to conduct research, through what he termed an "epistemology of love". By engaging in mindful meditation with an intention to focus on a description of a phenomenon through concentrating on the experience and then shifting to a broader focus, I believed that insights could be gained to find answers to research questions. Thus, for me, meditation became a way of knowing and discovering information.

Mindfulness was used to cultivate new knowledge through mindful meditation by noticing my body sensations, emotions and thoughts, to discover answers to the research question (Nyanaponika, 1962; Zajonc, 2009; Nhât Hanh, 1987). Mindful

inquiry is a valuable tool for researchers to discover information (Bentz and Shapiro, 1998).

Zajonc's epistemology of love in contemplative inquiry as part of the methodology
Zajonc (2009) described a template for mindfulness or contemplative inquiry for the
researcher called an 'epistemology of love'. The researcher is immersed in a
meditative process focusing attention on the object, experience or 'other'. This
epistemology of love has nine components to serve as a guide when engaging in
contemplative inquiry:

- 1. respect for the 'other' and what he/she brings
- 2. gentleness
- 3. intimacy
- 4. participation
- 5. vulnerability so the meditator is open to the confusion, the jumble of emotions, feelings and thoughts
- 6. transformation
- 7. organ formation (creating new understanding; new ideas)
- 8. illumination, a specific light shining on the new organ in meditation to perceive it from all angles and
- 9. *new* insight (Zajonc, 2009, p. 187).

The reason Zajonc called for gentleness, intimacy and participation was to build relationship with the experience so there is more connection than just initial noticing of the phenomenon for all new ideas to emerge (Zajonc, 2009). These nine components provide a thorough guide for a contemplative inquiry process, resulting in transformation and change to generate insights and build new knowledge. Initially in steps 1-4, concentration is the form of meditation used to see the phenomenon clearly. This is followed by *insight* meditation to look beyond the 'what' to see what is behind the phenomenon or experience in order to discuss its impacts and broader implications (Zajonc, 2009). The epistemology of love outlined by Zajonc provided the template for the meditation process I used during the data interpretation.

4. 6 Phenomenology

This two phase contemplative practice is similar to the phenomenological way of knowing. Phenomenology is the study of lived experience, as lived by a 'being' (Heidegger, 1953/1996; 1975/1992; 1962/1985). Phenomenology, as a way of knowing, requires focused awareness so that the experience or object can be described in detail (Husserl, 1976/1985; Heidegger, 1975/1982; 1962/1985). In this process, understanding or knowledge is gained about each 'being's' perspective of the lived experience (Heidegger, 1953/1996; 1975/1992; 1923/1999).

I contend that Husserl's description of phenomenology encompasses the first part of a mindful meditation (concentration). During the first part of the *concentration* phase, the mindfulness practitioner, I believe, is able to develop an initial understanding of the object or experience without considering related emotions, feelings or experiences as Husserl has suggested in 'eidetic reduction'.

In the concentration phase, I first consider all details of a participant's experience to describe it before attempting to consider the broader implications of that experience and other's experiences or interpretations of that same or a similar experience in the insight phase described by Zajonc (2009) which is more reflective of Heidegger's notions of phenomenology (Heidegger, 1953/1996). Through this process, experiences dwelling in unconsciousness are brought to consciousness to describe the essence of the experience. Phenomenology recognises that experiences are lived without awareness, so individuals need to bring them to consciousness in order to describe a particular object, event or activity (Wrathall & Dreyfus, 2006). Merleau-Ponty (1945/1958) identified this process when an individual's description of the phenomenon is brought into consciousness: a way to gain "access to truth" (p. xxviii). With intentionality, a key feature of mindfulness, Merleau-Ponty (1945/1958) added that more of the 'objective' aspects of a phenomenon may be viewed. This perception, he described, begins with sensations in the mind/body, and from these sensations, the 'truth' is brought into consciousness through sensorial perceptions and then feelings.

The process described by Merleau-Ponty above aligns with the Gadamer's (1975/1985) concept of phenomenology. Gadamer (1975/1985) noted that as a phenomenological researcher proceeds through a study, it is important to remember that the first 'knowing' comes from recognition or noticing to bring the 'truth' to the surface. The idea is to notice each image of a 'lived' experience before consciousness can colour one's perception, which is not easy. Husserl (1976/1985) believed that this focused concentration to describe, in full detail, the phenomenon was the essence of phenomenology. In my opinion, this aligns with mindfulness practice, because the purpose of mindfulness is to be more aware of the experiences, feelings and thoughts in each moment through living more consciously. An individual can therefore act with intentionality and describe details of each activity with clarity.

Starting with Husserl

When observing objects or experiences, in a process similar to 'bare attention' in mindfulness, emotions, past experiences and biases are 'bracketed', not considered, and do not influence the detailed descriptions that are presented in the Husserlian view of phenomenology (Husserl, 1976/1985). This 'bracketing' of emotions and judgements assisted phenomenologists to focus on observing sensorial experiences in developing an accurate description (Husserl, 1976/1985). An object or experience is described in full detail following this direct observation, stepping back from ontological beliefs, emotions, pre-judgements, and prior experiences. This type of 'meta-awareness' may assist in seeing, through focused concentration, more of the phenomenon that is hidden from view (Brown et al., 2007) to describe the 'pure' essence.

The 'pure' essence is described without being tainted by personal experience or judgement. Husserl (1912/1980) clarified this point about uncovering 'pure' essence by "holding fast only to this initial perception and its legitimacy; let nothing of other experiential knowing restrict us, no physical, no natural science of any kind" (p. 28). Knowledge is revealed in the immediate instant intuitive perception of an object or experience, without any prejudice or filtering through other experiences.

This process, called "eidetic reduction", excludes previous experience and judgements to focus simply on "a science of essences" (Husserl, 1913/1982, p. xix-xx). In contrast

to Husserl, who believed that this reduction is perceived without sensory input (Husserl 1912/1980), I believe that this knowledge of an object comes through a mindful meditation on thoughts, feelings, and body sensations.

The essence described from the 'reduction' of the component parts of a phenomenon deconstruct the detail of experiences noted in consciousness so the researcher finds the 'truth' (Husserl, 1976/1985). This is very similar to the process described above in mindfulness in 'bare attention' meditation (concentration) before deeper reflection.' Truth' comes from direct observation (Dilthey, 1900/1976) not reflection (Polkinghorne, 1983). Heidegger (1975/1982) pointed out that Husserl saw the goal of phenomenology as a description of the essence of the actual experience and did not include causes or judgements but simply focused on 'what' the phenomenon was.

This viewing process to describe the essence of the object takes considerable time to provide a thorough, complete description. Time was needed for investigation, perception and thought through "systems of cognition based on insight by work that clarifies, makes distinct, and grounds ultimately, and to trace the concepts and statements back to conceptual essences, themselves apprehensible in intuition" (Husserl, 1912/1980, p. 83).

Polkinghorne (1983) concluded that Husserl viewed phenomenology as descriptive, looking at how the experience or object is lived from different angles even though it is the same experience. Aspects of the lived experience are woven together to form a picture to bring into consciousness in a purely objective manner (Polkinghorne, 1983). This is quite different to Heidegger's view of phenomenology. Heidegger saw phenomenology as being part of the conscious world, filled with beliefs and judgments based on previous experiences, to describe what it was like 'being' in the world (Heidegger, 1953/1996).

Continuing with Heidegger

Heidegger extended Husserl's concept of 'bare attention' description. Full descriptions and therefore true understanding is influenced by judgements and biases that may have come from past experiences and memories (Heidegger, 1953/1996; 1954/1968).

Merging new information with past experiences, memories and pre-knowings adds greater depth to the description and helps to provide insights into the phenomenon itself as well as its relationship to 'others' (Heidegger, 1953/1996).

"The prejudices of the individual, far more than the judgements, constitute the historical reality of his being" (Gadamer, 1975/1985, p. 261). Therefore, when engaged in phenomenological study, in Heidegger's or Gadamer's view, it is impossible to remove our prejudices from our interpretation. Habermas (1970/1985) added that interpretation is based on biases but that those biases and new information create new interpretation. Language is used to form ideas which differs from the one right answer of positivism and is therefore subjective rather than objective knowledge (Habermas, 1970/1985).

For me, this aspect of phenomenology relates directly to the aspects of *insight* in mindful meditation. In mindfulness, insight is gained after biases and judgements are acknowledged and set aside to bring a clear picture (Zajonc, 2009; Nyanaponika, 1962), whereas in Heideggerian phenomenology, the biases and judgements are considered to be an important aspect of the understanding of the full, clear picture as a way of knowing (Heidegger, 1975/1992; 1954/1968). This is the essence of the difference between mindfulness and phenomenology. Further, Heidegger (1954/1968) maintained that mindful thinking was an integral part of the phenomenological process, demonstrating another link between the two perspectives.

The phenomenon is also considered as it relates to the concept of 'time', not simply as time passing, but as in the evolution of time as a continuum which, in itself, brings change (Heidegger, 1953/1996). This continuum of time refers to *Dasein's* awareness of its own historical nature from birth to death during which the experiences that influence perceptions occur. Through time, these perceptions change and therefore understanding evolves and changes (1953/1996). This concept of 'time' is extended to the process of reflection or thinking in phenomenology to interpret an object or experience. Spans of time, in the present-time continuum, are needed to think about or reflect upon these experiences as *a 'being' becomes* aware of past experiences

(from birth to this present moment) and biases. These past experiences are integrated with new perceptions to form new knowledge about the phenomenon.

The 'space' to experience the phenomenon is also important for new understanding to emerge; in order to integrate past, present and future (Heidegger, 1975/1992). 'Space' is not only referring to physical space, but also to creating that 'space' in the mind that is open to deeper thoughts to bring out the new insights desired in a phenomenological interpretation.

Heidegger (1953/1996) further maintained that this contemplative process was an extension of philosophy so that by 'thinking', *Dasein* ('beings') could understand more about themselves, who they are, and what they know. Deconstruction was the key to a Husserlian observation whereas Heidegger (1975/1982) looked at construction of the phenomenon putting all the pieces together. Heidegger (1975/1982; 1962/1985) suggested a 'construction' of ideas in phenomenology through the comments made by each individual, over a period of time, about their understanding of the object or experience, guides the researcher in revealing that person's truth.

The critical factor is a focus on the interpretation of everyday being in the world (Heidegger, 1975/1982; 1962/1985). In phenomenology, the essence of the phenomenon is revealed through focus on participants' everyday lives (Heidegger, 1953/1996; Wrathall & Dreyfus, 2006; Inwood, 1997). 'Truth' and understanding comes from our experiences with the world; the nature of being human means that the 'being' interprets its experiences (Dilthey, 1900/1976).

Heidegger (1975/1982) cautioned researchers using phenomenology to first notice what the 'being' is and the way the 'being' is in a particular moment. Then, being curious about the differences in each 'being' and their relationship to the phenomenon will reveal deeper insights. Heidegger might phrase this observation as: how the 'being' is 'being with' the phenomenon.

To connect Heidegger's concepts of 'being' and phenomenology to this study: 'being' is the beginning teachers experiencing mindfulness over time, influenced by their

experiences from birth until this moment. The experience occurs in a particular space, and from that total experience, the 'being' (the participants and I) are able to express not only 'what' they experienced but 'how' it impacted on them. The beginning teachers and I, open to new ideas, might also expand a 'space' in our minds and thoughts to notice other insights that may have broader implications for the phenomenon of mindfulness for beginning teachers.

Gadamer adds the final piece

A further aspect of the phenomenological way of knowing has been discussed by Gadamer. The way of knowing is influenced by the 'play' between the interpretation, the interpreter and the individual providing the information (Gadamer, 1960/1993; 1962a/1976; 1975/1985). It is also the play between discovery and what is hidden in the text so that the interpreter's attitude is one that seeks agreement between the 'self' and the text (Gadamer, 1962a/1976). As a result of the interplay between the text, the interpreter and the participant, the final description is pieced together (Gadamer, 1966/1976, 1975/1985; Dilthey, 1900/1976; Dowling, 2004). This means that the 'other' (both the text and the participant) have a significant influence on the phenomenological process of knowing to reach the final answer, description or interpretation.

4. 7 Hermeneutics

The aspect of 'play' in the process of knowing leads to the role of interpretation in reaching for an answer (Gadamer, 1960/1993) which was an integral part of my study. The role of the 'other' (subject or participant) and their perceptions is an important part of the hermeneutic process of 'play'. Hermeneutics is the art of interpretation to gain insights about the information (Dilthey, 1900/1976; Dowling, 2004). Interpretation of data is a way of knowing and learning new information. Knowledge is derived in a hermeneutic interpretation in a circular fashion between the written text and the reader and the dialogue between two 'beings' (Gadamer, 1960/1993). In my study, the process of hermeneutics was used to extract knowledge from the interviewe transcripts and journals and the researcher and the interplay between the interviewer and the interviewee.

Gadamer (1962a/1976; 1975/1985; 1960/1993) discussed the concept of 'play' in phenomenological study as a hermeneutic circle in which the data collection and interpretation is read, re-read, written and re-written so that the researcher continually engages with the content of the data. In addition the participants review the data collected and interpretations to complete the circle (Gadamer, 1975/1985). This includes an understanding of the other's dialogue, which is influenced and changed by the power of rules of interaction between individuals and their relationships (Gadamer, 1960/1993). Dowling (2004) confirmed that the description comes from connecting to the consciousness of others including their beliefs and values.

Gadamer (1962b/1976) stressed the interactive nature of the hermeneutic circle in bringing forth an interpretation of the experience and understanding of each other through synthesis of data and reflection, which takes time. The interplay of the hermeneutic circle is totally subjective as it is not possible for the participants or the one completing the interpretation to be objective (Gadamer, 1966/1976; 1967/1976). Furthermore, the meaning, derived from these experiences is shaped during reflection, and is coloured by an individual's values and beliefs which, therefore, affects the interpretation (Gadamer, 1960/1993). In this study, the interaction between the participants, myself, and the text from journals and interviews constituted the 'play' which led to an understanding of their lived experiences.

A significant aspect of hermeneutics is that the art of interpretation goes beyond what is seen on first perception but goes deeper into the context of the individual or other factors related to the object being described, to paint a more detailed picture (Heidegger, 1975/1992; 1953/1996; Dilthey, 1900/1976; Dowling, 2004). In my study, this meant that my first initial thoughts were re-perceived several times after discussions with the participants and after 'sitting with' the data and that it was important to have a clear understanding of each participant's individual context. For me, phenomenology, as a way of knowing, aligns with Heidegger's interpretation that it focuses on the 'what' and hermeneutics focuses on 'why' (Heidegger, 1975/1992). Phenomenology and hermeneutics work hand in hand in helping the researcher to know and to describe an experience, object or feeling fully.

Hermeneutics was originally used as a way of interpreting written texts (books), in particular scripture, and emphasised the importance that the final interpretation demonstrate clear links to the original sources and text: being "understood by reference to whatever it is part of" (Dilthey, 1900/1976, p. 221). The purpose of hermeneutics is to create new learning that is of value to mankind and aligns with what we already know (Dilthey, 1900/1976).

Hermeneutic interpretation offers the opportunity to conceptualise in thoughts, and then words, the essence of the phenomenon. Heidegger (1975/1982) highlighted the value of words including poetry and artistic interpretation to conceptualise thoughts. Poetic description can bring a more vivid picture to the mind than a written description and is often used in phenomenological studies to encapsulate the ideas being discussed. And that is why poetry appears throughout this thesis. "To understand a text is to come to understand oneself in a kind of dialogue...a text yields understanding only when what is said in the text begins to find expression in the interpreter's own language" (Gadamer, 1962a/1976, p. 57). This is another reason to use poetry as a way to express understanding as it comes from the interpreter's own language. Only when the interpreter (I) can voice in my own language am I able to see the key parts, and relationships within a text or experiences that are the basis of the description.

Polkinghorne (1983) noted that phenomenology describes the components of an experience, the organisation of those components and the relationships of each, whereas hermeneutics explores more deeply the effects and significance of the experiences for individuals, groups and society. The hermeneutic aspect helps provide knowledge that can be reflected upon by the researcher and others when considering its significance. This deeper reflection occurred during the *insight* meditation in my research process when a 'space' was opened up in the mind to allow new ideas to emerge.

Hermeneutic understanding presents more than a distillation of facts (Habermas, 1970/1985). Hermeneutics is not about one 'truth' but rather the individual's truth and understanding influenced by their context (Heywood, & Stronach, 2005).

Hermeneutics, as a way of knowing, provides an opportunity to blend information from a number of different sources to arrive at an interpretation of the information to provide new knowledge and understanding of an object or event as experienced by the individual participants. Bruner (1991) added the idea that hermeneutics requires the researcher to remember that their own and the participant's social and cultural backgrounds influence what is shared and how it is interpreted. This complements the phenomenological approach outlined by Heidegger and Gadamer.

Hermeneutics, the art of interpretation, helps to explain in words what is being described in a phenomenological inquiry, in contrast to positivism which relies solely on observation and quantifiable test results to arrive at conclusions to report to the world (Guba & Lincoln, 1994). Hermeneutic interpretation provides a pathway to knowledge when it is difficult to fully understand what is revealed from an initial description, so that a moment in a person's life can be fully expressed and valued (Chladenius, 1749/1985; Mueller-Vollmer, 1985). Hermeneutics provided a vehicle to understand the deeper implications of the lived experiences of the participants in this study.

4. 8 Methodology: Mindfulness, phenomenology and hermeneutics working together

In the previous section, I have discussed the concepts of mindfulness, phenomenology and hermeneutics. By combining these three ways of knowing as suggested by Bentz and Shapiro (1998) I was able to develop a methodology to describe and interpret the lived experiences of the beginning teachers in this study.

With the intention of bringing what is noticed through 'bare attention' into consciousness, both phenomenology and mindfulness are ways of approaching and reflecting on an event or object to describe its essence. In mindfulness, non-judgement is practiced so emotions and previous experiences are noted but regulated. In completing the research, I found this difficult to do so judgement and previous experiences have influenced my interpretation. Husserl would adopt the 'mindfulness' approach in phenomenology and 'bracket' emotions, judgements, and previous experiences, but others including Heidegger, believed that the researcher would

consider these during interpretation. Without connecting to past experiences, completely understanding a phenomenon or object in a particular context is very difficult (Heidegger, 1975/1992; 1962/1985). Hermeneutics complements mindfulness and phenomenology in the research process to assist with interpretation in order to derive new knowledge.

In this study, knowledge about the phenomenon of beginning teachers using mindfulness was gained from careful observation, which included individuals' descriptions of their perceptions of the phenomenon. This observation was complemented by the two-phase mindful meditation process which mirrors the phenomenological perspectives of Husserl ('bare attention' and *concentration*) and Heidegger (*insight*) described earlier. My position is that in the first part of the interpretation I was able to 'bracket' pre-knowings, but a more vivid description emerged in the second phase of the interpretation (*insight*) after I considered my own experiences when interpreting those of the participants.

Cerbone (2008) reviewed the different interpretations of hermeneutic phenomenology, stating that Husserl emphasised the 'what' of the experience and Heidegger the 'how' of the experience. It is the intentionality of mixing these two things that drove the methodology chosen for this study: the 'what' being the beginning teachers' experiences with mindfulness, and the 'how' being the impact on their professional experiences, accompanied by insights into any initially unforeseen broader implications or connections to other phenomenon.

I chose this methodological approach to help describe something (a being) and how it works. My analysis of the participants' experiences in this study provides an ontological description of mindfulness for a teacher by understanding, through a phenomenological description, what 'being' is for these participants. 'Being' in this case relates to what their lived experiences are, after introduction to mindfulness.

Revelations from the participants were then interpreted to create new knowledge. When using phenomenology as a methodology, Heidegger (1975/1982) said that it was important to notice what the 'being' is (beginning teachers using mindfulness) and

the way the being is in a particular moment (the impact on their professional lived experience). Then, the next step is to notice the differences in each being and their relationship to the phenomenon because in that difference, lays the 'truth' (Heidegger, 1975/1982).

I experienced Gadamer's 'play' in this study, as part of the interpretation process, when I engaged in conversation with the participants about their actions and thoughts, asking them why they thought they felt the way they did and what their conclusions were, as well as discussing my own conclusions from what they had been telling me.

In the methodological design of this study, I considered how my interpretations made here would add to knowledge of the beginning teacher's first year even though others might have different lived experiences or have made different interpretations. Kögler (1996/1992) substantiated the importance of not being constrained by a desire for objectivity as each person interprets in a different way; he noted that "understanding involves individualising rather than normalising, interpreting rather than objectifying, pluralising rather than encompassing" (p. 109).

Interpretation comes from a point of view that is grounded in working out possibilities that come from understanding, not just collecting information about an experience (Heidegger, 1962/1985). From this we develop an 'assertion' which is "a point out which gives something a definition, character and which communicates" (Heidegger 1962/1985, p. 231). This communication is the description of the object or event, in this case, the value of mindfulness for a group of beginning teachers derived from a phenomenological, mindful hermeneutic interpretation.

I chose to add hermeneutics to the methodology because it offers the opportunity to interpret the lived experiences of these beginning teachers, and to reach insights about the future potential of mindfulness for teachers and opens the possibilities to any other unforeseen conclusions and links to other aspects of teaching.

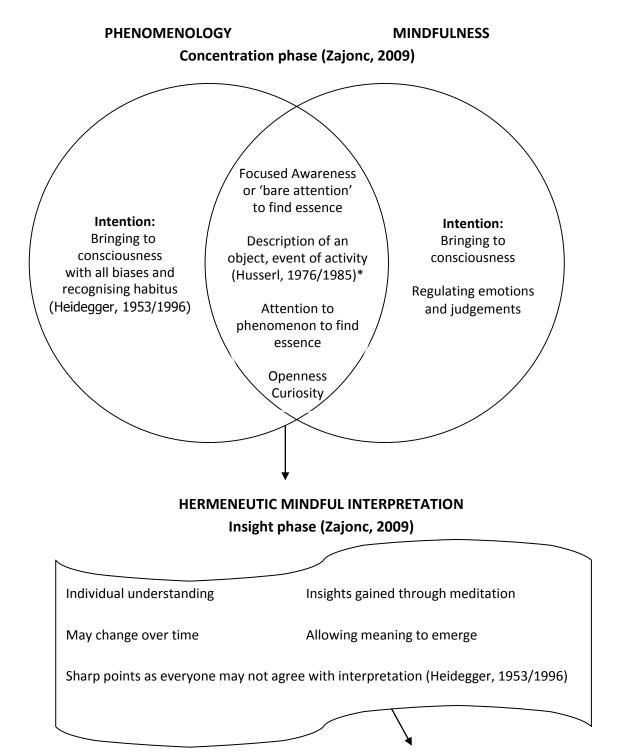
Hermeneutics moves beyond a description of the action, or lived experience, to

understanding the meaning of those actions and the impacts of those actions (Dilthey, 1900/1976).

My model of the combination of phenomenology, mindfulness and hermeneutics interpretation as a part of methodology is depicted in **Figure 1 on the next page**. This figure illustrates the interrelationship between mindfulness, phenomenology and hermeneutics as a methodological process, to focus attention, to describe a phenomenon in order to arrive at new information to make a contribution to knowledge. Habitus, in **Figure 1**, refers to each individual's background, culture, experiences and biases (Bourdieu, & Wacquant, 1992).

Figure 1

Phenomenology, Mindfulness, and Hermeneutic Interpretation as Methodology



Findings and Contribution to Knowledge

^{*}Husserl did not use the term 'mindfulness'

The mindfulness circle shows the first step of the interpretation process which is supplemented by the phenomenological circle to bring a focused description in the *concentration* phase (Zajonc, 2009). Then, with hermeneutic mindful interpretation, new insights were illuminated in consciousness to bring greater depth to the description and consider broader implications in the *insight* phase Zajonc, 2009).

To position myself in research, I believe that mindfulness, phenomenology and hermeneutics are each an epistemological perspective, a way of knowing. They were combined in a methodological process that allowed me as the researcher to gain new information, through a new way of knowing. The many links between mindfulness, phenomenology and hermeneutics suggest that these 'three ways of knowing' work together well to create a new way of knowing, a new epistemology (Bentz & Shapiro, 1998). I believe that qualitative research from the interpretive paradigm is driven by the passion of the researcher to produce new knowledge making a contribution to research.

A link, between these three epistemologies, is made through love and compassion, as part of mindful meditation for the research and for the 'beings' or 'others' involved in the research (Kabat-Zinn, 2005; Zajonc, 2009). By reporting the 'truth' from all of the participants, new information is added to a collection of ideas and conclusions about the phenomenon of mindfulness and its place in initial teacher education, and support programmes for beginning teachers.

In phenomenological study, the researcher can assume one of two different roles: as simply an outsider viewing the phenomenon or as an additional practitioner engaged in the phenomenon. This illustrates a further difference between Husserl's and Heidegger's perspectives of phenomenology. Husserl advocated direct focus on the phenomenon: "looking at the phenomenon as it presents itself in the consciousness of the people who live it. The researcher is on the outside, looking in" (Titchen and Hobson, 2005, p. 121). Heidegger's approach, on the other hand, was indirect and included the living of the phenomenon by the researcher. The researcher is connected and involved and shares his or her stories as well (Titchen & Hobson, 2005; Heidegger,

1975/1982). This provided a distinction between chapter 6 (the Husserlian view of interpretation) and chapter 7 (the Heideggerian view). I have included my own experiences and interpretations of the phenomenon in the introduction and after describing the participants' experiences in chapter 7.

In conclusion, I chose this combination of phenomenology, hermeneutics and mindfulness to provide opportunities for participants to share their perspectives, and for me to combine them with my own perceptions to create new knowledge. This combination of theoretical perspectives in research has been undertaken previously; specific examples were outlined in chapter 3 and include: Stew's (2011) phenomenological study of mindfulness to improve clinical practice; Bentz and Shapiro (1998) who used phenomenology, hermeneutics and mindfulness in a number of studies, and Kozik-Rosabal (2001) who integrated phenomenology and interviews as part of a study for supporting student teachers' development to improve their practice.

In the next section, I have discussed the data collection tools used to record the information for the lived experiences of the participants for this study incorporating mindfulness, phenomenology and hermeneutics.

4. 9 Data collection

Reflective journals and interviews were the tools used to capture the data of their descriptions of their 'lived experiences' using mindfulness.

Journals

Reflection is an important tool for teachers to gain knowledge about themselves and their practice (Marsh, 2008; O'Connor & Diggins, 2002). Smyth (1989) supported the use of reflective journals so that teachers could develop a critical eye to build self-awareness and self efficacy. Journals provide participants with an opportunity to describe their experiences, which can later be reviewed and interpreted by the researcher and the participants themselves.

In addition, journal entries were chosen as van Manen (1990) suggested, so that participants could describe their experiences in written form, exploring feelings,

thoughts and sounds without trying to use flowery language. These entries provided a starting point for understanding the beginning teachers' lived experiences and allowed them to share personal observations and perceptions.

Participants had been introduced to reflective journals as part of their initial teacher education. During their courses, students reflected on what they learned, lessons taught and specific events during their practica. Smyth's model of reflection was used as a template, encouraging active reflection to build new knowledge by questioning beliefs (Smyth, 1989). This model outlined a process for teachers and student teachers to reflect upon questions, thinking beyond descriptions, following very specific steps:

- a. describing What do I do? (What happened?)
- b. informing What does this mean?
- c. confronting How did I come to be like this? (How is this supported by my knowledge and beliefs---ontology and epistemology?) and
- d. reconstructing How might I do this differently?

 (Smyth, 1989, pp. 5-6).

Having completed reflective journals in their initial teacher education, participants were comfortable with this process. Reflective journals were chosen for the reasons discussed here and to give participants the opportunity to begin to deconstruct their experiences.

Interviews

Heidegger (1954/1968) highlighted the importance of questioning to bring the phenomenon to view as an accompaniment to reflective, contemplative thinking. This led to my decision to use interviews to capture the participants' experiences and thoughts. Interviews are an opportunity for participants to elaborate in detail on their perceived experiences in dialogue with the researcher, becoming "an inter-change of views between two persons conversing about a theme of mutual interest" (Kvale & Brinkmann, 2009, p. 2). Bleakley (2005) noted that interviews, rather than being just a data collection device, can be used to co-construct knowledge with the participant and the researcher, which assists in making sense of the data. When conducting interviews, it was important to remember that the interviewer's role is to listen and

only intervene to ensure participants addressed areas needing clarification or elaboration (Tolich & Davidson, 2003b).

Interviews can also be considered a mindfulness exercise for the interviewer who follows the principles of focused attention in the moment, being open to new ideas and perspectives to develop new learning and insights. Kvale and Brinkmann (2009) refer to this mindful experience as approaching the interview with "deliberate naiveté" (p. 30) to access information to describe the lived experiences of participants.

An interview is a valuable tool for uncovering aspects of the life-world of individuals "in order to interpret the meaning of the described phenomena" (Kvale & Brinkmann, 2009, p. 3). In this study, I used interviews as a way to obtain a detailed insight of mindfulness and its effect for each individual. From interviews, I believed it would be possible to notice the changes that participants were often not able to identify for themselves in their journals. The description emanates from what is in the interviewee's consciousness but may also reveal what is hidden from view in their unconscious (Kvale & Brinkmann, 2009). For this reason, interviews suit a phenomenological study where the goal is to describe an experience from both conscious and unconscious knowing.

Opie (2003) discussed the importance of questions as prompts so that comments came from the participant as a true report of their individual perspective. Although there were pre-determined questions for the interviews, each interview took its own direction, and I trusted what it 'was' so that it revealed what needed to be said at that time with that person (Smythe, Ironside, Sims, Swenson, & Spence, 2008). Kvale and Brinkmann (2009) confirmed the importance of allowing the interview to take its own direction as the interview is the participant's story. I used semi-structured interviewing to provide opportunities to look closely at the specific phenomenon, and worked with small numbers and/or cases to allow for participant involvement, as suggested by Tolich & Davidson (2003b). Semi-structured interviews provide opportunities for spontaneous descriptions of the lived experience (Kvale & Brinkmann).

For this study, I have concluded that the journals and interview transcripts along with the teachers' experiences themselves became the 'text' to be interpreted hermeneutically. As mentioned earlier, Dilthey (1900/1976) stated that hermeneutics is used to interpret 'text'; but 'text' can be interpreted broadly. Gordon (1988) pointed out that teachers' experiences can be regarded as 'text', and therefore, in this broader sense, I viewed the beginning teachers' experiences as 'text' to be interpreted hermeneutically.

4.10 Data interpretation: Distilling ideas

In order to unravel meaning from the data, I looked at the whole journal and interview transcript not phrases or sentences. I followed the advice of Giddings and Wood (2001), who stated that a coding software programme is not desirable when using a hermeneutic phenomenological approach. Phenomenology is as much about the process as it is about the meanings that are revealed, so it is important to let the data speak to the researcher, and to feel comfortable just absorbing and dwelling with the data (Smythe et al., 2008).

The first look at the data was designed to adopt Husserl's idea of describing the phenomenon, or the 'what', by distilling information about the teachers' actual engagement with mindfulness. In this phase, the focus was on a strict description of the lived experience of what mindfulness practices these beginning teachers used, when and for what purpose without looking at broader implications. Zajonc (2009) referred to this as the concentration phase in his epistemology of love with respect for the 'other' and what he/she brings, a gentleness in approaching the person and the meditation process, intimacy with the participants and the object of the meditation, and complete participation in the process.

One aspect of my thinking process involved reviewing the journals and interviews to see what was unique or different, and to look at the variance between participants which follows suggestions proposed by van Manen (2002). When new information was constructed through the interpretation, knowledge of the phenomenon was gained about its practice in individual's lives (van Manen, 1990). New knowledge, within a

hermeneutic interpretation, comes when sitting with the data and something emerges from the voice of the researcher and the voices of the participants (Heywood, & Stronach, 2005).

Thus, it is not just a description but a thinking process so the researcher (I) must "hear" what is underneath and this can only happen through mindful reflection (Giddings & Wood, 2001).

Bentz and Shapiro (1998) suggested that by using phenomenology, hermeneutics and mindfulness during this process of data interpretation, one allows each participant's story to reveal the emerging themes and the essence of this lived professional experience. On the other hand, each participant's story is unique because not all participants will perceive events in the same way. For this reason, it is important to let the data speak for itself as these differences provide 'rich data' and credibility (Gall, Gall & Borg, 2005).

Attention was focused intentionally and purposefully, with curiosity, openness and acceptance, while recognizing the biases that were present when interpreting the data. Bentz and Shapiro (1998) argued that this greatly enhances the ability to observe people and phenomenon. When reviewing data or trying to provide interpretation of the phenomenology of a lived experience from an individual's point of view, these aspects of mindfulness helped promote clarity and brought meaning to the surface.

I attempted to be 'non-judgmental' when interpreting, and was generally successful with this during the *concentration* phase leading to the distillation of their experiences. But, I am fully aware that as Gadamer (1975/1985) noted, this was not completely possible and I fully integrated my own biases and experiences when moving to the next phase of *insight* to synthesise ideas to see 'how' mindfulness had impacted on the beginning teachers' lives.

4.11 Data interpretation: synthesising ideas

Following the distillation process through the *concentration* phase, the process of thinking led to a deeper look, to synthesise ideas about 'how' this impacted on their

lived experience and possible broader implications in a more Heideggerian approach. I reflected upon my own experiences and pre-understanding in this phase of the data interpretation.

This reflective process was accompanied by contemplation through meditation and other mindfulness exercises to assist the thinking process. A contemplative inquiry can produce data equal to what we observe and learn through our physical senses (Zajonc, 2009). Zajonc (2009) stressed the importance of focusing on relationships, metamorphosis (change for participants) and active engagement in the thinking process. This happened when synthesising ideas in an insight meditation, open to new ideas and change (Zajonc, 2009). During the synthesis phase, the researcher (meditator) is vulnerable because there is often confusion and uncertainty about where the interpretation is heading. Heidegger suggested opening a 'space' in the mind for this wider view; Zajonc (2009) refers to this 'space' as 'going deeper' in meditation to reveal new insights.

Smythe et al. (2008) noted that this part of the inquiry process requires thinking and questioning without expecting the one and only 'truth'. Heidegger (1954/1968) commented on the importance of this contemplative process of total immersion in thinking about the data and engaging constantly in the thinking, questioning connection. This thinking, Heidegger (1954/1968) stated, reveals the fundamental nature and the key aspects of the phenomenon in question; uncovering what is hidden from view, if we are willing to listen.

Meditation as part of interpretation

The hermeneutic phenomenological process requires time to simply ponder, to meditate and often provides the best results when the mind is at rest; so that the researcher is not overwhelmed with the data and the essence of the lived experience is revealed (Smythe, 2004). Using mindfulness meditation as a tool for discovering meaning was a key aspect of this research study. Various forms of meditation were used to 'sit with' the data to arrive at data interpretation. Meditation is a process of deep thinking (Smythe, 2004) that occurs when "we can free ourselves from the noise that tells us all that is already known as information then we may find ourselves

amidst the clearing where thoughts are free to play and roam" (Smythe et al., 2008, p. 1391). Mindful awareness comes from observation in meditation during which emotions and judgements are accepted but suspended; this is a process that takes much time and practice (Kornfeld, 2011). This deep thinking and meditation can take many different forms including long walks (Smythe et al., 2008), running, sitting at the beach or other activities that shut off the mind chatter and "leave us free to think...one finds oneself thinking, questioning, wondering and somehow strangely understanding in a new way" (Smythe et al., 2008, p. 1391).

Merleau-Ponty (1945/1958) believed it was possible to 'perceive' before judgements and past experiences coloured that perception, but that this was extremely difficult and not the reality for most researchers in phenomenological research. Meditation assisted me in 'bracketing' emotions and experiences at least for the initial phase of the interpretation cycle. My meditation practice itself could therefore be perceived as either a possible limitation to this study or as advantageous.

4.12 Quality in a Phenomenological Hermeneutic Mindfulness project With qualitative research, Lincoln and Guba (1985) commented that reliability and validity are not keys to the quality in this type of inquiry, unlike in a quantitative study. Rather, building the reader's confidence in the study through trustworthiness is an important criterion (Lincoln & Guba, 1985).

I have used the concept of 'trustworthiness' (quality) presented by van Manen (1990). He suggested quality in a phenomenological study comes when the interpretation lines up with experiences we have had or might have had in the context of the culture of the research setting. Such resonance grabs the reader who might think that it all sounds very familiar or that he or she has had similar thoughts (Smythe et al., 2008). "Qualitative research does not seek to generalise to the whole population but to provide a precise (or valid) description of what people said or did in a particular research location" (Davidson & Tolich, 2003b, p. 34). I do not propose that the interpretations included in this thesis by the beginning teachers and me are generalisable to others.

Bogdan and Biklen (2007) would also concur that this study is not generalisable because participants disclosed their experiences in their individual contexts. Thus the analysis of the data becomes a comparison and contrasting of the participants' 'lived experiences' only to describe their unique experiences. At the same time, recurrent themes and ideas were gleaned and noted as possible commonalities for other beginning teachers in similar contexts. This resonance, I believe, leads to trustworthiness and is determined by the reader, and is the most appropriate quality criteria for this project.

I have also considered notions of quality for qualitative study proposed by Kockelmans (1973), Smythe et al. (2008) and Zajonc (2009). Familiarity with the phenomenon is crucial according to Kockelmans (1973), who proposed criteria for the quality of the hermeneutic description. He suggested that the interpretation needed to remain true to the phenomenon, make reasonable sense, and show evidence that parts of the phenomenon were considered as well as the whole, and then a return to the parts. Kockelmans (1973) also suggested that it is imperative that the meaning of the phenomenon in its present context is clear, that it is not simply reflecting something that happened in the past.

In reviewing Kockelman's' (1973) quality criteria, I am familiar with the phenomenon, and have considered parts of each participant's transcripts and journals. I have also tried to make sense of their experiences for reducing stress within their contexts, which may resonate for other beginning teachers.

In order to maintain the quality of the study, the researcher should demonstrate commitment to the research throughout the project (Smythe et al., 2008). This can be achieved through focused attention on the phenomenon in contemplation, a determination to gain deeper insights about the phenomenon, openness to new ideas that arise, and a general positive frame of mind (Zajonc, 2009). Zajonc (2009) noted that the final thesis should guide readers through the contemplative research experience that led to new knowledge.

I have carefully documented the research design and procedure in this thesis and continued my mindfulness practice throughout this study so retain familiarity with the topic and the participants, and continue to be committed to research to find ways to support beginning teachers.

Another measure of quality can be considered by reviewing the interview process and resulting transcripts. Kvale and Brinkmann (2009) confirmed the importance of transparency about the procedures related to a phenomenological study in the interview and interpretation phase. Quality criteria for an interview include: spontaneous relevant answers; short interview questions and long interview answers (Kvale & Brinkmann, 2009). An excerpt from an interview with each of the participants has been included in chapter 6 or 7 to illustrate these aspects of quality criteria.

The goal of a phenomenological study is "to provoke thinking towards the mystery of what is" (Smythe et al., 2008, p. 1391). The quality of the written descriptions presented, based on the interviews and journals, provokes the reader's thinking.

After 'sitting with' the data, thick interpretations were written. Denzin (2001) described thick interpretations as full detailed accounts which consider emotions and feelings, offer multiple meanings and multiple voices (the participants' and the researcher's) without abstract ideas, while acknowledging the participants' backgrounds. Thick interpretations take time and are possible when the researcher knows the participants and has experience of the phenomenon himself (Denzin, 2001). Thick interpretations were possible within this research as they can only be completed when there is an established relationship between the participants and the researcher which was the case in this study. Thick descriptions have been included in the description of participants and their experiences in chapter 5 and 6. Chapter 6 and 7 contain the thick interpretations which could only be completed after mindful meditation.

Thick descriptions and interpretations contribute to an understanding of each individual participant, yet remind us that each is unique. Rather than being generalisable, the understandings revealed are not intended to uncover 'the answer',

but rather to add to the body of knowledge about the research question (Carter, 1993). Denzin (2001) noted that *thick descriptions* help the reader feel they could experience the same thing. The final writing and interpretation of the participants' stories is a 'freeze frame" of a moment in time in the play of thinking (Smythe et al., 2008) of their professional experiences.

4.13 Summary thoughts on philosophy and methodology

Since the Modernist era, researchers have moved away from the scientific methods used by Rationalist thinkers (Glendinning, 2007), to rethink their own being and existence. From such recent perspectives, descriptions of phenomenon were presented without trying to come to a conclusion of the 'truth' as they would in a quantitative investigation.

For me, mindfulness used during the methodological process, may provide a way "of tapping into the full dimension of our humanity" (Kabat-Zinn, 2009, p. xi) to expand the "flow of awareness" (p. xxiii) providing a link from phenomenology to hermeneutic interpretation to form new understandings of the nature of being for beginning teachers. Mindfulness is the new aspect of the phenomenon as well as a contribution to the theoretical perspective for reviewing that phenomenon. In my research, beginning to understand the phenomenon came through my mindful awareness and my meditation on the data (the beginning teachers' experiences, journals and interviews) which were considered 'text' for hermeneutic interpretation.

I described both Husserl and Heidegger's perspectives of phenomenology. Husserl noted that phenomenology is the process of reducing something down to its bare essence while 'bracketing' emotions and previous experiences. Heidegger, on the other hand, considered 'bracketing' impossible and in fact, an individual could only interpret an experience through the lens of previous experiences, and knowledge over time, to produce a full, vivid account of the phenomenon. I have compared Husserl's perspective with the *concentration* phase and Heidegger's notions to the *insight* phase of a meditative inquiry process described by Zajonc.

Bentz and Shapiro (1998) discussed the use of mindfulness as a methodological tool in the research inquiry and Zajonc (2009) extended this by designing a template for the mindfulness meditation process for data analysis. Bringing together phenomenology, mindfulness and hermeneutics has allowed me as researcher to notice, or bring to attention and then ponder (meditate), to find out what and how a phenomenon is and its significance for 'beings' in line with what Heidegger (1923/1999) wrote. My data interpretation began as a description, but then using hermeneutics, I reached beyond the description to ask 'why' participants felt as they did, what the impacts were and what other implications could be derived that had not been initially uncovered.

With mindfulness, phenomenology and hermeneutics, past experiences from another 'time' are reviewed as 'time' (present-time) and 'space' is created to open up the mind to new ideas revealed by the data. From that deep reflection, the researcher can articulate his interpretation of the phenomenon to form new knowledge.

The insights gained from the hermeneutic and mindfulness meditation provide a foundation for understanding the value of mindfulness for beginning teachers and its role in the research process. This research could contribute to a growing body of knowledge of the important components of initial teacher education and mentoring programmes for beginning teachers.

In summary, the research unfolded in this way: the participants used mindfulness personally and professionally in the first year of teaching. From time to time they described their experiences in journals and interviews which were reflected and meditated upon as part of my hermeneutic interpretation process as the researcher. From this, commonalities and differences were observed and the information distilled down to ascertain how mindfulness was used, and then in deeper reflection, synthesising new ideas around broader implications of the phenomenon. The next chapter explains what actually happened (the pragmatics) in the implementation of this particular study, followed by the data interpretation and findings.

4.14 Phenomenology and mindfulness (poem)

Drifting

Wondering what is being revealed

Dreaming

Thinking about the answer and noting its absence

Running, walking, breathing

Building the ability to focus in the moment

Approaching an answer

Discovering new ideas and coming closer to knowing

Questioning what is 'truth'

Noticing what is happening in the moment without striving

for something else

Questioning again

Truly understanding-the more you learn the less you know

Chapter 5 How this mindfulness research process unfolded

- 5.1 Key aspects of the research project and how it started
- 5.2 The participants
- 5.3 Data gathering
- 5.4 'Sitting with' the data
- 5.5 Another look at addressing research quality criteria
- 5.6 Concluding remarks about what actually happened

5.1 Key aspects of the research process and how it started

This chapter contains a description and review of the research process as it evolved in the course of this study. Participants and their contexts are discussed along with the ways in which the data was collected. The role of mindfulness meditation during the data interpretation process is commented on. Finally, research issues are reviewed with a focus on the quality and trustworthiness of this qualitative study.

This study was designed to answer the question: What is the lived professional experience of beginning teachers who have been introduced to mindfulness during initial teacher education? The question had two key components:

- What effect does mindfulness have on the personal and professional resilience of these beginning teachers in their individual contexts?
- Would introducing mindfulness lead to greater ability to cope with the demands of the first years of teaching, and would it possibly lead to improved academic achievement and social relationships for students?

Using a hermeneutic phenomenological approach supported by mindfulness, the five beginning teachers were asked to reflect upon:

- their feelings and perceptions of their first six months in the classroom
- their awareness of the effects of their practice of mindfulness on their classroom environment, including interactions with students, delivery of classroom curricula, as well as their own personal lives, and their stress levels

 their well-being and its relationship to their lived professional experience.

Although all participants were beginning teachers who had been introduced to mindfulness during their initial teacher education, the contextual factors for each beginning teacher were unique.

5.2 The participants

As one of their lecturers in their first semester at university, I had introduced all of the 2009 graduates of the three-year Bachelor of Education, (Primary School Teaching) at Auckland University of Technology to mindfulness. These graduates had practiced mindfulness strategies in various classes, and had had the option to join lunchtime sessions to become more familiar with 'deliberate' mindfulness strategies, such as breath awareness, body scan, visualisations, sitting meditation, and to grow to understand and employ 'effortless' mindfulness in their own lived experiences.

Following the introduction to the mindfulness exercises in the first semester of their initial teacher education programme in 2007, regular practice opportunities were given in three papers: *Curriculum Study in the Arts, Mathematics II* and *Inclusive Education* in 2008. After an initial discussion of each technique, opportunities were given to try them within the safety of the lecture room. In this way, knowledge was offered in a mutually reciprocal, respectful way. During 2009, their final year of study, interested students met weekly to practice and debrief each other about the techniques.

After they had completed their degrees, I invited them to participate in my research.

How were participants recruited and selected?

Once the School of Education Exam Board had confirmed all graduands, and after approval from the University and the Ethics Committee, the Participant Information Sheets were sent by email and posted to all 2009 Bachelor of Education (Primary School Teaching) graduates by the Alumni Association.

The Participant Information Sheet outlined the parameters of the study, the requirements for participants, and an invitation to join the study. The invitation

provided details about a refresher workshop to practice previously introduced mindfulness strategies. The only other criterion for participation in the study was that the participants had to have secured a teaching position.

Five potential participants who had indicated interest in being a participant attended the refresher workshop in March 2010, conducted by a Mindfulness Counsellor, and at that stage, were under no obligation to participate in the study. The refresher workshop allowed participants to consolidate their knowledge of mindfulness, and to feel more comfortable choosing particular practices that might be used personally, professionally, and in their classrooms. The workshops were based on strategies explained by Kabat-Zinn (2005) and May (2006) and are explained in full detail in Appendix 1.

Three of those who attended this mindfulness retreat decided to sign consent forms. The other two, though interested, noted that they felt they could not participate fully, given all the requirements of their first year of teaching. Subsequently, two other graduates who had secured teaching positions volunteered to join the study and joined me in individual sessions to review the mindfulness techniques.

Details of the final five participants, with their pseudonyms, are included in Table 3 on page 118 to provide individual contexts. From this detailed information, it is important to note that Patricia is the only one of the five participants who taught in a low decile area; considered by many to be a more stressful situation. She was also the only participant who was not in a partnered relationship. Robert, the only male participant, had the longest personal history with meditation or mindfulness practices, which might have influenced his perspective. Juggling work and home commitments and activities outside work initially made it difficult for all participants to engage in regular mindfulness practice. A short introduction of each participant, as a *thick description* (Denzin, 2001), follows Table 3 and has been included to gain a greater understanding of each individual and their context. Some vignettes or specific examples of mindfulness practice are included. Many themes from these introductory narratives have been explored in chapters 6 and 7, the data interpretation.

All participants had a particular interest in personal development and were drawn to mindfulness practices. Two of the five participants had studied Montessori philosophy, and two of the participants had studied Steiner philosophy during the final year of their teacher education programme. As both Montessori and Steiner included contemplative ideas in their teachings, it is possible that these four participants were predisposed to volunteer for this study.

In addition to gaining knowledge from the participants, I aspired to give something back to them in a mutually respectful relationship by introducing them to mindfulness. Tuhiwai Smith (1991) supported this 'giving back' in a research project and advised that the *mana* (status; individual spiritual power or being) of all participants be protected. This is what I attempted to do in these mindfulness workshops and throughout the study. I believe that I was successful with this, and that each person's integrity was honoured and respected. Individuals felt safe to practice the techniques in ways that were comfortable and appropriate for them personally.

Table 3
Participants and their contexts

	Participant #1	Participant #2	Participant #3	Participant #4	Participant #5
Pseudonym	Robert	Patricia	Debbie	Laura	Valerie
Gender	Male	Female	Female	Female	Female
Age	25	35	22	31	24
Nationality	New Zealand Indian	New Zealand European	New Zealand European	New Zealander	New Zealand European
Country of Birth	South Africa	New Zealand	England	Zimbabwe	New Zealand
Specialty philosophy studied at university	Montessori	Steiner	Montessori	Pasifika pedagogy	Steiner
Class Level	Year 4 Ages 8-9	Pre-school Ages 3-4 Team teaching	Years 5-8 Ages 9-12	New entrants to Year 8 Ages 5-12	Years 1-8 Ages 6-13
School decile and location	Decile 10 Auckland Central	Low decile area of South Auckland; large Māori and Pasifika population	Decile 10 Auckland Central	All over Auckland	International School in Asia
Other school details	Large school with a large Asian population; 'traditional classroom setting'	New entrants Preparation programme funded by the Ministry of Education	Montessori Unit; mixed ethnicities largely New Zealand European; mixed age classroom	Relief teacher; did not have her own class	Classes taught in English; taught each class level for a specific time period
Interest in meditation	Prior personal meditation practice	Very interested in mindful- ness practice personally	Actively engages in personal development programmes	Enjoys quiet time when own children asleep	Yoga practitioner as well as meditator
Other pertinent information	Active soccer player and gardener	Studying Māori Ianguage and music	Strong advocate for Montessori education	Previously highly paid IT position; has three young children	Active in a variety of sports; advocate for Steiner education

Introducing Participant #1, Robert

Robert used a variety of mindfulness exercises including meditations he had learned from his parents. Robert meditated regularly before and during the study, and was therefore already mindful and in the moment. During the school holidays following the second term, though, he did not engage in meditation practice and found it difficult to return to the practices in the third term. With the return of the stresses of school, a 'need' to meditate presented itself so meditation became part of the routine again. Robert noticed after engaging in mindful practice, he was more aware of his surroundings as well as his communications with his students.

Beginning teachers often feel they have no time to focus on one thing at a time, but mindfulness helped Robert to do that. This evolved from noticing the fine details around him. Following exercise, he noted body sensations in his muscles and his lungs, as previously he had suffered from asthma. Noticing body sensations after exercise and in the body scan, and focussing on his food when he was chewing, Robert believed, improved his ability to notice the fine details when working with the children.

Throughout each day, the focus was first on his teaching, then the children and finally himself. Robert was continuously observing the children to find what worked best for them. When considering implementing mindfulness, Robert was continuously striving to find ways to relate mindfulness to key aspects of the curriculum. Mindfulness strategies were taught not simply to restore 'calm' to the classroom environment, but Robert found ways to relate mindfulness practice to the curriculum. For example, mindful walking and running was linked to Health and Physical education. Observation skills were explored in a science/technology unit on fabrics. Healthy eating during snack time was an opportunity to teach mindful eating. Students mindfully ate their fruit snacks and also considered where the fruit had come from, the varieties, and the different textures. Robert found this particularly useful as the children previously gobbled their food.

In the end, I believe that Robert, although always putting the children as his first focus, used the practices for himself as well and linked them with his previous contextual experiences with mindfulness and meditation through his family and spiritual beliefs.

Introducing Participant #2, Patricia

Patricia, in her first of year of teaching found that she was constantly thinking about the children (even dreaming about them) and not focussed on herself. As she came to this realisation, she began to become aware of the 'here and now' or noticing what was happening and then being totally conscious that she was aware. This made her more conscious of the children's needs.

Practicing mindfulness exercises herself helped Patricia to build her consciousness both personally and professionally (planning including more creative ideas, observing the children and working with the children). She often practiced the 'breath' focus and 'body scan' which gave her the ability to carry out chiropractic exercises that she had previously been unable to do.

Early in the study, Patricia realised that she was often unaware of what was beyond the immediate sphere of her consciousness or beyond the children she was specifically engaged with at a particular moment. She would be unaware of what was happening with the rest of the children in her class. She decided to use the moment by moment awareness of mindfulness to slow herself down to concentrate on one thing, whilst being totally aware of what else was happening around her. She learned to check with herself to make sure she was aware of the total environment in any given moment.

The other benefit that Patricia noted from engaging with the practices is that she was not getting worried as much or emotionally caught up in what was going on at a particular moment. At the end of the first year of teaching, she was still concerned about whether she noticed the little things and so planned to constantly check in with herself to make sure that she is being mindful.

Introducing Participant #3, Debbie

Debbie engaged in meditation of various kinds including body scan, mountain meditation, sitting meditation and simply focussing on what passed by particularly when sitting at the beach. She indicated how she used her senses for perception, and sometimes it was great to turn off particular senses to 'enjoy the ride' more. She particularly valued the opportunity for a 'morning refresh'; life was new each day. She could still feel the feelings, but she learned to accept them.

De-stressing, Debbie found, became her reason for meditating. And after a very stressful second term, to focus on the breath helped her reduce both the real and self-imposed stress. Debbie kept a blog of her first year of teaching. She found it interesting that both her students' journals and her blogs featured emotional release through noticing and reflecting on those emotions. This reflective process helped Debbie and her students to respond in a mindful way.

Introducing Participant #4, Laura

Being a mother of three, Laura had to specifically set aside a structured mindfulness practice time. She started each day early before her own children got out of bed with a morning meditation/quiet time in a little corner she set up for herself in her house to just 'breathe'.

As a relief teacher, Laura found the strategies valuable for coping with stress herself, and for using with the children as often there were no plans left by the teacher. Laura had been surprised by the low levels of stress she had been experiencing even though she did not know from day to day where she would be teaching or how the children would behave.

By being present and 'in the moment', Laura was able to have in-depth conversations with children to understand their individual needs and plan for them. In addition, being mindful helped her to be observant and notice children---how they were acting, feeling, and how much effort they were putting in to complete particular assignments. From these observations, it was easier to determine ways to adapt classroom programmes to meet the needs of children or which activities were appropriate for

each class. The exercises came in handy as a relief teacher as it appeared that they had a calming effect on the children. In fact, children were more mindful of themselves and others which helped the day run more smoothly. By being aware of their own behaviour, there were fewer classroom incidents.

One day, while at home by herself with the children, her son who had a high fever and convulsions, then stopped breathing. He was taken to hospital and everything turned out fine. Laura often recalled this incident which reminded her how vulnerable she felt. She used her mindfulness practices and meditation to help her return to the actual moment she was experiencing, rather than focussing on that past traumatic experience. Laura found that by engaging in these practices, she was able to focus better and reflect with more clarity at the end of the day. At the end of the day, Laura used the body scan to unwind.

Introducing Participant #5, Valerie

Valerie found that as a first year teacher, she sometimes felt on autopilot in the classroom, unconsciously reacting rather that responding to what was happening. On several occasions, she would get to the end of the day, and was not aware of what had happened, did not know what she was doing because she was not focused on the class, but on behaviour control. This was particularly true of the year one science class more than any other class. Boys in general, in this class, were not as respectful of women teachers as male teachers. One contextual factor that contributed to Valerie's stress was that she had many different classes, seeing each class only twice per week for forty minutes, allowing less time to observe children and build relationships. When Valerie took the time to observe the children, meditate on that information and then plan, she found she was relaxed knowing she was meeting individual needs. She also discovered that when she was ill, it was much harder to stay in the moment with the class as her mind drifted and her body tensed.

Mindful awareness, she noted, came naturally sometimes and other times, you really had to work at it. Mindfulness practices presented an opportunity to focus on body sensations, feelings, and thoughts to relieve stress and be more in the moment when she 'made the time'. By the mid-point of the study, Valerie was starting most

mornings with yoga and ending the day with the body scan. She also put up a poster on the back wall in her classroom to remind her to re-focus in the moment.

5.3 Data gathering

The initial data gathering (two sets of journals and two interviews) took place during a six month period in each participant's first year of teaching. To collect data for this contemplative inquiry, the participants engaged in mindfulness practice personally and kept fortnightly journals of their lived experiences during the first year of teaching. After five reflections (i.e. ten weeks), I interviewed each participant to review, in detail, the information they had written in their journals and to clarify any queries they had.

Unless there are expected changes over a period of time, Giddings & Wood (2001) indicated that one interview is sufficient to gather the needed information. However, I expected change during and after the first year of teaching, so I conducted the first interview after ten weeks of teaching, a subsequent one after twenty weeks of teaching, and a final interview following the first few months of the second year of teaching. Table 4 on the next page shows timelines, noting when these key tasks were completed by each participant.

The journals and interviews were a tool to understand their perceptions about the impact of mindfulness on their first year of teaching; their individual 'truths'. 'Truth', in a hermeneutic phenomenological inquiry comes when the researcher is open to the perceptions of the 'other' (participants) and their expression of 'truth' about their experiences (Heidegger, 1971/2001); in this case the journals and interview transcripts. Then Heidegger (1971/2001) continued, the researcher steps back to question those revelations to create new understanding.

Table 4
Timeline for task completion for data collection by participant

Name	Attended Workshop	First set of five journal entries	Inter- view #1	Second set of five journal entries	Interview #2	Interview # 3 (follow-up): 2nd year of teaching
Robert	13 May- individual	April – June 2010	June 2010	July – September 2010	October 2010	April 2011
Patricia	19 May- individual	April – June 2010	June 2010	July – September 2010	October 2010	April 2011
Debbie	9 April- group	April – June 2010	July 2010	July – September 2010	November 2010	April 2011
Laura	9 April- group	April – June 2010	June 2010	February – April 2011	April 2011	June 2011
Valerie	9 April- group	November 2010 – January 2011	January 2011	February – August 2011	April 2011	August 2011

Journals

Following the mindfulness workshop or individual review session, each participant reflected fortnightly, during their first year of teaching, on their individual reality (experience) of teaching. These journal entries provided rich insights into the thoughts, feelings and perceptions of each participant. I noted their perceptions of the effects of mindfulness practices on their personal and professional development from the data collected from these fortnightly journals. Although completing reflective journals was difficult for participants, given all of their other demands, personal and professional, they completed five fortnightly entries before each of the first two interviews was conducted.

For Debbie, who had already begun blogging her first year of teaching, selected blog entries substituted for journal entries. This allowed her to reflect in a personally authentic format.

I read the journals initially to determine individual interview questions, and then reread the entries several times to distil down to how participants were engaging with mindfulness. The next step was to synthesise the information to address the impacts

on their professional lives and to consider broader impacts. I re-read and meditated on their entries to focus my own thoughts.

Using journals provided the participants with freedom to describe the mindfulness practices they were using, how they were using them, their stress levels, and their perceptions of the effects on their classroom practice. They were aware that the researcher had no preconceived ideas about what they would write, and that each of them would likely write about different exercises, consider different aspects of their classroom environment, and highlight individual areas of development. Journal entries also addressed the types of mindfulness practices used in the classroom. Many participants critiqued their mindfulness practices or their classroom teaching whilst others discussed future practice or integration ideas for classroom curriculum. A wide range of topics was covered and the journals reflected the participants' curiosity about mindfulness and the research process.

Interviews

After completion of the first set of five journal entries, I interviewed each participant to more clearly understand their insights and my observations noted from the journal entries. Journal entries were reviewed prior to the interviews to tease out possible topics to discuss, particularly for the first interview. A second interview was conducted after each participant completed a further five journal entries. The third and final interview was conducted during the first few months of the participants' second year of teaching. This follow-up interview provided each beginning teacher an opportunity to discuss the researcher's initial interpretations and their perceptions of the effect of mindfulness as they were starting their second year of teaching. The interviews with the final participant (Valerie) were via 'Skype' as she was teaching overseas. All interviews were recorded, as I did not want note-taking to create a distraction.

Interviews provided an opportunity to probe beneath the surface ideas and the concepts appearing in the journals and to confirm my interpretations. When preparing for the interviews, I considered suggestions from research literature and emerging ideas in the journal entries. Opie (2003) discussed the importance of questions as prompts for open-ended questions when providing guidance for researchers preparing

for interviews. The open-ended questions used were helpful for initiating conversation. From there, each interview followed its own course. I was not surprised that these open-ended conversations with participants provided a rich source of information, as Mutch (2005), Caswell (2003) and Gay, Mills, and Airasian (2006) all indicated that such interviews give a clear picture of feelings, concerns and perceptions.

Appendix 2 contains a list of potential questions for each of the three interviews. In the first two interviews, I asked questions starting with "Tell me about...." (eg. "Tell me about using mindfulness practices personally"). The participants' answers to these questions told their story (phenomenological approach) and then I asked "Why do you think that happened?" to assist me with later hermeneutic interpretation (Giddings & Wood, 2001, p. 16). Additional interview questions were based on ideas from Tolich and Davidson (2003b). Not all questions were asked of each participant, and additional discussion evolved from the answers given to initial questions. Questions for the final interview were based on information from Cohen-Katz et al. (2005b) and are also included in Appendix 2.

I listened mindfully to answers to questions, feelings and perceptions, and asked further clarifying questions, remaining mindfully focused in the moment rather than trying to steer answers toward the themes that were emerging for me as a researcher. In this way, I believe that the interviewees' comments were spontaneous and reflected true reports of their individual perspectives. This process also provided an opportunity to co-construct knowledge with the participants, as I probed to find what was hidden from view, and what was *not* said, following suggestions from Barbour & Schostak (2005). Co-construction of ideas was a key part of the interview process and added to the richness of the journalised data. Participants were asked key questions to discover why they thought events transpired in a particular way, to help with initial hermeneutic interpretation.

The interviews proved a suitable way to follow-up on experiences, emotions and thoughts included in the journals. Participants discussed their own practice animatedly, and even more enthusiastically detailed opportunities to integrate

mindfulness into their classroom teaching. They also highlighted the reactions of their students. A lead-in question was often all that was needed for the participants to outline how they felt (often overwhelmed with teaching duties), and how they used or did not use mindfulness to support themselves through the difficult times.

5.4 'Sitting with' the data

To begin the data interpretation, I transcribed the interviews from the taped recordings which Smythe suggested is an additional opportunity to more fully consider the responses (Smythe, 2004; Smythe in Giddings & Wood, 2001). Completing the transcription process myself allowed me to re-hear not only the participants' words but their voices, and feelings. In this way, their personal vitality infused the data interpretation phase. This was the first step in the mindful process to review and become familiar with the data, to begin to bring to light key emerging ideas. Participants were then sent transcripts and asked to comment. All participants found the transcripts to be a satisfactory account of the conversations. I reviewed their comments to complete the hermeneutic circle.

Contemplative inquiry including mindfulness meditation

Meditation on the data was one mindfulness technique I used to reflect upon and develop my new perceptions. Other tools I used in my personal practice during this phase, included body scan, breath focus, and mindful eating; these practices are described in Appendix 1. I used mindfulness in order to more fully comprehend the phenomenological experience for these beginning teachers, and as the route to my hermeneutic interpretation of the results. To use Zajonc's (2009) terminology, in the 'organ formation' and 'insight' phases of meditation, I sought to illuminate the participants' experiences, in order to discover information about mindfulness practices that might be useful for beginning teachers.

During the study, running was a useful opportunity for meditation on the data.

Although I (the body) was engaged in physical activity, my mind was focused on two things: the actual running and its effects on my body and my breath. At the same time, I was also focused on the data from participants' journals and interview transcripts that lingered in the subconscious and later surfaced in conscious reflection as key

ideas to describe the phenomenon (teachers' experiences) (Smythe et al., 2008). My runs lasted thirty minutes or ninety minutes depending on which route was taken, and the extent to which my mind was creating a 'space' for the generation of new ideas.

Sleep was another opportunity for various subconscious thoughts to develop, and to distil ideas into themes for the data interpretation in the conscious mind in the morning (Steiner, 1961/1995). Steiner (1961/1995) proposed this method of problem solving or decision making for teachers as a way for the mind to be cleared to sift through ideas and to come to conclusions. It is used throughout Steiner schools today and proved useful for this study. When we sleep, Steiner believed (1924/1997) that ideas and concepts are germinating and as we wake up, the soul and spirit come back to us in revelatory thoughts. Steiner (1961/1995) also noted that our feelings enter into the subconscious during this 'sleep time' allowing for a deeper, more personalised morning revelation.

Actual sitting meditation was the final method of 'sitting with' the data to arrive at data interpretation. The process of engaging with the data in meditation started with a quick re-reading of a portion of the data. Mindfulness meditation, as outlined by Kabat-Zinn (2005), Nhât Hanh (2007), and Zajonc (2009) was followed. To begin the process, there was a focus on the breath, followed by a scan of the body as a whole, and then the mind drifted, allowing thoughts to come and go without judging the thoughts but simply noticing them. The intention was simply to see what thoughts would trigger an initial data interpretation, describing the participants' mindfulness practice.

Following Zajonc's epistemology of love (2009), I approached each meditation period with gentleness, and had as my intention to become more intimate with the data, participating actively in present-moment observation of my thoughts rising from the emerging themes and descriptions. As I moved from the concentrative portion of the meditation to synthesise insights from the descriptions, I experienced what Zajonc (2009) described as 'vulnerability' as I became a bit confused when my own experiences and pre-judgements began to influence my embodied experience.

Through the final steps in the meditation described in the 'epistemology of love', I discovered *new* insights as overarching themes and conclusions began to emerge.

Kabat-Zinn (2005) referred to the value of being aware of the specific intention when meditating. First, the intention was simply to focus on what I noticed (observed) drawing upon Husserl's idea of reducing and deconstructing the phenomenon of mindfulness for beginning teachers through direct, close, focused observation. This phenomenological approach requires 'bracketing' personal experiences of the phenomenon and any other prejudices to express its essence (Husserl, 1976/1985) as described in chapter 4. 'Bracketing' was difficult, but I was able to simply focus on and describe the thoughts expressed by the participants.

Then, the intention shifted to creating a space to go deeper to interpret what these observations of the beginning teachers' 'lived experiences' might mean or potential implications for other teachers. In this phase, I drew upon the meditative thinking processes discussed by Heidegger, to understand how the 'being' is 'with' the phenomenon (mindfulness) and how the 'being' relates to that phenomenon (Heidegger, 1954/1968; 1962/1985). I found 'bracketing' as described by Husserl (1976/1985) was impossible when engaging in this more contemplative practice (Heidegger, 1962/1985).

The goal of this process was to review the information from participants' stories to bring forth findings and conclusions. Although this was my intention, during many sessions no new thoughts would arise or, in other cases, there would be a mix of descriptive recount of a participant's story along with deeper reflection. The key was to trust the process and keep meditating so I did.

Boyce (2011a) suggested that by engaging in these practices, our ability to be in a mindful state of mind more often throughout the day increases, bringing more 'being' into our lives to balance all the constant 'doing'. Mind and body are *here* together in the moment, experiencing and interpreting life. I acknowledge that I am human, and therefore while I attempted to be mindful and 'sit with' the data, this was not always an easy task. I tried to meditate or engage in other mindfulness practices regularly to

improve my contemplative skills, but I was not always successful. In all my meditative practices, my mind often wandered away from the intended focus. Finding 'time' and 'space' to meditate in this busy world can be difficult, but as I became more immersed in the data, it seemed easier. I also honoured 'time' in terms of my historical nature as described by Heidegger (1953/1996) so that my personal experiences and judgements of mindfulness permeated my meditative experiences in the latter part of the meditative/interpretive process.

Following the mindful processes of sleeping, running or meditating, I wrote down the new ideas that were being generated as entry points for hermeneutic interpretation and writing. These ideas were summarised and then reviewed with the primary supervisor, to discuss strategies for formally writing up the data interpretation. From these discussions, the chapters presenting the data and my interpretations were developed. The data interpretation is summarised in the next two chapters. Implications are considered in the final chapter, chapter 9, including suggested future research opportunities related to mindfulness in the classroom.

With this contemplative inquiry, mindfulness wrapped around the entire study, from the conception stages of the design through to the reporting of the findings.

Mindfulness itself served as a form of knowledge through contemplative thinking as a way to access knowledge to understand and drive this study.

Data interpretation-distillation and synthesis

What questions did I meditate on during the data interpretation process? After I searched the reflections in their journals and the interview transcripts to see how participants were affected, and if changes were revealed over the year, I looked to probe beyond the initial descriptions of their lived experiences. Questions noted below, were developed from those of Riley and Hawe (2005), and these assisted me in the data interpretation process:

- 1. Why was this particular event or piece of information shared?
- 2. How does this relate to the bigger picture and the broader context of the classroom, teaching and the teaching profession?

3. How were the supporting cast of players (students and other school staff members) mentioned? Why were they mentioned? What do they represent?

The first step of this process was to *distil* the data from the journals and interview transcripts, to be able to describe the essence of the phenomenon of teachers using mindfulness. This resulted from the first step of the meditation process which focused on reducing the information down to the key component parts. This is reported in chapter 6.

The second phase involved *synthesising* ideas from the data through deeper meditation, to look at how the experience impacted on the 'beings' of the teachers and how they were 'being with' the phenomenon of mindfulness in the classroom. In other words, how was their professional life affected? The latter part of chapter 6 and all of chapter 7 contain the results of this part of the contemplative process. My experiences with mindfulness that relate to the participants' reflections are also included in chapter 7.

A critical component of this thesis is the 'quality' of this two phase data interpretation. In the next section, I address areas of research quality in this study.

5.5 Another look at addressing research quality criteria

In this section, I consider aspects of research quality and issues that might influence the outcome. Several of these topics are ethical issues: the relationship between the participants and the researcher; confidentiality and privacy; and how I dealt with sensitive issues.

The relationship between the participants and the researcher

One particular issue to discuss is my relationship with the participants. I acknowledge that I had a previous relationship with the participants as one of their lecturers during their three-year teacher education programme, and the person who introduced them to mindfulness. During introduction to mindfulness techniques in lectures, the participants had not yet self-selected to volunteer.

Although this type of relationship implies a 'power' over relationship, they had graduated by the time they were asked to consider involvement in this study.

Clear boundaries were maintained between participants and me, as the researcher. Kögler (1996/1992) noted the influence of power upon interpretation in a hermeneutic phenomenological study. Dialogue may have been affected due to this previous power relationship, so I accept that there may have been some residual influence. At the time of the study, my relationship with the participants had changed to a more collegial one. I believe that our relationship gave me the empathy to conduct this study exploring the full potential of this topic. I do not believe that this has adversely impacted the results of this study, but leave that to the reader to decide.

Atkinson (1997) concluded that if the researcher and the participant have a close relationship, the analysis may not be thorough and accurate, but Riley and Hawe (2005) suggested that as long as there is an accountability system in place, then this disadvantage is addressed. For this study, all data interpretation was reviewed by the primary supervisor to assist in maintaining accuracy. In addition, aspects of the interpretation were presented at conferences at Auckland University of Technology and discussed with colleagues who served as critical friends.

Researcher and participant perspectives

Although I am aware that, when practicing mindfulness, I have attempted to put aside preconceived ideas, desires or expectations and to be open to the unexpected (Bentz & Shapiro, 1998), I also realise that to eliminate bias completely in a phenomenological study is impossible, inappropriate, and irrelevant for this methodology. I have explained my experience with mindfulness in the introduction. Emotions and previous experiences are expected to be a part of the interpretation. Davidson and Tolich (2003a) reminded us that values, contextual backgrounds, and the perceptions of those involved in a study influence the way the results of a study are perceived. This is what makes the study interpretivist.

I recognise that volunteers were likely to be those students who found resonance with mindfulness and with my teaching; all participants self-selected to join the project. I

acknowledge their active interest in the phenomenon of the study (mindfulness) which is often the way with innovations; I believe this was an advantage. To that end, I have described each participant's individual context at the beginning of this chapter.

Ezzy (2000) recognised that the interpretive analysis is a construction of the personal identity of each participant based on what he or she chose to include of their 'lived experience' based on their perceptions of the beginning teaching experience, and their individual creative writing style. Participants shared the information and experiences that they felt were relevant and important. Their background experiences, including social and cultural contexts, not only shaped the data associated with each participant, but resonated from each participant's voice (Harris, McKenzie, Fitzsimmons & Turbill, 2003). This was expected, and brought richness to the results of this hermeneutic phenomenological study.

The personal nature of interpretation

One way to ameliorate the risk of bias was suggested by Smythe et al. (2008), and addressed in chapter 4: the key process needed to bring trustworthiness occurs when the reader connects with what is written in the analysis, finding resonance with his or her thinking. This aspect of trustworthiness will only be tested when this thesis is published and reviewed by others.

Gall, Gall, and Borg (2005) outlined ways to reduce bias in studies such as this where bias naturally occurs. When interpreting data I considered the following questions:

- 1. Perceiving: What am I looking for? What are my first impressions?
- 2. Comparing: Is it similar to something else? What goes together?
- 3. Contrasting: What is different? What doesn't go together?
- 4. Aggregating: Were some ideas similar and could be grouped together? Why do they go together?
- 5. Ordering: What links can be established to other participants and to other teachers? What is the relationship between the data and or the literature, and classroom practices?
- 6. Speculation: What do I think explains what they have told me? Is further research needed?

Another way to address the personal nature of interpretation and affirm trustworthiness was to involve the participants in reviewing the researcher's interpretations. To confirm authenticity and to ensure that their perspectives were interpreted accurately, initial transcripts and emerging themes were reviewed by the participants as suggested by Alton-Lee (2001).

Confidentiality and privacy

As the study has addressed feelings and events experienced by the individuals involved, privacy and confidentiality of participants were protected. Christians (2003) contended that although total confidentiality in modern times can be difficult, it is the researcher's imperative to find every way possible to maintain it. Confidentiality is critical and is difficult within a small country like New Zealand and must be protected for "genuine research which leads to new knowledge" (Snook, 2003, p. 80). Only pseudonyms have been used to avoid the research divulging identities unexpectedly. In this study, children were not observed, but they were discussed in interviews and journal entries without using their names.

Sensitive issues

Due to the information noted in the literature review about the challenges of the first six months on the job as a teacher, I was aware that sensitive issues might be disclosed. Participants had no difficulties discussing their personal or professional issues or feelings. But, as these issues and the associated feelings were likely to be sensitive, I took the following precautions:

- 1. interview questions were open ended;
- participant's needs and personal support systems were discussed prior to the interview;
- if a participant needed counselling, the participants had been informed by the researcher that a counsellor from Auckland University of Technology would provide additional support at no cost to the participant; and
- 4. when interview transcripts were returned and data interpretation summaries shared, participants had the right to make changes

including deletions as part of Gadamer's 'play' of the hermeneutic circle.

Credibility of the researcher and the research

Reflecting on my role as researcher, I had been involved in mindfulness longer than the participants. I have expressed my personal views about the benefits of mindfulness in chapter 1, and hoped and expected positive results. The personal understandings and experiences of the researcher bring life to qualitative studies (Gergen & Gergen, 2003). I understand that the data collected from the participants' stories could be interpreted differently by someone else. A number of checkpoints were included in the research process so that I was comparatively neutral to highlight positive, negative and unexpected results. These checkpoints included:

- 1. discussion with critical friends,
- 2. periodic critique from my primary supervisor of my interpretations,
- 3. my own regular mindfulness practice in which the intention was to be non-judgemental and open to new ideas, and
- a confirmation process between the researcher and the participants in which I asked participants to review my interpretations and provide feedback.

The confirmation process between the researcher and the participants during data interpretation was one way to establish the credibility of the researcher. Gergen and Gergen (2003) insisted that researchers include their own voices, combined with those of the participant, as a natural part of a study drawing upon phenomenology and hermeneutics.

I engaged in mindfulness practices fairly regularly and made every effort during meditation and throughout the data interpretation process to be mindful. I have stated that I recognise that emotions and pre-judgements are not easy to monitor. I think that I was moderately successful, but as phenomenology does not expect the same degree of emotion regulation, I do not believe the results of this study were compromised. In addition, I would return to the data and meditate on it as a way to manage emotions and pre-judgements.

The process of interpretation was an ongoing one so it was important for me to 'live with' and review the data mindfully and repeatedly over time. My ultimate findings did not surface immediately. Therefore, following the principles of mindfulness and mindful learning, and engaging in mindfulness practice was integral to this process. As a result, I meditated on the data for several weeks.

Olendzki (2009) pointed to five obstacles that may inhibit mindful meditation: body comfort, amount of sleep, overall health, temperature in the room, and other issues that might be on my mind. He further suggested that a mindful meditator moves beyond these five obstacles when meditating (Olendzki, 2009). I considered and addressed these five obstacles before meditation initially and soon discovered that the more I meditated, the less difficulty I had; another reason for spending large amounts of time 'sitting with' the data.

This mindful meditative inquiry was guided by an ethos of care and acceptance suggested by Zajonc's epistemology of love (2009). To that end, all participants and their thoughts in journals and interviews were respected, reflected and meditated upon with an open mind. "This attitude allows the Beings of the participants of the study to shine forward, to reveal themselves to the inquirer" (Bentz & Shapiro, 1998, p. 54). The ultimate goal was to have a positive effect on the 'life-world' of these beginning teachers, and then on 'life-worlds' of other beginning teachers.

My final concern about quality in this study involved reviewing how my approach fitted Zajonc's template in the 'epistemology of love' (2009); this is discussed in chapter 8.

5.6 Concluding remarks about what actually happened

Does this research with 'real people' have as its goal, improving the classroom environment for children? This is the first question of ethics in educational research, according to Snook (2003). I believe that it does. By assessing beginning teachers' perceptions of the effect of mindfulness on their teaching practices and their ability to cope, there is the potential to provide support for other beginning teachers as they embark on their careers in education. This may also have a positive effect on the children in their classrooms. I would extend Snook's idea to incorporate new strategies

to improve the classroom experience for the teacher, as this may in turn, improve the classroom environment for children. Then, Snook's suggested goal will have been achieved for children and for teachers.

In the next chapter, the data is presented and summarised to explain the essence of the mindfulness practice for these teachers and initial insights. In chapter 7, the data is then synthesised to interpret my perceptions of the impacts mindfulness practices had on their professional experience; and potentially on those of other beginning teachers.

Chapter 6 Distilling ideas to describe the 'what' of the participants' lived experiences

- 6.1 Arriving at data interpretation
- 6.2 Initial data interpretation (What did I notice?)
- 6.3 Next level of data interpretation (What was revealed to me?)
- 6.4 Conclusion

6.1 Arriving at data interpretation

In this study, I looked at the phenomenon of beginning teachers who have been introduced to mindfulness. In phenomenological research, the goal is to strive to understand the lived experience, to focus on the comments and actions of the participants, and to look for key words, significant revelations or comparisons. In reporting this phenomenological experience, the researcher uses hermeneutics to interpret the insights of the participants (van Manen, 2006; Grant & Giddings, 2002).

To review the process, mindfulness or focused awareness was used by the researcher to understand the phenomenon, instead of completing a quantitative analysis. The approach I used involved reading the beginning teachers' journal entries and interview transcripts, then "dwelling with" the data in reflection and mindfulness meditation to focus on the key ideas hidden from view, beneath their individual recounted experiences. This process required time to simply ponder and meditate. The best interpretations occur when the mind is at rest; otherwise one can be overwhelmed by the quantity of the data, and not allow the essence of the lived experience to be revealed (Smythe, 2004). It is difficult to put into words an individual's interpretation of lived experience (van Manen, 2002). This takes many hours of contemplation and reflection. I have tried to focus on the experience, not the cause, to highlight the phenomenological aspects of the study as suggested by Bentz & Shapiro (1998).

In this chapter, I discuss each participant's engagement with the mindfulness practices used. Three key areas emerged for me:

- 1. the participants' desire to 'meditate' perfectly
- 2. how they noticed 'mindfulness' in different parts of their lives
- 3. how mindfulness influenced their development as teachers

The data was distilled, drawing upon a Husserlian view of phenomenology (Figure 2 below), to notice how each participant integrated mindfulness into their lived professional experience. This lens was used to approach an understanding of the essence of the phenomenon and its impact on these individuals. The *concentration* phase of mindfulness meditation on the data supported these initial focused revelations.

Figure 2 Initial view - Data interpretation



6.2 Initial data interpretation (What did I notice?)

The interpretation reflects what I noticed and is coloured by my personal experiences with mindfulness which I attempted to 'bracket', as suggested by Husserl (1976/1985), to describe the participants' actual experiences with mindfulness. Merleau-Ponty (1945/1958) confirmed that data interpretation provides an accurate description of an experience in phenomenological research, even though it is greatly influenced by the perceptions and experiences of the researcher. I considered the following questions based on journal entries and interview transcripts:

- 1. Did participants actually use the mindfulness practices themselves?
- 2. Did they notice? Were they observant in the moment? Did this improve attention? and
- 3. What benefits were noticed?

1. Did participants actually use the mindfulness practices themselves?

All of the participants, through their journals, showed that they used the practices

sometimes. But, when asked in the interviews, they believed that they were not using

them. Upon further discussion, each participant realised they had developed their own

unique practice; all engaged in mindfulness in their own way. The focus on breath and

the body scan were the practices used most often. Initially Laura, Patricia and Robert

had regular routines. They noted that they could 'feel it' when they were not

practicing regularly, and it changed their approach to task completion, to events, and

to the children in the classroom. Patricia identified that she could be a procrastinator,

but felt that mindfulness practices were particularly important, so engaged in them in

the early morning. She also found that with practice, she felt that she continually

improved.

All of the participants continued to use the practices in the second year as noted in the

final interview. Debbie identified her use of the practices informally throughout the

day, while the other four also indicated their ongoing use of the formal practices.

It was not until feeling they had 'bottomed out' in Term 2 and were overstressed that

Valerie and Debbie remembered that they had learned the exercises. After living

through stressful periods, and through discussion in the interviews, Valerie and Debbie

discovered two things:

1. They were using the practices but had not considered what they

were doing to be 'mindfulness', and

2. It was important to engage in the practice all the time, not just

when you thought you 'needed' it.

In this extract from Valerie's second interview, Valerie described the mindfulness

practices she had engaged in.

Researcher: Which practices have you been doing?

Valerie: I switched to doing my mindfulness practices in the morning. I

am doing yoga for myself and finishing off with 5-10 minutes of just

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sitting—focussing in on myself, focussing on my breathing and then ending with the loving kindness activity. I dedicate practice to certain people or children in my class. Then I could switch to thinking about the day ahead. No distractions. Before my partner was up. Somebody always wants something at work so no time before each class. Doing it in the morning before having contact with anyone. It focuses me with a good start of the day. It is a good way to wake up. I do that every day. The only days I don't is when I might have had a super late night. But I hardly ever miss it. I am actually finding if I don't do, I feel that I am missing something. I don't feel like it's a chore. I look forward to yoga and meditation time.

(Valerie, second interview, April 2011)

Valerie found that setting aside time every day made a significant difference. She discussed a variety of different practices and varied the time of day she tried to meditate until she discovered her preferred time and style. She started with five minutes and built up to longer time periods, focusing on the breath first and then on one aspect of her teaching. As a result, she felt a lot calmer. She also found with after work commitments, she would fall asleep if attempting to meditate in the evening. Like Patricia, she discovered that her preferred time was in the morning, after waking and before going to work.

All of the participants, except Robert, commented that if they meditated at the end of the day, they fell asleep; which is common. This meant that participants actually needed to sleep and should engage in mindful practice at a different time. Falling asleep is not considered to be the purpose of engaging in mindful practice. Instead, one hopes to 'fall awake'; to be more aware. Debbie found that she was so exhausted at the end of the day that she fell asleep quite quickly when starting the body scan.

Dianne's meditation tape (body scan from refresher workshop) has really helped me to de-stress in the evenings. Most evenings I probably only get up to the hips or waist and then I was asleep. But it helped and it really did relax me. Taking things for the now and just accepting things the way they were.

(Debbie, first interview, July 2010)

Mindfulness helped to calm them down, quiet the chatter in the mind, review the experiences from the classroom that day, without replaying them over and over again, and prepared them for sleep.

The journals and the second round of interviews indicated that the participants all came to the realisation that the best results came from daily mindfulness practice. Since morning was the easiest time of day to meditate, they found that they were more likely to meditate if they meditated before work. On some days, though, the evening was the only time available.

Each participant increased the time devoted to mindfulness, and the use of mindfulness in the classroom for themselves and the students. Laura commented that setting aside time, for herself, was invaluable to help her cope for the day as a relief teacher with the ever-changing pressures:

Spending ten minutes in the morning in a quiet house, mentally planning my day and strategies through meditation helped me be more focused.

(Laura, journal entry, May 2010)

In a subsequent journal entry, she described how mindfulness practices helped her keep calm when she was helping with the clean-up in the aftermath of the February 2011 Christchurch earthquake:

I used what I have learned from the Mindfulness information that being able to just concentrate and focus on one particular aspect of something, that I am able to control my inner angst and other emotions...My morning meditation would take up to an hour and I have decided that my focus word would be 'calm'. That if throughout the day I get stressed or very emotional that I would regroup and focus on my work.

(Laura, journal entry February 2011)

It is possible that as the school year progresses, all beginning teachers find more 'personal' time that could be devoted to mindfulness practices. These teachers chose to expand their mindfulness practice as well as their individual 'personal' time to relax or engage in other activities for themselves as the year progressed. All participants

noted that in their day to day lives, it required effort to find the time and space to continually practice the mindfulness exercises.

2. Did they notice? Were they observant in the moment? Did this improve attention?

Their journals and interview transcripts indicated that participants felt they had developed a greater ability to actually notice the needs of individual children and to be more thoughtful and creative during planning as a result of engaging in regular mindfulness practice. They also noticed more about themselves and what was happening to them as they engaged in mindful practice.

Debbie described the feeling during mindfulness practice of "lightness: getting rid of everything you are thinking about" (Debbie, second interview, November 2010). By noticing that she could clear her mind, she was then able to focus on her own needs and the needs of the children in a particular moment.

Patricia found the exercises, before and after school, a way of separating from all the activity of the day and reducing brain overload, so she could actually focus on other required tasks and her own needs.

I have been able to control my thoughts more during my mindfulness practices. ...being aware of each moment, my feelings in that moment, and focusing my attention on the 'here and now' rather than thinking "what am I going to do tomorrow?" That is what mindfulness means to me.

(Patricia, journal entry, May 2010)

All had become 'meta-aware' during classroom time and in their own lives. In the interview excerpt below, the detail with which Debbie described learning the new skill of surfing, demonstrated how she was observant and in the moment.

Debbie: I had taken up surfing during the summer so every week I'd be thinking...hmmm...Maybe I can go surfing at the weekend. That was another way of getting 'out of me'.

Researcher: So when you were on the board were you totally on the board or was your mind somewhere else?

Debbie: Totally at one with what I was doing there. To be able to do something so different. I'd wanted to try it for so long. My friend just said here's the board, just try it. I'll come in the water with you. I didn't get very far and I kept falling off and drank half the ocean. The sheer fun of getting out and doing something different. It really plucked up my courage of being in the water. There were days the waves were too big for me and I'd be screaming. My friends would be there. Afterwards you just come off and you're so exhilarated. It's a different kind of buzz. It took you away for a little while. It's a different way of getting out and doing something different.

Researcher: Can you describe for me what you feel when you are surfing?

Debbie: If I can surf. I got to the point where I could get up on my knees and just about balance and surf on my knees. I can come in on my knees....I haven't gotten up on my feet yet. I don't know...there's so much enjoyment. I was swallowing so much water because I was laughing at myself. It was really nice to just laugh at yourself. Life isn't serious....it's just what you make it.

Researcher: You found yourself just being in the moment, surfing.

Debbie: I've never found that with sports. I don't do team sports so I'd never found that outlet. I know a lot of people do; I just don't.

(Debbie, final interview, April 2011)

All participants noticed that they were noticing things more: aware of the children and their needs; seeing when to step in before a crisis; and responding to children rather than reacting to their behaviour. Debbie guided her students to notice their own behaviour more. She had the children focus particularly on the level of noise in the classroom. This proved a major success, as children, rather than the teacher, monitored the classroom loudness.

It's really nice actually to watch them kind of reflecting on how loud they can be. I don't know what the word would be to describe the way they are. They just...the way they are...they really noticed.

(Debbie, first interview, July 2010)

Laura found that, although she was a relief teacher and greeted a different class regularly, she would become aware of what mindfulness exercises would suit each group of children by morning tea time.

I found it depends on the class. I try to suss it out early in the day, but it is not something I'll do in the first block so I try to see what kind of group they would be and what would work with them. If it's a class where you know there is just going to be silly behaviour from start to the end, I try to work it in with what they are doing. I don't think that you can have a set programme of...this is what I am going to do.

(Laura, first interview, June 2010)

All of the participants indicated that they were more observant of children's behaviour. Patricia had expressed that she felt she was oblivious to other things going on because she was so focused on an individual or group of children. This noticing was particularly helpful for the beginning teachers as they assessed children's individual needs.

...then they have my full attention. There's one boy...before he was in my teaching group. I just felt like I was telling him off. I just didn't know him. It was constant, 'No, you can't' do that', 'stop talking'...It was just constant negative and then he came into my teaching group. He's a really good thinker. I was just asking basic questions or what's the same or different. This boy is really with me...he's only 4½ years old but he is coming up with ideas...great thinking. So from that first day with me when I was paying attention to him, it was so different. I just think he is misunderstood. I just love him dearly. He's a real sweetheart. His intent is never malicious. He doesn't purposely try to hurt people. He's still learning how to share and learning social skills, but paying attention to him you develop that relationship. Just last week, the teacher who was

taking afternoon mat time, told him to go to the table because he was being disruptive. I had just finished with another group doing guided reading so I came along seeing him at a table by himself crying so he came over and helped me set up for Art. He was not intentionally being disruptive, he just needs to learn. I think it is all about me paying attention and understanding what he needs. I am using mindfulness without realising that I am.

(Patricia, final interview, April 2011)

Journal entries and interviews were filled with vivid descriptions of tears and humour, when participants actually noticed what they were thinking and feeling. Patricia, in particular, discussed a mindfulness exercise which brought up memories, so she went with that and just re-experienced the past events in her meditation. On one level, the event was sad so she cried during her practice, but then carried on with the rest of the meditation. She was very pleased that she was aware of all the 'magical' moments, actually experiencing them without getting caught up in them.

3. What benefits were noticed?

a. Did they create new categories, look at things in new ways, and were they open to new ideas?

Debbie felt very positive about stepping out of her comfort zone to attempt new things. She felt open to new ideas, seeing beyond what was observed in the moment to break down barriers, building her confidence, patience and communication skills. This particular participant was reflective throughout the data collection process. Debbie noticed that what was important was how she reacted:

Our reactions to those experiences are what defines us.

(Debbie, April 2010 blog: What a difference a day makes)

I also believe that we should stay conscious to the fact that, it's just another day. (Debbie, April 2010 blog: Opportunities for experience)

By the end, she was no longer caught up in her reflections. Instead, when she reflected on her experiences, she took the opportunity for goal setting. The dramas of the day were seen as part of life. In her second interview (October 2010), she discussed the 'ups and downs' of life.

Participants began to question their own actions and responses to their students and events. Langer (2009) confirmed the importance of this questioning process as part of the benefits of mindfulness. As Langer suggested, individuals began to question themselves, their old assumptions and unconscious beliefs so that the old way of thinking did not take over decisions that were made. Langer (2009) also noted the positive impacts of this mindful way of making decisions. In a review of a number of studies she had conducted, Langer (2009) demonstrated that new creative thinking and new ways of responding resulted when participants began to examine unconscious assumptions. When not acting mindfully, responses were habitual or tasks completed without engagement (Langer, 2009). The participants in this study found that not only were they noticing more, but they were reflecting on their own practice to set new goals, and questioning previous perceptions. As a result, they found themselves making personal and professional decisions with greater awareness and without relying on previous patterns or judgements.

Patricia, in one of her early diary entries, pointed out mindfulness had helped her to be more creative.

I find also when my mind is clear and calm; it is much easier to be creative!
I come up with my best ideas after practising mindfulness. It therefore
allows me to plan without feeling stressed, and I feel that my teaching is
better for it. I have been mindful of being mindful.

(Patricia, journal entry, May 2010)

Robert felt better prepared for parent interviews in the second year after practicing mindfulness regularly so that he no longer had the perception that he would have difficulty engaging with parents. Robert clearly pointed out that it was because he was mindful and therefore not just because it was his second round of parent interviews.

Yes, even though there are parent teacher interviews on Thursday, I feel I am much more prepared than if I was not mindful. I've got all my books sorted. If parents have any issues, I am ready to handle (them). Last year, I was really stressed....what kind of questions would I be attacked with and how will I answer them. Now, I am not really worried about it.

(Robert, final interview, April 2011)

Debbie found she was looking clearly at her own practice to make professional decisions.

In the last couple of months, I have become very good at listening to myself in the way that I speak to the children. Lately, I have been reading a lot about Montessori practices...Talking to the children in a way that we should. I have been reflecting on things like that but also just smaller things...The other day this child swore at me... I was going over the catalogue in my head...what do we need to do?... I didn't hear the swearing so I don't feel that I can justify giving this child a punishment because someone repeated it. So I went to the child and I asked why were you swearing? He said you really annoyed me. I said if the children in my class really annoy me, do I swear at them? He said "no". I said if I am really annoyed at you, do I swear at you? What makes you allowed to treat the other child like this? Rather than putting them through things like writing lines, allowing them to think about what they are doing. This is something that I have really learned to do in the last few months.

(Debbie, second interview, November 2010)

Valerie noted in one of her first journal entries that she felt that trying to 'focus' on what she was doing to be more mindful was, perhaps, taking 'extra' time.

I wasn't quite sure whether me being "focused" on what I was doing was mindful, or whether I should have been thinking/doing something else. I guess at this stage there are definitely times where I find that mindfulness comes naturally, but other times I feel like it is something extra to think about. But then maybe I am confusing the actual act of mindfulness with writing diary entries.

(Valerie, journal entry, December 2010)

By her final interview, she described quite a different reaction to the mindfulness practices. She felt more efficient because she was mindful in each moment and able to respond to things as they came up rather than being reactive. In her final interview, she confirmed that the practices helped her to feel more efficient:

I feel like it helped me focus more on what I am actually expected to do and not worry too much about the paperwork side of things.

(Valerie, final interview, August 2011)

She also indicated that her body and mind felt 'more relaxed'. She had been experiencing neck and back pain, but was unsure of how to change her behaviour to alleviate the discomfort. Throughout the day, she focused on different parts of her body, which she realised helped her maintain better posture in the classroom while teaching, and relieved the pain.

b. Was stress and anxiety reduced?

Mindfulness practices were helpful for all participants in relieving stress at the end of the day. Laura, who was also coping with personal issues, was able to reflect on these issues with clarity. Laura discussed in the interview excerpt below the sense of calm she experienced when using mindfulness.

Researcher: So just to end, what would you summarise for you, has been the benefit (or not benefit) of using mindfulness as a beginning relieving teacher?

Laura: Benefits? Calm before the storm because you never know what you are going to be getting or what you are walking into. Just having that calm, it's a different calm than I've ever experienced before and I am able to focus a lot better. I'm able to just bring up more in my teaching. And I can reflect better on my day because I had the calming start of the morning. And if my morning starts calm within myself, once the boys wake up, it's not calm at all, that that just gives me that time out for myself. That's been a very big benefit for me. Otherwise I get very anxious and stressed out. And no one likes a stressed-out teacher.

(Laura, first interview, June 2010)

Other participants also noted lowered anxiety. In term 2, Debbie found that she was overwhelmed with stress and wasn't sleeping. She was ready to go to the doctor....

Mom said, "No, no, no. Try that meditation." I thought, oh yeah, I've got just the thing for that. So I took it off the shelf (the CD from the refresher workshop) and put it in. It was really nice actually.

(Debbie, first interview, July 2010)

Recalling that conversation with her mother in her second interview, after seeing her experiences in a new way, and regularly practicing mindfulness exercises, she was pleased to say:

Second term was horrible and I think it has been good ever since.

(Debbie, second interview, October 2010)

Rather than being on autopilot because they were caught up in the stress and challenge of the day, they had the ability to respond authentically to each child rather than react to individuals who demanded attention. Behaviour management, although still on their minds, was no longer the focus of class sessions. Instead, they focused on children as individuals and their developmental needs. Participants noted a lightness, greater self control and the ability to stay calm. Patricia, Valerie and Laura were pleased, but surprised at how much their stress levels had reduced.

Due to the participant's mindfulness and classroom practice of mindfulness, participants noticed that the children were also calm. The children also engaged with the mindfulness practices. Participants reported that children were noticing more, and were more aware of what was being taught. Probably more significantly, children were more aware of their own behaviour. There was a noticeable reduction in student anxiety as well.

Debbie, as noted before, reported how the students became quite aware of the volume of the noise in the classroom. The noise level in the classroom had challenged her patience and contributed to her anxiety. The students, after learning about mindfulness, were more aware of noise levels and made conscious efforts to reduce the noise when it got too loud, which in turn, reduced her anxiety.

Valerie found that when she was stressed or worried, she could notice her body sensations and immediately focus on 'why' and what her perceptions were. Her

mindfulness practice had helped her to be more relaxed when faced with the stresses of this first year of teaching. She made these comments during her second interview:

Valerie: My body and mind are much more relaxed and ready to take on whatever happens next. I don't feel like....it's a hard concept to explain.

Body wise, I feel really relaxed; good way to release tension. I notice all parts of my body particularly my posture and do that throughout the day.

I feel like my body is much more aware of what it is doing. I think I am just more calm as the day goes along. I am not panicking about anything.

I am reacting positively. I can reflect on it as I go so if I find I am getting negative or worried about something. I can actually go to 'why' right away and look at my perceptions. Usually I can work it out and take perspective to try to sort it out from there.

(Valerie, second interview, April 20110)

In this way, she was able to find solutions to problems more quickly, and therefore she did not need to feel anxious. In a similar vein, Valerie discovered that the older students in the school where she worked found it difficult to take the time out of their studies to learn the mindfulness practices. She believed that the reason for this was the considerable stress the students felt from parental and societal expectations, which they accepted as part of their lives, and therefore she was keen to introduce these children to the mindfulness practices.

c. Were creativity (Langer, 2005, 2009), empathy and self-compassion (Kabat-Zinn, 2005; Kaiser Greenland, 2010; Nhât Hanh, 2007), which are key indicators of mindfulness, enhanced?

Laura noticed the value of starting each lesson by observing the children mindfully. From these observations, she had a better idea of how to proceed with planned lessons. Laura would encourage students to send (verbally) a compassionate wish to someone in the class as a way to set a positive tone for the day.

Laura was concerned about one child in particular who was a perfectionist, and discovered that the mindfulness practices worked particularly well for him. The strategies helped this child to cope, when faced with new or difficult tasks, rather than

shut down and as a result, to feel more creative. He changed his reaction from "I can't do anymore" to a more responsive "I'll give it a go".

And when we do the mindful practices like the mindful walking...at the start of it, he was quite anxious, he wanted to do it 100% perfect or the body scan and even when we looked at mindful eating. He would get very anxious and literally break down and you can't get him out of this shell where he goes, "I just can't do it." And I worked long with him one on one to explain that when we do the walking it's not for anyone else, it's just for us. And the more he started learning it was just something internal for him, the more you could see these bricks just falling apart. Body scan was very good for him. Even the mindful eating where you start realising that it's just for him; his own observations for him, the feelings that he has for himself. It was great. He is such a smart kid. He is really, really intelligent and I think because he just over-thinks everything, it was a bit of a problem for him. The writing he has done about his experiences you can just see how it has changed in about the three weeks that we had done the exercises with him. (Laura, first interview, June 2010)

All reported specific teaching strategies that they had used, or units they had planned, demonstrating creative teaching. Robert in particular found numerous ways to relate mindfulness to the curriculum he was teaching. For example, close observations of fabrics they were studying including textures, how the fabrics felt and exploring what the fabric was made of and how it was manufactured. At one point, his students sent friendly emails in their heads to a local sports team playing in a tournament.

Laura integrated the practices with a writing activity and found that the children in her class enjoyed writing more because they had been actively involved in the mindfulness activity.

I did have one class writing what they were thinking beforehand. We did the food one. Then a week later, we did the activity again and then they got to write about whatever. Then we put it in an envelope and stapled it up and it was only for them to read. And after a week, when we went back, they wrote again and they could compare how they had changed.

That was quite interesting. That was a year six class.

(Laura, first interview, June 2010)

Valerie noted how she initially felt like she was on autopilot in the classroom, unconsciously reacting to children or events.

During the past month I have been meaning to write my journal entries, but again I was caught up in my "unconscious" teaching role. Many times throughout my day I would have a realisation that I had been on autopilot, reacting to a situation in class rather than acting in a conscious or mindful way.

(Valerie, journal entry, November 2010).

She was not mindfully aware of what was going on, but still reacting to what was happening in the classroom, and even able to follow lesson plans completely. She would get to the end of the day and was not aware of what had happened, and did not know what she was doing because she was not focused on the class, but on behaviour control. She felt empathy for the students; they were not interested in her lessons. After engaging with mindfulness and reflection, she decided to change her teaching approach to be more empathetic to the children. As a result, rather than follow the prescribed approach she had been instructed to use by the school, she drew on her knowledge of Steiner philosophy and education to plan more creative, active and relevant lessons. The students were more engaged, and she believed they learned more. In order to do this, she needed to focus on the children's needs and her own without judgement, and then proceed to find new ways of teaching.

d. Did participants analyse their own thoughts and seek ways to be more mindful?

Debbie noticed that consciously going to the beach helped her to engage in mindfulness practice and to analyse her thoughts without getting caught up in them. Debbie found that doing the mindfulness of the breath practice immediately after school was helpful:

It just makes a nice separation between working with children and planning for the next day. (Debbie, first interview, July 2010)

When analysing and describing the body sensations experienced during the body scan, Laura summarised it in this way:

Tingling. It's like this calm; this absolute sense over you. It's an odd feeling to describe. It's like the wind changing on a hot day...you suddenly get this cool breeze that just sweeps over you and it's that sensation of calm.

(Laura, first interview, June 2010)

Patricia, after reading my notes following her interview, stated:

You make it sound like I know what I am doing. Maybe on an unconscious level, but it doesn't always feel that way.

(Personal communication – email, February 2011)

This was then confirmed to her again in her evaluation by her supervisor at work who noted that she is a very effective teacher. After considering these evaluations of her teaching, Patricia then sought advice from me on ways to make the time for practice and how to engage more mindfully in the classroom. Patricia noted that mindfulness often comes naturally and other times you really have to work at it. She was grateful that mindfulness allowed her to focus on body sensations, feelings and thoughts to relieve stress.

My head's always thinking and it's hard for me to find quiet time for my head. (Patricia, final interview, April 2011)

In fact, when she was ill, she found it really hard to stay in the moment with her class, but she was in the moment with her body. She noticed every pain, every discomfort, and the lack of focus of her mind and thoughts on anything other than on her body. She found that when she did incorporate meditation, she was more relaxed, aware of and confident that she was meeting individual children's needs.

Valerie noticed that, initially, she listened to other teacher's pre-conceived ideas about students. She soon discovered that she was no longer integrating those perceptions into her own beliefs, but was able to respond to children in the moment. With mindful awareness 'in the moment', she felt she was able to analyse her own thoughts and respond better and more appropriately to children.

Debbie initially thought of using mindfulness practice "when I need it" and, in her first interview, acknowledged that it might be a good idea to find more time to practice regularly: "instead of just when I need to". (Debbie, first interview, July 2010).

She expanded on this further in her second interview and expressed her realisation that it might be better all the time when she stated:

I think I have been fixing it as I go along. Noticing when things are going wrong. I mean I think about living in the now as you suggested, but also excited about the future and thinking about that; trying to find that balance. Ultimately we are mindful all the time.

(Debbie, second interview, November 2010)

6.3 Next level of data interpretation (What was revealed to me?)

Steiner (1961/1995) extended the notion of noticing thoughts and lived experiences to include feelings, and allowing the subconscious and conscious states to work together to bring even greater clarity. Secondary reflection, drawing upon the deeper meditation suggested by Heidegger (1954/1968, 1962/1985) to reveal what might be hidden from view, revealed three key themes: striving for perfection, connecting through awareness, and gaining authenticity.

Striving for perfection (as a mindfulness practitioner and as a teacher)

The participants were asked to focus on their own practices in their journals and during the interview. The first interview questions related to their own engagement with mindfulness. Instead of responding to these questions, all of the participants animatedly shared what they were doing with the children in the classroom first.

When asked 'what mindfulness practices are you engaging with yourself?' during the first interview, four of the five participants answered about classroom practices, and

had to be redirected to come back to focus on themselves. Patricia recalled that she was always thinking about the children.

I constantly think about the children – I even dream about the children, and about teaching when I sleep! (Patricia, journal entry, May 2010)

Then, by the latter part of the study, the beginning teachers talked more about their own mindful practice without necessarily connecting it to the students. All of the participants were very concerned about 'doing it right' or striving for perfection. Two themes emerged:

- 1. How does it connect to the students and the curriculum? and
- 2. How do I practice it better myself, finding the time within my busy schedule?

When practicing mindfulness, the goal is 'not striving' but to allow things to evolve naturally from the purpose and vision the individual has set for the practice (Kabat-Zinn, 2005). For beginning teachers who strive to do the best for their children, this aspect of mindfulness can be very useful for reducing stress and improving focus. The attitude of 'non-striving' is very difficult for a beginning teacher to master for themselves let alone for their classroom practice.

Perhaps one reason for this is that, at some level, all of the participants could be identified as perfectionists themselves; always striving for things to be 'just right'. They were often concerned if they were engaging in the practices correctly. Robert's journals and interview transcripts demonstrated his desire for perfection and his striving to make sure things were just right. He wanted to be sure that everything was 'perfect', not only in his personal practice in mindfulness and sport, but also in his teaching including finding links for mindfulness within the classroom.

Will I get through this lesson? Will my teaching be good? What will happen next? Will my transition be good? Are the children actually learning? I had all these things going through my mind.

(Robert, first interview, June 2010)

Because sports and personal fitness were very important to Robert, he related several practices to healthy eating, and noticing what was happening in the body during physical activity.

Patricia, as mentioned before, struggled with maintaining her focus on all of the children in the class so viewed mindfulness as a way to help her slow down, to concentrate on one thing, but at the same time be totally aware of what was happening around her. A teacher often has to work with individuals or small groups of children while still maintaining a watchful eye on the other members of the class. This is a stress for many beginning teachers. Mindfulness helped Patricia reduce her excessive worrying about the children or getting emotionally caught up in what was going on at a particular moment. Instead, she was constantly checking in with herself, to make sure she was being mindful. At the same time, she was also noticing when individual children needed to be reflective or engage in a mindfulness practice to calm down.

You can see what you need to do; you can tell them [the children]
when to use them [the mindfulness practices]....just be there with the
children. (Patricia, first interview, June 2010)

Because they were striving for perfection in all aspects of their teaching, the participants found Term 2 of the school year extremely stressful. The 'start-of-the-year' enthusiasm of students and teachers had worn off. This was compounded by winter illnesses. They continued to try to 'get everything right' and meet all administrative deadlines. Debbie described this as:

A steady flow of things you have to do. You HAVE to do. You have to do. You don't ever feel like you've achieved something, and I think I found it's really important to sit back and think.

(Debbie, second interview, November 2010)

By Term 3 and Term 4, perceptions of these difficult times had changed, and all felt they would respond with greater clarity and more mindfulness in the future. All participants described how time set aside for meditation of various kinds was important for de-stressing. By the end of the year, they had all come to the conclusion

that it was important to engage with mindfulness *always* so that the stressful times were less stressful.

Connecting through awareness

Finding connections between mindfulness and other things in their 'conscious' world seemed to be a major focus in the journal entries and interview transcripts. Though this was not explicitly stated by the participants, it was brought into view for me during mindfulness meditation when 'sitting with' the data as part of the hermeneutic phenomenological process. Table 5 on the next page demonstrates a number of ways that the participants strived to make these connections.

Three participants noticed how others in their world were practicing mindfulness. One example of this was when Patricia reported that she was taking te reo Māori language classes. She was excited to find that the students in the class were being guided with mindfulness practices to reduce their stress of learning the new language as well as to clear their minds to take in the new information. Patricia excitedly declared,

It's no longer just Ross (the researcher) from uni doing it. It has made me more positive realising it's for all kinds of people not just a certain kind of person. (Patricia, second interview, October 2010)

Laura noticed how children of different ages connected with the activities and adapted them accordingly.

For the younger groups, I think you just have to make it a bit shorter...just focus on two parts of the body, maybe. Mindful walking, I haven't found that successful with year 2s...it's more mindful running. The older classes from year 4 upwards, it works really well. They follow the instructions a lot better. (Laura, first interview, June 2010)

Table 5
Connecting with awareness

Connecting through awareness

PERSONAL AWARENESS

Steiner's ideas of mindful breathing and the breath/mind/body connection; pain is just a reminder from the mind of something going on; connecting with yourself first

OTHER SOURCES

Māori class, own pedagogy, people that you meet, through loving others, activities

with thought processes (idea of overthinking when thoughts can get out of control)

IN THE CLASSROM

In the now with the children seeing the unique nature of each child without judging the child or the situation

Patricia and Valerie spoke specifically about Steiner's philosophy and how it connects to mindfulness, and the other three participants discussed the value of the breath/mind/body connection without being aware of the connection to Steiner philosophy. Valerie and Robert spoke explicitly about the connection between pain and the mind and all of the participants through their journals expressed the importance of connecting with themselves through mindfulness to be better teachers.

Gaining authenticity

Engaging in mindfulness brings authenticity (McCown, Reibel, & Micozzi, 2010) which enhances a teacher's classroom practice (Gibbs, 2006; Hart, 2001a). When a teacher experiences this authenticity, he or she feels successful within the classroom. McCown, Reibel and Micozzi (2010) outlined the key characteristics of a mindful teacher: "authority, authenticity and friendliness" (p. 92). Authority comes from knowledge of what you are teaching which comes with time and experience (McCown, Reibel, & Micozzi, 2010). Feeling this sense of 'authority' is often an issue for beginning teachers and is exacerbated by the concern that others, particularly students or parents, do not always perceive that a teacher has this 'authority'. These beginning teachers showed authenticity and friendliness (building relationships with students) throughout their journal entries and interview notes as they discussed with passion the activities designed to meet the needs of the children in their classes.

To establish their own authenticity, each participant found the importance of engaging in activities outside the classroom including mindfulness practice. Patricia, not only studied te reo Māori but pursued opportunities to practice music. Debbie enjoyed surfing while Robert was an avid soccer player. Laura enjoyed time with her three children and Valerie took advantage of being in a foreign country to explore the local area.

Valerie provided a detailed example of the attributes of authority, authenticity and friendliness. She had been struggling with one particular group of children when teaching a science lesson.

Two days a week I teach grade 1 science. Grade 1s are the hardest class to remain present in. They demand so much of your attention and energy. Even before considering what content you are teaching.

(Valerie, journal entry, November 2010)

She discussed this further in her first interview.

I guess when I am in that class I feel like I try to use my body language as well to come across as assertive as well which I don't enjoy doing. I feel a discrepancy between what I was trained to do, especially in Steiner, and the teacher I am almost forced to be in that 'science' class.

(Valerie, first interview, January 2011).

Following mindful meditation about this particular group, she noticed that she felt tension in her body, as she was using a behaviour management system and teaching methodology prescribed by the School, rather than ones she felt comfortable with personally. She decided that rather than using the textbook approach with the children, and an authoritarian type behaviour management system, as required, she would incorporate ideas she had gained from her university study of Steiner philosophy and educational theory.

She had learned to present her lessons through art and story and to see each child as a unique individual at a particular stage of development. She realised she had not been in the moment, engaging with the children, but totally focused on 'fixing' their poor behaviour, and acting as 'teacher' in the way she perceived that she was expected to

by the school administrators. Following the first class when she presented the science material in this new way, Valerie noticed that she was excited about her teaching again, she did not feel the tension in her neck and shoulders resulting from the assertive body language that she had been using previously. And, the children were 'getting it'.

6.4 Conclusion

Findings from initial surface observations related to the participants themselves and to their students. The findings indicated that the participants used the mindfulness practices themselves, but often found it difficult to allocate the time and space to engage in specific exercises, or fell asleep at the end of a long, stressful day. Following the stressful second term of the school year, participants realised they needed to engage in mindful practice regularly so that the stressful times were not so difficult.

Each participant engaged in practices shared during their university study and in the workshop, especially 'breath focus' and the 'body scan'. In addition, participants developed their own mindfulness practices that suited their individual personalities.

Participants noticed more in each moment, about themselves personally, and the children in their classroom. The participants discovered they were more focused, and aware of their own needs and the needs of the children in the classroom. They learned to reflect and question themselves without adding further to their stress. Perceived stress was less for all participants than they had expected it would be during their first year of teaching.

Greater awareness and attention afforded the opportunity for participants to be more creative in their planning. Four of the five beginning teachers reported positive effects on their classroom planning. All participants included in their planning, activities for students to practice empathy, self-compassion, and compassion for others. At the same time, the beginning teachers were developing greater self-compassion in personal reflection.

When going deeper to find insights beyond the surface observations, further analysis suggested that participants were connecting with awareness to students, other teachers and friends. In addition, authenticity resulted from finding time away for mindfulness activities and to focus on other personal and/or creative outlets. Meeting the needs of the children and finding interesting ways to meet the demands of the curriculum (as participants strived to be the perfect teacher), was a predominant feature of their journal entries and interviews. They described and took pride in sharing the classroom pedagogical practices they had implemented, using mindfulness.

In this chapter, I attempted to 'bracket' my own experiences and thoughts about mindfulness to describe the participants' lived experiences drawing first upon Husserl's ideas about phenomenology. In the next chapter the data interpretation takes an alternate perspective by reviewing the 'lived professional experiences' of the participants through the lens of Heidegger's concepts of 'being', 'being with' and 'time and space'. Through this perspective and deeper meditation, I have been able to further explore insights beyond initial observations. These insights helped me to synthesise ideas to outline the impact of integrating mindfulness into their personal and professional lives in ways that were authentic for them as individuals. My personal experiences and biases may have been reflected more in this deeper mediation phase. In addition, I have been able to extend these insights to consider the impact of integrating mindfulness into initial teacher education programmes at my own university and in the wider world.

Chapter 7

Synthesis of the data: My perceptions

- 7. 1 Key ideas from Heideggerian philosophy
- 7. 2 'Being' (Approaching)
- 7.3 Approaching understanding (poem)
- 7.4 'Being with' (Continuing in the profession)
- 7.5 Being with (poem)
- 7.6 'Time' and 'space' to approach authenticity
- 7.7 Time and space (poem)
- 7.8 Concluding Remarks

7.1 Key ideas from Heideggerian philosophy

In chapter 4 (pages 89-93), I looked closely at Husserl's and Heidegger's different perspectives of phenomenology. In chapter 6, I drew upon the Husserlian view of observation to deconstruct data to unravel a description of the phenomenon of the lived experience of beginning teachers who use mindfulness. Following the concentrated, detailed description, I included some initial insights from my interpretation. In this chapter, I have discussed insights revealed from those descriptions in chapter 6.

My purpose was to move beyond my initial thoughts, and to attempt to synthesise my insights about the participants' experiences to describe the essence of the phenomenon from the perspective of the 'being'. This part of the interpretation process considers the significance of the implications of 'what' the participants experienced. The concepts of 'being', 'being with' and 'time and space', part of Heidegger's philosophy of phenomenological study, provided the lens to review the 'lived professional experiences' of the participants in chapter 7 to outline the 'truth' for these participants.

By incorporating Heidegger's ideas about phenomenological research, this data interpretation involved 'sitting with' the data to try to uncover what 'being' is; what is the human essence that makes up the participants' experience and comes from the larger picture behind their descriptions (Heidegger, 1953/1996). Specifically, in this case, 'being' is seen from the perspective of the beginning teacher participants. These 'beings' described their perceptions of 'being with' the phenomenon of mindfulness over time and in their particular space or context. What was the 'lived professional

experience' in terms of 'being' for *these* participants? What have we learnt about their 'being' in *their* 'lived professional experiences' as detailed in the journals and interview transcripts?

The following discussion is my interpretation of the 'lived experiences' with the phenomenon of mindfulness in the actual contexts of the participants over time, and not a step by step account of the details of the experience (Heidegger, 1971/2001). From the deeper reflection required for this chapter, I was able to extend the observations from chapter 6 to insights on the benefits of mindfulness for beginning teachers. The insights, illuminated during the deeper part or second half of the meditation, are explained here, and were influenced by my own personal observations and experiences. In turn, my own mindfulness practice was greatly influenced by those insights.

Figure 3 below depicts these subsequent views using a Heideggerian lens.

Figure 3 Subsequent views for data interpretation



7.2 'Being' (Approaching)

Initially, the participants focused on their classroom teaching and getting to know their children. In 'being' a teacher who engages with mindfulness, participants initiated

personal and classroom practices, and noticed individual and group dynamics and results. They knew the 'what' and 'how' of mindfulness practice but were still unsure whether to trust the process; whether there would (or would not) be positive results for themselves or their students.

All the participants realised that there was much more to learn about being a teacher and particularly a teacher who used mindful practices. They were building their knowledge base using mindfulness personally and professionally. From this knowledge base, the participants began to feel a sense of authority as a 'being'; a teacher using mindfulness. They experienced living and knowing what it meant to 'be a mindful teacher' in their individual contexts, and continued to add to their knowledge base as they understood that there would always be more to learn.

Robert tried to incorporate many mindfulness practices in his teaching in the second year as can be noted in this extract from his final interview (April 2011). What is also evidenced here is his reflection on the previous year to enhance his experience in his second year of teaching.

Researcher: Also in your journals and interviews, I noted your total focus on the classroom ---the kids are number one for you. Tell me about using mindfulness for them this term.

Robert: I used some of the things that I did last year. This year is more focussed – last year they were a bit too young, I didn't label it or anything...we were just trying to focus ourselves so we don't distract other people. I have put in classroom management kind of stuff...fruit breaks, with music so no talking; they also focus on what they are doing at the moment. I did get your scripts, I adapt them a bit and ask them about areas they feel and bring in oral language; we've been doing environment things outside, focusing and focusing on our senses as well so touch, taste and everything. We sketch that as well. Writing, art---quite a bit.

Researcher: And how are they responding.

Robert: They love it; they always want to go for environmental writing I think because I give them a choice. We talk through about our senses so discuss differences we perceive in our senses. When they are describing things, they use touch instead of look, so now they are looking to speak about the correct senses...Looking at ourselves a lot. It worked well with mindfulness. They did self interviews that kind of helped us.

(Robert, final interview, April 2011)

After eagerly practicing mindfulness with the children and describing the benefits over a period of time, all participants wanted to learn more exercises to use personally and with their children. They were particularly interested in more information about why and how mindfulness works including the neurological explanations. Being able to identify specific benefits for themselves and for their children was also a priority. I expressed to them that even after several years of using mindfulness I, too, continued to both decide to add to my knowledge base and to actually do so.

Building this knowledge reinforced their sense of authority in the classroom, in terms of knowing what to teach and how to teach, while responding rather than reacting to children (McCown, Reibel, & Micozzi, 2010). Participants noted that they were not always successful in engaging in the practices themselves or in introducing them to the children. Initially, when working with the children, a few children indicated their disinterest by behaving inappropriately or trying to distract others. This left the participants unsure of how to proceed. They persevered for those children who were engaged and, after the first few times, most children actually engaged in the exercises. I assured them that when I introduced mindfulness practices to students, I had a similar experience. After the first week of mindful practices, sometimes the children themselves reminded the teachers to start the practices, or offered other ways to incorporate what they believed they were experiencing into the classroom environment and activities.

When I first introduced the participants to the mindfulness strategies, they responded like children learning mathematics; they were 'using materials' (deliberate mindfulness

practices) and needed very clear and detailed guidance. Gradually, the participants began to 'image' or visualise using the strategies without my guidance, and to visualise different ways to use the same strategies or to adapt them. This showed a maturity in their teaching, appropriate for their own context, and the confidence to be so creative. This same process of starting with materials and then moving to 'imaging' is echoed in the Numeracy Programme promoted by the Ministry of Education in New Zealand (Ministry of Education, 2008). The changes in experiences and behaviours resulted in the participants re-imaging or re-perceiving different events during the day using these innovative skills. I recalled how I followed a similar growth journey when incorporating mindfulness in my teaching.

The process of re-perceiving when using mindfulness practice was discussed in the findings of a quantitative study conducted by Carmody, Baer, Lykins, Olendzki (2009). They discussed the importance of applying this re-perceiving process with mindfulness to improve an individual's state of 'being', as mindfulness becomes a trait practiced all the time rather than a 'state' engaged in at a particular moment (Carmody et al., 2009).

Participants attempted to 're-perceive' their 'being' by adding mindfulness to their pedagogical practices and to their individual daily routine. At a practical level, all participants reported that, at one time or another, they had trouble fitting mindfulness practices into their day. Besides coping with the busyness of the classroom and all the required preparation, they had other commitments and demands in their lives as young professionals. The participants persevered and 'reperceived' their own being in order to engage in practice more regularly and also adapted the exercises to fit their own lifestyle and context.

The 'busyness', experienced by these beginning teachers, is an issue for many teachers. Viola (2009) highlighted the value of mindfulness for teachers to cope with the pressures of the classroom. This was reflected in the participants' initial journal entries that mostly discussed classroom practice, and how they were able to be mindful or not during their teaching day, and in their own personal lives. As the study progressed, participants found they were able to identify their increased use of

'effortless' mindfulness in day to day events such as driving. Mindfulness was slowly becoming part of their 'being' in the classroom, as they engaged in more deliberate practice to build skills to cope with pressures and demands in both their personal and professional lives. In the concentrative part of meditation, I noted that the participants found ways to engage in regular practice even though they were experiencing the 'busyness' of first year teachers. Then, in the second half, deeper meditation, I drew, from this observation, the insight that the participants had incorporated mindfulness as part of their 'being'.

In the beginning of the data collection process, four of the five participants focused on classroom practice more than on themselves personally. Laura and Robert focused initially on the children giggling and not being able to complete the practices. Patricia was unsure how to use mindfulness with her students. Valerie felt compelled to teach the curriculum using the pedagogy of her school until she knew enough about the context to try any mindfulness exercises. From the beginning, the fifth participant, Debbie, who had previously sought out 'self-help' programs and was writing a blog of her experiences, spoke directly about her own experiences with mindfulness. She summarised the stress of not 'being in the moment', and what it revealed about herself. Mindfulness was helping to make a difference, but she still had to work on it:

A lot of times I'm too busy thinking about things that are ahead of me rather than what is here and appreciating what I have. When I think about it, I can bring myself back to it, back to the moment, but I think all I did was I was thinking too much of the past, now I have fast forwarded and thinking too much about the future. I'm not really sure. I'm still trying to find that balance.

(Debbie, second interview, November 2010)

Once participants were 'being with' the mindfulness practice themselves, they discovered that not only was more revealed about their personal and professional experiences, but their classroom practice improved and their stress levels reduced. This included their own personal stress levels, particularly after the second term of the school year. I noticed also that participants were 'being with' the practices more, as participants felt more able to cope with the stress of meeting children's needs and

fulfilling curriculum requirements. This insight illuminated the importance of 'being with' the practices fully, not just doing them mindlessly (Kabat-Zinn, 2009). In addition, from both my own experience and from reviewing the participants' journals and interview transcripts, I found that once the students in the classroom felt more comfortable with the practices, everyone in the classroom was able to 'be with' the practice in their own way, and was more likely to experience the potential benefits. This included the fact that students were able to 'opt out' of participating; though few did.

As the study progressed, the participants felt more confident professionally and were more willing to try new activities within the classroom. They still questioned themselves, but from a more secure foundation. All became more involved in personal mindfulness practice as the year went by, which they indicated, resulted in being more mindful personally and within the classroom in effortless mindfulness (Siegel, 2010).

Valerie summarised the value of mindfulness for her as a beginning teacher, noting that teachers should focus mindfully on their interactions with students. Gibbs (2006) described the importance of being aware of these interactions in building relationships with students as a critical step for a teacher developing authenticity in the profession. The benefits of these mindful interactions would be seen in a greater ability to more immediately and accurately assess children's needs, and then to plan and teach to more effectively meet those needs, rather than spending time on paperwork. For Valerie, that was what it was to be an effective teacher. This corroborates the earlier insight that the longer each participant meditated, the more natural it felt to incorporate mindfulness in the classroom; it became embedded in their daily planning and practice.

Although this study focused on only five teachers in very specific contexts, each found that as mindfulness was more a part of their 'being', they were more aware of their children, the classroom, what they were teaching, and why and how they were teaching a particular concept. Upon reading the interpretation of the participants' experiences, other teachers might see mindfulness as a way for a 'being' (teacher) to be, approaching the possibility of being more aware of and present with the children and classroom events.

7.3 Approaching understanding (poem)

Discovering what it is to 'be'
Observing the actions unfold
Collecting information
Thinking, thinking too much
Lying in bed, dreaming
Sitting with and meditating....what else is there?
Reaching out to find an answer

Approaching knowing what it means to be; reacting and then responding

Coming closer, closer, closer

What is that? Who is that?

Can it be...Is it something else?

Being

7.4 'Being with' (Continuing in the profession)

The data interpretation has painted a picture of what a 'being' using mindfulness experiences. In the process, I realised that we can only approach responses to this question in these particular contexts; there will always be more questions. 'Being with' specific mindfulness exercises assisted me in moving closer to interpreting the 'lived experience' of these beginning teachers.

The insight part of the interpretive process, which is similar to the practice of sitting meditation, led me to an understanding of the concept of 'being with' the teaching profession. 'Being with' the phenomenon in this study, meant 'being with' the profession (continuing their careers as teachers) while using mindfulness. This realisation became clear for participants in their everyday and classroom experiences. During the insight meditation, I discovered that these mindfulness exercises supported the participants to feel more comfortable 'being with' the teaching profession and more secure in their teacher self efficacy. Likewise I felt more secure in my own teaching after using mindfulness.

During another specific mindfulness exercise, the body scan, participants were guided through 'being with' the breath and then "not thinking about your toes, but just being with your toes" in the soft focus of experiencing, rather than heavy intense concentrated thinking about their toes or whatever body part they were 'being with' (May, 2005, CD script). The participants can 'image' the parts of the body without over-thinking but also can start to 'be with' what they are discovering about themselves in their own conscious minds (Heidegger, 1953/1996). The participants' improved comfort levels in using the mindfulness exercises for themselves was an important outcome of the data analysis; it could also be that it gets easier with practice. In the excerpt below from an interview with Patricia, she talked about 'being with' the practices, and noticing her feelings and reactions during and after engaging with the practice.

Researcher: What about when you are practicing? Have you noticed that you are thinking about what you are doing? Or are you able to just do it?

Patricia: I do it with my chiropractic exercises. I don't feel like I am there. I start focussing on my breath and do the body scan but I don't even notice that I am doing the chiropractic exercise which is uncomfortable for most people. I don't know how to describe the feeling, but it is quite nice. I always feel refreshed after it. That's why we do it in Maori. I feel really refreshed except for that one time in my journal when I started thinking about my grandmother and I didn't want to come back. I was so upset. I totally didn't expect to go there.

(Patricia, second interview, October 2010)

Participants were also able to 'be with' or connect more directly with the children rather than simply observing the experience of being with them. By simply 'being with' the children or 'being with' the experience of mindfulness, the participants felt more self-assured as well as more authoritative, knowledgeable and confident in what they were teaching and how to meet individual needs.

Their journals and interview transcripts also noted that they were experiencing more authority and confidence in their own personal development through mindfulness. In this way, participants experienced more directly their roles as teachers, and teachers using mindfulness in the classroom and personally. They soon discovered that the goal was not how long they individually practiced or how well; rather that they would continue the practice on a regular basis. 'Being with' mindfulness is a continuous, ongoing process rather than doing it in exactly the 'right' way (McCown, Reibel, & Micozzi, 2010). Participants were able to deconstruct their experiences to reflect upon how 'striving for perfection' had affected their 'being'. From this data, it was revealed that without expressing that they had stopped worrying about being perfect in practice, the participants lived their lives in a way that indicated that they would continue to use the practices after the research project concluded.

By 'being with', the participants were able to focus on the group skills and the needs of the individual students, but most importantly, their own needs, which McCown, Reibel, and Micozzi (2010) pointed out was important for those teaching mindfulness. Participants were caring for themselves and for children in their classes, as everyone

began to be more comfortable about how to 'be' during mindfulness, so engaged more deeply in the practices.

After engaging more deeply in practice, Valerie discovered that she was dedicating her mindfulness practice to certain people or children in the class, filling her meditation with compassion for others. Other participants were able to describe the physical sensations in their bodies during the mindfulness practices and how they felt emotionally. All participants noted reduced stress and an overall general positive outlook after the second term of school and after more regular practice.

They also noticed that the children began to ask to do the exercises and were generally calmer and more aware of their own feelings. Debbie, as mentioned in chapter 6, was pleased with a mindfulness lesson when the children in her class became very aware of their own noise levels (intrapersonal awareness), but they also noticed changes in her mood and offered her support when needed (interpersonal awareness). Intrapersonal and interpersonal awareness are developed through mindfulness with the development of the pre-frontal cortex; this is critical for emotion regulation in young children (Diamond, 2002).

Robert indicated that the children would request mindfulness activities if he had forgotten. Robert also noted that the children began to use skills learned during mindfulness exercises in other curriculum areas (really 'noticing' the differences in the fabrics they were studying), or added their own ideas (sending positive thoughts and feelings to the people of Christchurch after the 2010/2011 earthquakes), or applied the information to explain their learning in other areas (noticing the breath and then realising long, slow breaths were the most efficient for running). Transferring knowledge from one activity to another is an important skill for children to learn often referred to as 'generalisation' (Snowman, Dobozy, Scevak, Bryer, Bartlett, & Biehler, 2009; Krause, Bochner, Duchesne, & McMaugh, 2010). Developing this skill of 'generalisation' was just one example of how integrating mindfulness enhanced their teaching and the children's progress. During insight meditation on their reflections focusing on their teaching practice, I began to see more clearly how mindfulness might be integrated with the curriculum in both primary schools and in teacher training. I

also adapted and enhanced the way I introduced mindfulness in my lectures, including discussions of pedagogical connections with mindfulness.

The participants' success in the classroom enhanced their personal confidence and helped them to feel more able to and more enthusiastic about continuing to work within the profession. Debbie chose, after one year and one term of teaching, to immerse herself in a year of study. She knows that she will return to teach, using mindfulness, but also with a greater knowledge of Montessori education. Valerie stopped feeling like she was on automatic pilot, simply dealing with behaviour management, and was actually teaching children.

They were 'being with' mindfulness; being mindful. The skills of mindfulness were applied throughout the day. Robert described this 'being with' as:

You just feel relaxed. No control over your body; just your fingers are moving. Thoughts are going on at another level.

(Robert, second interview, October 2010)

This can be a very productive time generally, except that I was concerned that Robert was engaging in mindful meditation while driving the car. He assured me that he hasn't crashed yet!

Finding the time and space for regular mindfulness practice enhanced the participant's embodied understanding of their professional experience, and their desire to continue 'being with' the profession or perceiving themselves as a 'being' who teaches. Next in this phase of data interpretation, I came to see how, by finding time and space to engage with mindfulness, the participants re-discovered their authenticity as teachers and professionals. Gibbs (2006) described the concept of authentic teacher identity as "an inner knowing of being true to oneself in who we are, associated with a presence of contentment, being at ease, or inner peace in being meaningfully connected with self in time and place" (p. 18). To be an authentic teacher, the individual teacher reflects upon their own identity and integrity. Each authentic teacher asks: "Who is the 'self' who teaches?" (Palmer, 2007, p. 4). Each participant, through reflection, discovered their own identity as an authentic professional by 'being with' their own beliefs and identity as 'self'. By 'being with' themselves and mindfulness, these

teachers were embarking on the journey of understanding their 'selves' as teachers; experiencing their authenticity.

By building regular mindfulness practice, 'being with' mindfulness, all participants began to find that they were not only taking time for mindfulness exercises but also 'noticing and completely experiencing (an object or subject) as it is, in the particular moment, with compassion, curiosity and openness (non-judgement)' in their day to day lives. (Working definition for mindfulness on page 44 in chapter 2.) Mindfulness supported their personal and professional development as they continued in the teaching profession.

7.5 Being with (poem)

A physical object
An image
And then imag(e)ing
Feeling it within the body and within the mind
And simultaneously not thinking about it
Running so hard to stop thinking but to

Soft focus coming in and out Knowing but not knowing Perhaps time and space

feel the response

7.6 'Time' and 'space' to approach authenticity

Over time, experiences, feelings and beliefs evolve, not in the sense of spending a certain number of minutes in practice or engaged in a phenomenon, but rather through the passing of time (Heidegger, 1953/1996). 'Time', as the expanse of time an individual lives from birth to the present moment is filled with experiences that influence a 'being's' feelings and judgements. For Robert, he spent many hours with his parents in meditation and this influenced his mindfulness practice.

You feel the warmth going through your body. It may just be psychological, but I feel it. Getting in to my head. Flame and heat through my body. I've been doing that for awhile with my mom and dad. Sometimes we have a family time and sometimes I do it on my own. I've been doing it for years and years.

(Robert, second interview, October, 2010)

Robert's family religious practices embodied his actions in his daily life and in his teaching through calmness and clarity in making decisions within his classroom and for himself. Aware of and regularly practicing a number of mindfulness exercises, Robert summarised the goal of his practice very succinctly as: "just me and my breath".

(Robert, second interview, October 2010)

For Patricia and Valerie, they had experienced various forms of contemplative practice in their study of Steiner education. Debbie had engaged in a number of personal development courses and Laura was seeking ways to cope with teaching and three young children. These experiences over time and other life events unique to each individual participant shaped the information shared in the journals and interviews. And for me, the 'time' spent in mindful practice and in teaching also influenced my perceptions of their lived experiences.

This idea of 'time' as the time from experiences that shape our perceptions also refers to the experience of mindfulness as a process not something to complete in a specified time. Over time, the participants practiced mindful exercises, and developed their ability to notice what was happening for them, when engaged with this phenomenon

of mindfulness. Through this passage of time, a space opened within each 'being' to infuse the experience within the body; sensations to enrich the 'being' in an embodied experience and then to describe that experience.

Patricia noticed that she tried a lot of different mindfulness practices, even though she often got lost in thought rather than staying in the moment. The more she practiced herself, the more authentic she felt in using those practices with the children. The most profound experience for her came with focusing on the breath, and becoming aware of the connection of the breath to her mind/body and to others. Being sick at one stage reminded her that we do take our breath and our bodies for granted, and how much more we understand about ourselves when we do not take our breath for granted.

When we stop breathing, we stop living. The importance of correct breathing can not be overestimated, yet it is something I do not consciously do. But with my chest infection over the past few weeks, I have noticed that my breathing is something that is difficult and laboured. (Patricia, journal entry, August 2010)

Laura as a busy mother of three children was conscious of these concepts of 'time' and 'space'; she realised that unless she deliberately got up before the children, she would not be able to find time to engage in mindfulness practice. As noted in my introduction of Laura on page 122, she set aside early morning quiet time in a corner for herself, and this became a daily ritual that she cherished. Cameron (1995) and Tolle (2004) and many others discussed the importance of a still, quiet time to meditate and reflect. Laura commented that she was aware of negative feelings and sensations in her mind and body if she had not taken this time for herself, and conversely that she found herself returning in her mind to her morning quiet time through the day, to rediscover stillness and calmness.

I've set up a little corner for myself. And then every morning before I start my day...I know my boys get up very early so I get up a little bit earlier than that and I just sit into quiet, plan my day. I just breathe. Then I plan out my day and see how it will go in my mind's eye and if there is anything that changes throughout the day, I know I'll be able to cope with it. But, that's

what I would do. I try to keep thinking of what you said, "being in the moment". So I keep bringing that back to how I am feeling at that particular point in time and just work back from there.

(Laura, first interview, June 2010)

Debbie experimented with all of the practices, but only after feeling she 'really needed it'. And then she discovered that it was important to engage in practice daily so that, when she 'really needed it', clarity was much easier to find. From then, she practiced the different exercises regularly, because after all, she stated, it was important to live all your experiences fully in her June 2010 blog entitled: Journée.

Following their regular mindfulness practice, 'being' a teacher who practices mindfulness, and a teacher 'being with' mindfulness and his or her students, participants re-discovered their authenticity as teachers. McCown, Reibel & Micozzi (2010) acknowledged that a mindful teacher takes comfort in the knowledge that what needs to happen for the students in a class will happen, as the teacher is aware, in the moment, and authentic. Participants, toward the end of the study, started to accept this notion. We discussed that by simply 'being' themselves, and being mindful in the 'space' of their classrooms, that they would more likely be aware of students' needs, and find ways to meet those needs. Palmer (2007) highlighted the importance of reflecting to find the teaching methods that work for you so that you are authentic; students then respond to the individual as a teacher in a positive way and to their teaching.

Engaging in mindfulness encouraged participants to 'notice' their own actions and feelings more, including their own pedagogical practices, in order to respond to the moment by moment changes in the classroom. When focusing on the participants' reflective processes, this insight became more clear to me. When engaging in mindfulness meditation, the participants were able to see more clearly what they felt was important for the students within their classroom that resonated with their personal philosophy of teaching. Then, when planning mindfully (in the moment, open to new thoughts and ideas, non-judgmental of any of their own ideas), they

organised activities that met the children's needs and aligned with their own philosophy.

Participants identified how mindfulness became a state or way of being throughout the day, not just when they were *doing* the mindful exercises deliberately. They were incorporating mindfulness in their day to day lives as it started to become a 'trait' or way of being all the time. This noticing was exciting for participants, who discovered that this 'effortless' mindfulness throughout the day brought an increased ability to respond rather than react to children. They were able to assess individual children's needs and abilities more confidently and accurately. They also noticed that by being more present-moment focused they were able to meet these moment by moment needs, as well as longer term needs related to academic and social and emotional development. Their mindfulness practices had strengthened over the course of the study both personally and professionally, and were illustrated by the following examples:

Patricia valued the mindfulness practices which took her 'out of her thoughts' so she could just be. A mindful activity during lunch revitalised her for the afternoon classes.

(Patricia, final interview, April 2011)

Laura noted that in her relief teaching, she could spend a short time with a class and know exactly what mindfulness activity would best suit the students. She uses mindful walking for boys who need extra time to 'calm' down.

(Laura, second interview, April 2011)

Debbie found herself thinking about her impending exciting study adventure rather than focusing on the children and would consciously bring herself back to the child-centred moment.

(Debbie, final interview, April 2011)

Valerie found she was calmer and more present during the day whereas she acted unconsciously before. Her mind was also clearer,

although she was not sure if that was the result of her mindfulness practice alone or because she had just given up coffee!

(Valerie, second interview, April 2011)

Robert found that although he meditated at home with his family; that was personal. Mindfulness meditation helped him at work. It helped him relax so that he could focus his energy on the children.

(Robert, final interview, April 2011)

In my own teaching, I found when I engaged in mindfulness practices, my ability to be mindful throughout the day improved significantly. The discovery of the importance of daily practice and using mindfulness all the time by the participants, aligned with Kabat-Zinn's recommendation that to achieve the maximum benefit from mindfulness, practitioners should engage in deliberate, daily specific exercises, and effortless mindfulness in day to day moments (2005). Over time, and certainly not immediately, participants found 'being with' mindfulness helped them to feel more confident in their knowledge, more connected with students, and able to teach in their 'space' in ways that complemented their personal philosophies of teaching.

My analysis and contemplation indicated that the participants demonstrated the three principles of mindful teachers: "authority, authenticity and friendliness" (McCown, Reibel & Micozzi, 2010, p. 9) They were able to demonstrate this authenticity over time and space, as noted in my descriptions of their practice. These characteristics of the effective teacher of mindfulness could be applied to benefit all teaching for teachers who find resonance with this way of thinking.

From the participants' experiences with mindfulness and my own, it appears that mindfulness affects classroom practice and personal development in a cyclical fashion. When the participants engaged in mindfulness practice through making the time for daily exercises and making 'space' to more deeply explore mindfulness, they demonstrated the characteristics of mindful teachers: their confidence in the classroom improved, they felt more knowledgeable giving them a greater authority to teach, were more aware of students so built stronger relationships, and felt more

professionally authentic. As they developed these skills of a mindful teacher, they continued to engage in more mindfulness daily practice which then gave them more confidence in the classroom and the cycle continued.

7.7 Time and space (poem)

Too busy
Too many interruptions
Too many demands

Can't sleep

I need it

Falling awake

My time

Continuing

Being

Being with

Noticing

My time, my space

Me, authentically me

Yes!

7.8 Concluding Remarks

By drawing upon Heidegger's perceptions of 'being', 'being with' and 'time and space', a deeper reflective view of the 'lived experiences' of the participants emerged. Conclusions about the use of and potential benefits of mindfulness for teachers were revealed during this second phase of the meditation data interpretation process. Though unique to each participant, these insights reflected how these beginning teachers had developed the qualities of effective teachers of mindfulness or mindful teachers, discussed by McCown, Reibel and Micozzi (2010). The variety of lived experiences of the participants in this study might, therefore resonate with other teachers and teacher educators. These insights were also supplemented by insights from my own experiences as a teacher of mindfulness, which Heidegger (1962/1985) suggested would be impossible to separate from the data analysis and would, in fact, enhance it.

Although many of my conclusions here might appear similar to those noted in chapter 6, this chapter illuminated more clearly the impact on the beginning teachers, their desired to continue in the profession, their maturity in their teaching practice, and their own authenticity as teachers as revealed in the second phase of the meditation interpretation process. Individual readers may find meaning in specific aspects of the interpretation in this chapter, or resonance with the approach. By looking closely at themselves and their practices, the participants revealed their authenticity as teachers. The reflections of the participants in their journals and interviews showed their belief in the value of mindfulness in their personal and professional lives, and the importance of daily practice of mindfulness exercises, and being 'mindful' in each new moment.

Chapter 8

Deconstructing this study of mindfulness

- 8.1 Introduction
- 8.2 In the 'play': Findings and implications of this research
- 8.3 Limitations of this research
- 8.4 Critiquing the methodology
- 8.5 Mindfulness as methodology-an epistemology of love
- 8.6 Using hermeneutics to see the phenomenon as something else

8.1 Introduction

Gadamer (1975/1985) discussed the value of the 'play' of the hermeneutic circle of the interpretation process as the participants and the researcher, as well as the researcher and the data, 'play' together in a back and forth deconstruction and re-construction of data to describe the phenomenon.

In this chapter, I look at the 'play' to discuss the findings and the implications of the research. I include a review of the limitations of this research; followed by a critique of the methodology used.

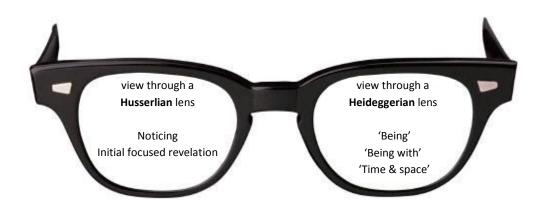
8.2 In the 'play': Findings and implications of this research

In chapter 6, I presented a distillation of the data to describe the participants' experiences with mindfulness using a Husserlian view of phenomenology complemented by *focused concentration* meditation. These initial revelations were followed in chapter 7 by a synthesis of insights from key Heideggerian concepts of phenomenology and *insight* meditation to illustrate the participants' 'lived experiences' and the perceived impacts of the usefulness of mindfulness in their lives. The interpretation outlined was a result of the interaction of the researcher with the participants, together with the interaction between the researcher and the text of the journal entries, interview transcripts and the beginning teachers' experiences. I needed to read, 'sit with' the data, reflect and meditate, re-read, discuss initial reactions with my supervisor and the participants, 'sit' again, and reflect again.

Similar conclusions were drawn in both data interpretation chapters: all participants noted the value of mindfulness in their professional lives. A distinct improvement in their well-being was noted in Term 2, and continued thereafter, once they re-engaged

with the mindfulness practices. This supported their decisions to remain in the profession. Figure 4 below shows that the interpretation of the data used both a Husserlian (chapter 6) and a Heideggerian (chapter 7) lens to arrive at a similar result.

Figure 4 View through both lenses



The findings and implications of this research fell into five main categories which I have discussed in this chapter:

- 1. stressful periods can trigger first time use of mindfulness strategies
- 2. the participants developing acceptance of themselves as practitioners
- 3. the value of professional dialogue
- 4. the development of characteristics of mindful teachers including those noted by McCown, Reibel, and Micozzi (2010) who discussed the importance of authority (knowledge of subject matter and how to teacher); authenticity (being true to yourself in your teaching; and friendliness (being aware of students and their actions and building relationships). These characteristics were introduced in chapter 6 on page 159.
- 5. the potential of mindfulness in both teacher education and professional development programmes for stress reduction and as a pedagogical tool Stressful periods can trigger first time engagement with mindfulness practices
 The beginning teachers in this study were no different than most beginning teachers.
 They experienced significant stress during the first year of teaching. The impact of the

stress generally seemed to be at its worst in Term 2 for several reasons. First, student assessments were completed in Term 1, and routines had been set so now the teachers were expected to deliver a quality teaching programme. The participants were anxious to meet the needs of all the children in their classes. The need to 'get it right' coupled with increased expectations from school administration, raised their stress levels. Many children got winter colds during Term 2 as well. As a result, three participants were sick during that time of the study.

Although they knew the mindfulness practices before then, it was at this time of significant stress that Patricia, Debbie and Valerie felt they 'needed' to use them. Several reflected during interviews, that perhaps, if they had been using mindfulness regularly all along, the demands and expectations in Term 2 may not have been so overwhelming. This indicates that even if individuals realise the advantages of being engaged in mindful practice before pressure and anxiety take over, it sometimes requires a difficult period to incentivise for individuals to personally see the value of daily mindfulness practice.

Developing acceptance of themselves as practitioners

All of the participants were curious about how the quality of their mindful practice and amount of time they spent on it compared to others in the study and to mindfulness practitioners in general. Kornfeld (2009) stated that in addition to the difficulty of finding time and space, mindfulness practitioners, particularly in the beginning, have difficulty with being non-judgemental and criticise their own practice. Beginners often tell themselves that they are not doing it properly, or that they could never practice correctly or as well as others (Kornfeld, 2009). As time passed, the participants grew to accept the value of whatever they were doing for mindfulness practice, and that the frequency was appropriate for them as individuals at that point in time; without judging or comparing themselves to others. Four of the participants were also encouraged by their encounters with others whom they knew who were also engaging in activities that resembled mindfulness practices.

After the participants introduced the practices to the children in their classrooms and noted benefits, then the participants were more encouraged to continue their own practice. A cycle continued where they would see personal benefits and then find

more ways to incorporate the practices into their teaching to enrich the curriculum which then encouraged them to meditate more.

The value of collegial dialogue

Professional dialogue was one by-product of the interviews in this research. During the interviews, the participants and I exchanged information about mindfulness, its role in our lives and in our classroom practice. Although I was the researcher, there were moments in the interviews, when I took the role of 'mentor' as described by the New Zealand Teachers Council (2011):

- providing support to the Provisionally Registered Teacher (PRT)/beginning
 teacher) in their new role as a teacher
- facilitating learning conversations that challenge and support them and
- listening to and helping the PRT to solve problems (p. 10).

From this interchange of dialogue, I learned about their lived experiences within the classroom, and could also provide support to mentor them in mindfulness. By being non-judgemental myself of what they were disclosing to me, I was able to provide additional pedagogical support if needed and requested by participants.

It would be helpful for teachers to join a mindfulness meditation group, or perhaps try to establish one within their own school or with other colleagues. In this way, they would not only engage in practice together but perhaps be able to collaborate on ways to include mindfulness activities within the classroom. Collegial dialogue stimulates improvements in classroom curriculum and delivery (Marsh, 2008) and promotes teacher learning (Mezirow, Taylor & Associates, 2009). Collegial dialogue about the phenomenon of classroom experience could be one aspect of Gadamer's 'play', the interpretive circle, in the process of reviewing information to describe the 'lived experiences' of a new group of participants.

As they engaged in 'deliberate' mindfulness practice more regularly, all the participants were more able to identify using mindfulness in their everyday experiences personally and professionally, such as answering children's questions, responding to conflicts between children or setting up the classroom in the morning. It

could enhance their classroom practice using mindfulness more if they had the opportunity to discuss with colleagues ways to integrate mindfulness.

During the final interviews, participants offered advice to new teachers about engaging in a regular practice, and also identified ways that teachers could use mindfulness in the classroom. They claimed that their ability to focus on and be aware of the needs of the children had improved. As a result, they were able to provide suitable teacher responses more immediately to meet those needs. This signalled the importance for teachers to be in the moment with children, to identify and address their needs. Although this is not a new idea, mindfulness, however, appears to have assisted these teachers in providing what children needed.

Displaying characteristics of mindful teachers

In considering learners' needs, mindful teachers, who are more observant and able to see things in new ways, are more likely to be able to notice how each learner interacts with new information and discovers more about individual learning needs (Brown & Langer, 1990). All participants revealed sincere, deep connections with their students. Davis et al. (2000) reinforced this idea noting that mindfully aware teachers examine the reactions of students to questions and topics to plan next steps. This was highlighted by the participants as they noticed their improved ability to anticipate students' needs, answer questions and develop and modify classroom lessons. In this way, mindfulness was incorporated in classroom programming to improve lesson planning and delivery, as well as to enhance the teacher's ability to meet student needs. In addition, principles of mindfulness can be applied to the actual learning process. Teachers help students develop mindfulness skills guiding them to notice what they have observed and to be flexible in their responses (Davis et al., 2000).

The participants focused intensely on their own roles within the classroom and how their roles changed over the course of the year. Through identifying and discussing their actions, the participants showed a growing ability to remain true to their own beliefs in the classroom. They incorporated mindfulness where they felt it appropriate to their individual contexts. This experience, I believe, supported their journey to authenticity, and helped build their personal and professional confidence, which

reduced the risk that they would leave the profession early. Gibbs (2006) also believed in the importance of developing authenticity, which increases confidence in one's abilities and leads to self efficacy; both being important for teacher satisfaction.

Journal writing and interviews created a space where, over time, the participants were able to reflect on their own practice. They experienced and described the positive personal and professional impacts of mindfulness. This enabled them to increase confidence and self efficacy. Having their own mindful practice enhanced their ability to include mindfulness in social emotional curriculum (Kabat-Zinn, 2005). Where possible, it is important to integrate core mindfulness practices throughout the day (Hawn Foundation, 2011). This is enhanced significantly by teaching students about the neuroscience of the brain and the positive impacts of mindfulness, as well as by finding links to curriculum areas such as science (Hawn Foundation, 2011). All participants integrated mindfulness into their classroom lessons and pedagogical practices. Valerie, Patricia and Robert were curious about the emerging brain research and in particular, the benefits of incorporating the practice in the classroom.

Mezirow, Taylor and Associates (2009) discussed the importance of reflection in transformational learning for teachers as they develop their own pedagogy and teaching philosophy. The mindfulness exercises practiced by the participants in this study, offered time and space for reflection, and provided them an opportunity to consider personal as well as professional benefits. Participants pondered and reflected upon their own development as teachers and as individuals. This critical reflection needs to include challenging personal assumptions, feelings and perceptions (Mezirow, Taylor & Associates, 2009). Through journals and interviews, participants looked closely at their feelings alongside their perceptions of the classroom, and the role of mindfulness in their teaching practice.

Critical reflection that enables transformation is enhanced by "engaging other ways of knowing" (Mezirow, Taylor & Associates, 2009, p. 10). Mindfulness provided the participants in this study with an epistemological template for coming to know about themselves and their practice. Participants were able to reflect upon their own

context, practice, feelings and assumptions during the study. As a result, the findings show that participants improved their teaching practice and confidence in the classroom. Therefore inclusion of mindfulness in teacher education and professional development might provide a platform for transformational change for the profession, particularly those starting out in it. This reflects the research on contemplative education in tertiary programmes cited in the literature review in chapter 3, particularly the work in teacher education of:

- Kozik-Rosabal (2001) whose student teachers improved their teaching practice by reflecting mindfully on the goals they wanted to achieve and
- Soloway et al. (2010) in which participants identified reduced stress after using mindfulness.

Cranton & Carusetta (2004) also wrote about the importance of this reflective process to support individuals as they move towards authenticity in the classroom. They noted that authenticity involves relational connectedness: personally, with others (the children in the classroom), and with the subject. The participants in this study, through mindfulness practice, and then also in reflection in the journals and interviews, had opportunity to think about these interconnections in their teaching, and the findings indicated that engaging in mindfulness had a cyclical effect on improving the skills of the mindful teacher outlined by McCown et al. (2010) including friendliness or connecting with students, which built their confidence and then they engaged in more mindfulness practice, and the cycle continued.

The participants noted the importance of regular routine and setting aside 'time' and 'space' for their mindfulness practice. Journals and interview transcripts included several examples of their increased attention and focus which particularly assisted them in meeting children's needs. Over the year of the study, participants found that they were using mindfulness more in their day to day activities sometimes effortlessly and at other times, they found they had to make a considered and focused effort. Benefits related to confidence building, reflective practice and stress reduction featured in the data as well.

At the end of the first year of teaching, all participants expressed the desire to continue in their current teaching positions, seek a full time position, or to continue with additional study and then return to the classroom. I would suggest that since mindfulness appeared to reduce stress and contribute to the participants' decision to remain in teaching, by aiding the development of self efficacy and authenticity, it could be considered a worthwhile addition to teacher education syllabi. Mindfulness training would be an asset within a tertiary setting or a professional development programme for teachers already in the profession.

Mindfulness in teacher education and professional development programmes

All of the participants continued their practice in the second year in informal ways in gardening, sports and other activities, and all except Debbie discussed their formal practice and the importance of that in maintaining their stress levels throughout the day. This reinforced my belief that mindfulness could be included in teacher education and professional development programmes.

Engaging with mindfulness and mindful learning, may require significant change for some teachers which may lead to resistance. Individuals developing initial teacher education and professional development programmes should be mindful of this, and should ensure student teachers or teachers feel safe and comfortable before engaging in any practices. The potential benefits, though, suggest the potential for including mindfulness in initial teacher education and professional development programmes. Patricia commented that she found the sessions at university where the student teachers practiced mindfulness helpful.

I really liked the lunch time sessions being able to do it at the beginning of lunch was great because then you still had the rest of lunch. Or you could do it ten minutes before class starts so that way you still get to go and have lunch but you just come back about ten minutes earlier. I always found that lunchtime session really revitalising and helpful. If you began it in the first year, then you are giving the students a strategy for when they get stressed. Because study for uni can be stressful with all the assignments... because they could use it (not so much meditation on their

questioning) but on the planning...just a clearing of the mind so things will come.

(Patricia, final interview, April 2011)

Mindfulness, as a part of a renewal, stress reduction, and self care programme for teachers, has been an integral part of the *Cultivating Awareness and Resilience in Education* (CARE) Programme at the Garrison Institute (Jennings, 2010). The CARE Programme extended the type of mindfulness training offered in this study, to include self awareness activities for modulating emotions, and listening with compassion exercises to enhance the resilience that teachers need (Jennings, 2010). Intrator and Kunzman (2006b) also confirmed the importance of renewal programmes in developing teacher resilience. They suggested this as a template for other programmes:

A teacher's vocational vitality, or capacity to be vital, present, and deeply connected to his or her students, is not a fixed, indelible condition, but a state that ebbs and flows with the context and challenges of teaching life. In light of this, an emerging form of professional development programming explicitly devoted to nourishing the inner life or core dimensions of teachers is increasingly important for today's educators

(Intrator & Kunzman, 2006b, p. 16).

The 'lived experiences' of the participants, detailed in the inter-play of professional dialogue between the participants, the data from the journals and interviews and me, indicated the positive effects of mindfulness on their professional development. Findings from this study suggest that there is value in including mindfulness in higher education programmes, particularly teacher education for stress reduction and as a pedagogical tool. These two areas are explored again in chapter 9 in the *contributions* from this research.

8.3 Limitations of this research

This research reports the 'lived experiences' of five teachers and is based on my interpretations of their self-reported data. The participants had learned mindfulness

from me, and I was the researcher who happens to be a mindfulness practitioner as well. As a result, there are some limitations within this study that I discuss here related to the participants, and the methodological design: the small number of participants, the predisposition of the participants to mindfulness, the use of self-reported data, and my own mindfulness practice as it was used in the data interpretation cycle.

There were only five participants. While this was a small number, they generated a large amount of data, with fortnightly journals over two terms and three interviews. I expect that additional numbers in future studies would serve to confirm or not confirm the results. However, it must be noted that other research would be based on the reflections of those teachers' 'lived experiences' in their unique contexts, just as this research represents the current five participants. The participants in this study represented a cross section of beginning teachers: one male and four females, ages ranging from early 20s-40s, teaching in the full range of socioeconomic areas, and representing different ethnicities. In a future study, it would be valuable to intentionally include more Māori, Pasifika and Asian participants, to reflect more fully teacher ethnicity in Aotearoa New Zealand.

Another possible limitation is the fact that all participants were interested in personal development and had positively engaged with mindfulness during their university studies. Four of the five participants had studied Montessori or Steiner philosophy as part of their Bachelor of Education and as noted earlier, these two philosopher/educators described contemplative practices similar to mindfulness in their curricula. None of the participants were neutral or resistant to engaging in mindfulness. These five participants were risk takers as they were prepared, during the strenuous and demanding first year of teaching, to engage in the mindfulness practices even though, the benefits for beginning teachers had only been researched in a limited number of studies.

Given the number of participants, it might be suggested that the positive results of this study may be related to the fact that there was a limited sample size and the participants were predisposed to mindfulness. Or there could perhaps be other factors, unique to each individual that would explain why these teachers each coped

with their first year and wished to continue in the profession, but this study's *only* purpose was to describe and interpret their 'lived experiences' with mindfulness. In describing those experiences, the participants' reflections indicated *they* believed mindfulness was helpful for them in the first year of their careers.

This research did not purport to definitively answer whether mindfulness practice works for all beginning teachers, or that it is the panacea for alleviating stress in the first year of teaching. It is rather a report of these beginning teachers in their contexts. Qualitative, interpretive phenomenological research is not intended to be generalisable or to make definitive statements, but rather to describe a focused examination of the experience of the participants that may resonate with the 'being' of others in the world (Heidegger, 1953/1996; 1975/1982; Davidson & Tolich, 2003b).

The examination of their lived experiences was generated from self-reported data. Each participant's fortnightly journals and three interview transcripts were rich with data that provided a full picture per individual. This data generated enough information to distil a description of the experience, and to analyse the nature of the impacts. It could be enhanced if the participants completed a mindfulness questionnaire such as the Mindfulness Attention Awareness Scale (MAAS) mentioned in chapter 2. The MAAS details the incorporation of specific subskills of mindfulness in the subjects' lives. Observations completed in the classroom that assess their mindful responses to students in the moment, would be another useful source of information that would bring a different perspective to the interpretation of the data.

The five participants, I believe, were forthright in their comments, as evidenced by their reported occasional non-engagement in the practices. I reviewed that information, and offered what I believed to be their experiences and my understanding of what could be learned by the wider world of teachers. In chapter 4, it was noted that there are various opinions about the role of the researcher in a phenomenological study. Kabat-Zinn (2005) stated that anyone involved in mindfulness research needed to be a mindfulness practitioner to complete the study. I am a mindfulness practitioner, and I also introduced these participants to mindfulness with the help of a mindfulness counsellor; I believe this contributed to the

study. Schonert-Reichl disagreed about the importance of the researcher being a mindfulness practitioner, and in fact, stated that not being a practitioner allows the researcher to be more objective (personal communication 4 September, 2008).

Mindfulness in the methodology

Mindfulness was used as a part of the methodology for 'sitting with' the data. The final limitation I discuss here is my own mindfulness practice. When an individual practices mindfulness, an intention is set for the practice to be focused and to be non-judgemental. As with many mindfulness practitioners, I often had trouble finding the time and space to meditate, and wondered whether I was doing it correctly. I realised, as did the participants in the study, that those are thoughts shared by many, and that that does not discount the quality of the meditation engaged in. In the rest of this chapter, I take a closer look at the methodology, and particularly the role of meditation in the data interpretation process. I critique my meditation practice, through the lens of Zajonc's epistemology of love, outlined in chapter 4.

8.4 Critiquing the methodology

The methodological design of this study included a combination of phenomenology, hermeneutics and mindfulness. Figure 1 on page 100 showed the interconnections of these philosophical perspectives and how they came together in this study of the 'lived experiences' of beginning teachers who have been introduced to mindfulness practices.

These three philosophical approaches worked well together to describe the 'lived experiences'. The information noted in the participants' journals and interviews provided the foundation for a detailed picture of the first year in the professional lives of the participants outlined in the data interpretation in chapters 6 and 7. Their reports, of the actual mindfulness experiences and the integration of mindfulness in their everyday lives, provided sufficient data to then make conclusions about the role of mindfulness in their professional practice and development. From this, further conclusions were made about the impact on their teaching careers.

Phenomenology, hermeneutics and mindfulness provided three complementary approaches that worked together to strengthen the study. Where phenomenological processes left off, hermeneutic interpretation brought richness to the descriptions. When the hermeneutic circle or the 'play' of the interpretation between the data, the participants and me began to stall, meditating provided 'time' and 'space' (opening up a deeper space in meditation) for the thinking process to move forward, and even change directions. This was particularly true when the initial Husserlian reduction was completed, and I began to look at the impacts on the participants' professional lives. This shift was initially difficult, but with meditation and the realisation that the 'what' and the 'how' of their experiences actually overlapped; the thinking process and interpretation moved forward.

The key difference between mindfulness and phenomenology discussed in chapter 4 related to the concepts of bias and non-judgement. Husserl (1976/1985) pointed to the need to 'bracket' personal perspectives, emotions and preconceptions, in order to accurately determine the nature of the phenomenon. In contrast, Heidegger (1962/1985) considered 'bracketing' impossible, and that actually reflecting through one's one experiences was a strong feature of hermeneutics and phenomenology. The researcher's perspectives, emotions and preconceptions will influence the results. Finally, mindfulness practitioners are asked to be 'non-judgemental', which is different to being 'non-biased'. A mindfulness practitioner continues to have preferences and preconceptions, but is aware of these and considers them when meditating. During reflection, the mindfulness practitioner tries to ensure that these preferences and preconceptions do not prevent the meditator from being open to new ideas.

From this philosophical foundation, I attempted to first analyse using 'bracketing', and then to allow my biases and prejudgements to come into consciousness. Through the meditation process, I took note of these influences when reviewing the participants' journals and interview transcripts and my own notes. As a result, the initial description was very factual, summarising types of practice and how participants engaged in those practices.

Subsequent discussion of the data extended beyond simply noting 'what' happened to describe 'what' the beginning teachers' 'lived experiences' were and 'how' mindfulness impacted on their lives and revolved around the three themes: striving for perfection, connecting through awareness and gaining authenticity. The data demonstrated the participants' development as teachers and as mindful teachers who were developing awareness of their greater knowledge for teaching and innovative pedagogical practices (authority, as described by McCown, Reibel, & Micozzi, 2010), and building strong relationships with students (friendliness, as described by McCown, Reibel, & Micozzi, 2010).

Timing was an important feature of the study. Due to logistical delays, the participants were not identified until April 2010, which meant that the beginning teachers had completed about ten weeks of one school term, before starting the study. This delay turned out to be useful as it provided the then potential participants an opportunity to consider whether they could be involved in the study, based on their perceptions of their workload in the first term. They needed to consider whether they could complete the journals and interviews while juggling their personal and professional lives. It is important to note that two potential participants, who had been using the mindfulness practices, were interested in the study, but felt that by the end of the first term, they could not commit to the time required to complete the fortnightly journals for this research study and the demands of the classroom. Perhaps this perceived inability to add an additional task to their busy workload indicates the need for professional development that includes something like mindfulness to be available for teachers, particularly beginning teachers.

Once committed to the study, all but one participant found it difficult to maintain the schedule of fortnightly journals. All participants did, in the end, complete enough entries per term to provide useful data. Writing a journal entry every two weeks was helpful, as the changes within the classroom environment and the influence of that on their emotions and thoughts were frequently demonstrated.

As noted in chapter 5, one participant completed an online blog which provided a different space for her to write about the range of emotions and experiences that related to her personal and professional development.

Five journal entries per participant provided ample opportunity for participants to discuss a number of events, feelings and ideas to pursue in interview discussions. The timing of the interviews at the end of the term also worked well. The teachers could see each term as a unit of time that included specific events to reflect upon, and as an opportunity to review emotions and thoughts. Depth of thought and professional growth was evidenced by spacing the interviews out. One interview was conducted midway through the year, and one near the end of the year. Participants also then had an opportunity to further describe and reflect upon their feelings and experiences in a final interview. I interviewed participants for the last time, after the first term of the following school year. It was only after completing the second set of interviews and reviewing the participants' thoughts at that point in the study, that I decided to undertake a third interview, so that participants were able to discuss their experiences without being influenced by the immediate pressures of the first year.

The third (final) interviews were particularly useful in providing additional detail to describe the impacts on the participants' professional lives. The time delay between the second and third interviews provided an opportunity for the participants to consolidate their understanding of the impact on themselves and to look back on their first year of teaching after the long holiday break. This distance in 'time' to review their first year reminded the participants why they were continuing to use the practices personally and in the classroom. The discussions in this final interview helped each individual establish a foundation for their second and future years in this career. Finally, the last interview provided an opportunity for the participants to offer advice for new beginning teachers based on their first year of lived teaching experiences.

I would recommend the combination of phenomenology, mindfulness and hermeneutics in methodological design for gaining insights into a particular phenomenon, and particularly as a lead-in to further study that explores specific aspects of the phenomenon or its specific effects.

8.5 Mindfulness as methodology-an epistemology of love

Mindfulness meditation, as a way of knowing and discovering new information and as part of the interpretation process is a unique feature of this study. Data interpretation

in qualitative research includes immersing oneself with the data for long periods of time . 'Sitting with' the data was helpful for me when the *thinking* process of interpreting the data did not seem to be moving forward. The unique aspect of my immersion process was the contemplative moments of meditation to create additional time and space for ideas to be considered and to 'percolate' in the mind. When meditating, non-striving is key to allowing ideas to come to consciousness. The intention was to either distil the participants' information to describe the phenomenon, or to consider the impacts of the phenomenon on their professional lives. I simply 'sat with' the information and allowed the ideas to come to me; to come into consciousness without searching for specific answers. Meditation in the interpretation process was part of the special contribution to research of this study.

In reality, the value of meditation to move the data interpretation forward is dependent on the discipline of the researcher/meditator. In my case, I have been meditating for only a few years and so am still a 'developing' meditator. Finding the time and space to meditate, which was often difficult for the participants in the study, was at times an issue for me. Throughout the study, a regular mindfulness practice was maintained including body scan, sitting meditation and 'mindful' running. But during particularly busy times, often the meditation sessions were very brief. During the initial data interpretation phases, though, I meditated daily for at least twenty minutes. As part of my conclusions and recommendations for this study, I suggest that researchers need to be aware of their own experience with meditation, and that a regular established practice is important before considering using meditation as a data interpretation tool.

Although critiquing one's own meditation processes would seem contradictory to the aspect of 'non-striving' in contemplative practice, I believe a review of my meditation practice, through the lens of Zajonc's epistemology of love would be useful for assessing the value of meditation for data interpretation in this study. To that end, I consider the nine aspects of the *epistemology of love* as outlined in chapter 4 (Zajonc, 2009).

Respect for the 'other' and what he/she brings

A foundation of this study, and hermeneutic phenomenology, is respect for the participants and whatever they contribute to the study as is the case with all ethical research. Without that respect then a picture of the phenomenon could not be presented. Throughout this study, I conveyed to the participants how important their contributions were and how much I valued what they had to say. I was clear that whatever they said would be useful and that I was not expecting any particular answers from them. I also noted that their journal entries and interviews would not be the same as that of the other participants and that would bring richness to the data. For example, Debbie at first attempted to complete written journal entries, but together we determined that she was already saying so much in her blogs that that would be sufficient. Her blogs revealed a lot of different emotions and events that she may not have included in a journal entry specifically designed for this study.

While I was meditating on the data, my intention was to honour each of the participants and their reflections and to provide interpretations faithful to each individual. This is one reason why I sought feedback from them on the interview transcripts and aspects of the data interpretation.

2. Gentleness

Although I wanted to construct useful data interpretation, I was aware that by forcing or putting pressure on myself during the meditation process, new thoughts might not be revealed. Gentleness was particularly useful for me, as often I was not sure where the data was leading me. I needed to exercise patience, knowing that gentleness would help provide the space for the new ideas to surface into consciousness. I noticed that this led to more ideas springing to mind, along with more questions to consider.

I needed to exercise patience with the participants as well. In the beginning, I could not understand why the participants were focusing on the mindfulness practices they introduced to the children rather than their own experiences. It is possible that participants who did not start practice immediately or did not practice on a particular day did not want to deal with something they thought was an issue for them. I thought

about this constantly. One day, during a mindful run, the word 'striving' came into my head. I realised that the participants were striving to be perfect in their meditations so as not to disappoint me or themselves. 'Striving' to engage in their practice 'correctly' could have contributed to initial avoidance and procrastination in engaging with mindfulness. But, once I realised that the participants were striving to be perfect, I suggested to each of them that specific activities they were engaging in were demonstrating principles of mindfulness, and that simply trying to practice was the key, not judging how they were practicing. This opened up new discussions and cleared a new direction in the interpretation process. They were discussing what was foremost on their minds: the children.

3. Intimacy

If 'intimacy' is measured by the number of hours an individual spends thinking about something, then I would confess that I am very intimate with the data in this study. Meditation provided an extra opportunity to 'sit with' the data without feeling compelled to actually *do* anything but let thoughts, feelings and emotions come to consciousness, be noted, and then disappear. Meditation allowed the subtext underneath experiences to be revealed to see what was *not* being said, as well as what *was* being said. During meditation, I realised I had 'missed' information about the emotional state of one of the participants, because prior to that I had been too focused on what she was saying, that I had not noticed how stressed she was. I then discussed this with her, and asked how she had come to the conclusion that she 'needed' mindfulness. From then, I was more in the moment during her interviews and during the interviews with the others. I felt a greater connection not just to the data but to the participants as well.

4. Participation

Zajonc (2009) described participation as another factor in getting closer to and spending more time with the data. Participation in contemplative inquiry starts with the 'concentration' phase, before moving on to the resulting 'insight' phase at the later stages of the meditation (Zajonc, 2009). The 'concentration' aspect parallels the Husserlian distillation process that I engaged in initially. In this part of the meditation and interpretation, I was able to describe the phenomenon before looking closely at

the impacts. When I meditated on the impacts, I gained insight into the effects on the participants, and possible conclusions for other teachers. The 'concentration' aspect was helpful, on the other hand, when I looked closely at how much and what types of mindfulness practice the participants engaged in, and noted the differences between participants.

5. Vulnerability, so the meditator is open to uncertainty, and the unexpected mixture of emotions, feelings and thoughts (Zajonc, 2009)

During the interpretation process, particularly the second phase of gaining new insights into the effects on the participants and considerations for the integration of mindfulness in teacher education, there were many times when I was confused and unsure of what I was supposed to be doing or thinking during meditation and reflection. I wondered when new insights would come to consciousness. Different ideas from colleagues whom I had shared information with about the progress of the study, including my supervisors, initially confused me. With time, and the opportunity to meditate further, I was able to accept the confusion and wait for new ideas to appear. A good example of this was my supervisor's contention that mindfulness, phenomenology and hermeneutics are all basically the same thing. This confused me and I thought about it for many, many weeks. I was focused on the similarities and differences, particularly the 'bracketing' of emotions and biases. By being open and vulnerable to the confusion and to my supervisor's prodding with new ideas, in time, I began to formulate my own conclusions about the methodology which were outlined in chapter 4.

6. Transformation

Ideas and thoughts transformed during the meditation process from the simple descriptions to insights. Participants' perceptions were therefore able to be viewed as potential benefits for other beginning teachers.

I also experienced considerable personal transformation in completing this doctorate and engaging in mindfulness practice. As noted in chapter 1, I initially discovered and used mindfulness to bring clarity and then transformation into my own personal and professional life. By being present in the moment and accepting thoughts as thoughts

and not who or what I am, I not only learned more about myself but also learned more about others. Then, using meditation as a data interpretation method transformed my beliefs about mindfulness for teachers and researchers as well. When I began this doctoral study, I believed that there might be a place for mindfulness in the pastoral care for beginning teachers, to help cope with the stresses of the teaching career. During the insight phase of the meditation, I extended this concept to the idea that *all* teachers would benefit from mindfulness training, not just to cope with stresses, but to bring a new dimension to the planning, teaching and assessment cycle. Through working with the participants and through the meditation process, I have changed my own teaching practice. I have integrated mindfulness into my lectures in initial teacher education on a more regular basis and see mindfulness principles, strategies and theoretical perspectives as the foundation for all my courses including the postgraduate courses I facilitate in authenticity for teachers.

7. Organ formation, the term used by Zajonc (2009) to refer to the formulation of new ideas or knowledge in this meditation process

By being patient with the meditation process and being open to new ideas with a 'beginner's mind' as described in the literature review, clarity of ideas emerged. In this study, I could see organ formation developing in chapter 7. Drawing from the Heideggerian perspective, new descriptions began to take place when I started meditating on the transcripts by considering the 'beings' of the teachers in the light of how they were 'being in the world'. Seeing the participants as individual mindfulness practitioners beyond their professional lives generated new ideas. Patricia's revelations of noticing mindfulness in other aspects of her life confirmed this new organ, this new idea for me: mindfulness as a way of *being* and a way of *knowing* both personally and professionally.

8. Illumination

In the illumination process, the phenomenon is viewed from different angles. Five participants provided different perspectives to be 'brought into light' as part of this study. In addition, often prior to meditation or after meditation, new ideas would be discussed with colleagues or my supervisor. These new perspectives, then planted in

the subconscious, highlighted different insights into the perspectives of the participants and the potential benefits of mindfulness.

Early in the study, a colleague discussed the incongruity of 'bracketing' within a phenomenological study from a Heideggerian point of view. Therefore, in her opinion, mindfulness which encapsulates non-judgement, could not be complementary to this type of interpretive inquiry. This idea dwelled in my subconscious for two years before I was able to see a way through the dilemma. Firstly, my meditation reminded me that different perspectives can exist and actually illuminate new learning. Finally, I came to the idea that there could be the two separate interpretation perspectives which are reflected in the two different chapters of the data interpretation. In this way, I reflected and meditated first by drawing on Husserl's notion of phenomenological description with 'bracketing' and then, Heidegger, without. In addition, it became clear to me that I can be aware of some of my preconceptions, beliefs and emotions; I recognised that there are always new preconceptions that continue to be revealed. I acknowledged that these preconceptions, beliefs and biases would influence my thoughts. At the same time, I can still be open to new ideas. Mindfulness, phenomenology and hermeneutics can and do co-exist and support each other.

9. New insight

New insight is the goal of a doctoral study. This study has revealed the lived professional experiences of beginning teachers using mindfulness and the potential impact on their coping mechanisms, stress levels, and pedagogical practices. The new insights are discussed in the next chapter as part of my contribution to the body of knowledge and research.

In conclusion, I believe combining mindfulness with phenomenology and hermeneutics enhanced the methodology used in this study. Mindfulness, as an epistemological perspective, and integrated in the data interpretation through meditation, were key features of this study. I believe the use of mindfulness in this study was an important contribution to future mindful moments in research design.

8.6 Using hermeneutics to see the phenomenon as something else

Once a hermeneutic interpretation of a phenomenon is completed, the description of that phenomenon, or the 'lived experience' related to that phenomenon, is extended to be interpreted in different contexts, for different purposes, or as something different than it was originally (Gordon, 1988). In this case, the phenomena of mindfulness for beginning teachers was considered in their 'lived experiences' as a tool for coping with stress in their individual contexts. In the data interpretation chapters, the participants' mindfulness experiences were described and interpreted in their individual contexts. To complete the hermeneutic process as suggested by Gordon (1988), I suggest that their experiences with mindfulness can also be seen as a tool for individual pastoral care and support, and as a feature of teacher training and professional development.

In the next chapter, I discuss options for the study of mindfulness for beginning teachers. I also have included a discussion of the value of including mindfulness meditation as an epistemological perspective in research design, and as a data interpretation tool.

Chapter 9

This present moment and potential future mindful moments

- 9.1 The contribution from this research
- 9.2 Future research
- 9.3 Completing the doctorate to complete the doctorate
- 9.4 My advice to beginning teachers

Following the reflection in the data interpretation chapters and the critique and discussion of the study and its findings in the previous chapter, this last chapter includes a discussion of 'where to from here', noting contributions to research in this present moment from this study, and potential future mindful moments when new insights can be drawn from further research.

This study of the 'lived' experiences of five beginning teachers who use mindfulness has demonstrated the potential benefits of mindfulness for assisting first year teachers, and perhaps all teachers, cope with the demands of the classroom. The findings highlighted their stress reduction, the value of dialogue with others about mindfulness and their teaching, and the potential of mindfulness as a pedagogical tool. I noted that participants became more knowledgeable and aware, more authentic in their teaching and built strong relationships with their students. The five participants decided to remain in the profession or pursue further study in education before resuming a teaching career.

When a teacher feels this greater self efficacy as indicated from the participants, it is likely that this could contribute to more people remaining in the teaching profession.

9.1 The contribution from this research

To address the contribution from this research, it is important now to return to a key driver of this thesis: that beginning teachers are stressed and finding it difficult to cope with the demands of the classroom. As noted in the introduction, 37% of teachers in New Zealand have left the profession within the first three years (Elvidge, 2002). At a recent teacher's union meeting in the UK, Vasagar (2011) noted that the levels of stress are prompting individuals to leave the profession, and individual teachers had contemplated suicide. Marzano, Marzano, and Pickering (2003) highlighted that teachers who are unable to manage these pressures find

difficulty in creating a productive classroom environment. "With nearly 40% of teachers leaving the profession after five years, we know that the familiar approaches aren't adequate when things get tough in the classroom" (Viola, 2009, p. xi). Teacher training and professional development, particularly in stress management, is needed to help teachers to meet these challenges and remain in the profession. "Given these high expectations and demands, it is surprising that teachers rarely receive training to address and successfully handle the social and emotional challenges of teaching" (Jennings, 2010, p. 133).

I believe that this study contributes to the body of knowledge of mindfulness for beginning teachers:

- 1. at an individual level to help manage responses to stress
- at a pedagogical level for 'mindful' learning strategies to assist learning, and

I also believe that this study contributes to the body of knowledge for mindfulness in research design: mindfulness as a way of knowing and finding out information alongside hermeneutical phenomenology. This is one of very few qualitative studies that used mindfulness in the data interpretation process.

From the descriptions and interpretations of the insights from the lived experiences of the beginning teachers, I draw the conclusion that mindfulness offers a way to cope with the stress that beginning teachers face to break the cycle of teachers dropping out of the profession, and therefore may be a useful component for teacher education programmes. The completion of this phenomenological study, in which mindfulness was used as part of the research methodology and in the data interpretation process, indicates the value of the utility of meditation and other mindfulness tools in qualitative research.

One significant contribution from this research emanates from the advice for beginning teachers on the value of mindfulness from one of the participants. Valerie summarised the effect of mindfulness on her first year of teaching, and what she learned as a contributor to the study:

I dedicate (mindfulness) practice to certain children in my class. My body and mind are much more relaxed and ready to take on whatever happens next. I can reflect on it as I go. So if I find I am getting negative or worried about something, then I can actually go to 'why' right away and look at my perceptions. Usually I can work it out, take perspective, and try to sort it out from there.

Definitely reflecting at the end of the day about what happened in the day and what you have to do.

Do the other stuff obviously, but just maybe try to focus on or be mindful of one thing at a time, don't try to do it all at once. I've learned over the last year that I kind of try to jump into things and I try to be perfect at them right away. And often I'll then feel a bit upset if it's not perfect. But when I take a step back I can see the steps I need to do to get to that point (where everything is accomplished adequately, though perhaps not perfectly).

(Valerie, final interview, August 2011)

I believe the most significant contribution to the research related to beginning teachers is that mindfulness has been shown to be identified as a potentially valuable component of teacher education programmes. Therefore this study could provide valuable guidance for those considering the importance of pastoral care and resilience training for teachers. This research is relevant for individual teachers who seek ways to cope with classroom stress and different pedagogical methods to foster student achievement. At a higher level, this research should be considered by curriculum planners and educators who develop teacher training or professional development programmes.

Mindfulness could be integrated into many aspects of a teacher education programme. I would recommend that student teachers are introduced to mindfulness as a component part of the preparation for their first student teaching practical experience. A mindful practice such as the *breath focus, body scan* or *sitting*

meditation could be used at the beginning of any class to focus the lecturer's and the students' attention on the class material. Mindfulness as stress reduction could feature as a topic in any class that includes a discussion of personal well-being. Mindfulness as a pedagogical practice could be included in educational psychology papers focusing on principles of learning and teaching. My final recommendation for teacher education programmes would be to offer an elective paper in mindfulness for students in their final year of study to learn about and practice mindfulness exercises, and to review the related personal benefits of stress reduction and emotion regulation including an in-depth analysis of the neurological effects. Student teachers in this elective course could also investigate ways to incorporate mindfulness into their primary classrooms to promote children's general well-being, improve social relationships and build compassion for others, as well as to increase academic achievement by using mindfulness and mindful learning across the curriculum.

This research has enriched my personal mindfulness practice and contributed to my own professional growth. I will use mindfulness as part of data interpretation in future research, and explore further the potential of mindfulness for teachers and for children. Mindfulness will continue to be the foundation for the content of my own teaching and for my pedagogical practices.

9.2 Future research

The role of contemplative education in initial teacher education has been researched by several individuals and groups (Kostanski, 2007; Kozik-Rosabal, 2001; Soloway et al., 2010). Contemplative practice in higher education has been used and researched for a long time (Hart, 2001b; Bush 2011). However, the practice is still relatively unknown, even though many programmes exist throughout the world. Three universities in the United Kingdom (Bangor, Exeter and Oxford) and the University of California at Los Angeles (UCLA) (Crane, Kuyken, Hastings, Rothwell & Williams, 2010) have specific mindfulness programmes. A greater profile for contemplative education within the tertiary education sector including the university where I work, Auckland University of Technology (AUT), would be a valuable contribution to teacher education and other tertiary education programmes. Contemplative practice in higher education is:

a way to increase students' attention and decrease stress, give deeper meaning to university education as a means to self-knowledge, and foster community and cooperation as a salve to the competitive atmosphere of the academy (Boyce 2011b, p. 1).

I hope to extend my research in mindfulness in education by organising, conducting and supervising studies in three major areas:

- specific strategies of mindfulness that work best for teachers' personal and professional use and their inclusion in teacher education programmes,
- 2. specific strategies to create a mindful learning environment for young children including an 'effective' mindful teacher profile, and
- 3. specific benefits of introducing mindfulness for children in the classroom.

Future research: Strategies for teachers

The first major area of future research relates to the teachers themselves. The Garrison Institute (2005b) suggested areas of research, including a review of the amount of time that mindfulness practice was required to be effective, and how to incorporate mindfulness into a daily routine. This research would be important for those developing mindfulness programmes for teachers.

The following areas of research would prove useful to provide an evidence-based rationale for contemplative practice (mindfulness) in teacher education and professional development or mentoring programmes for teachers:

- a longer range case study with this cohort of beginning teachers,
- a focus group of experienced teachers using mindfulness practices in the classroom,
- a study of a whole school approach, with teachers using mindfulness,
- self-reporting of mindfulness subskills, as measured by a mindfulness inventory such as Mindfulness Attention Awareness Scale (MAAS),
- use of test inventories of mindfulness for teachers such as *The Interpersonal Mindfulness Teaching Scale* developed by Greenberg, Jennings, and Goodman (Jennings et al., 2011),

- measures of stress-cortisol in teachers before practicing mindfulness, after an
 MBSR course, and periodically throughout a school year, and
- reaching beyond the teacher's experience, to survey students about their impressions of their teacher's mindful behaviour or teaching style and its effectiveness.

Future research: Creating a mindful learning environment and developing an 'effective mindful teacher profile'

The second major area of research would be to consider the vast amount of research conducted by Langer at Harvard University in mindful learning and adapt that knowledge for working with young children. Langer and Moldoveanu (2000b) suggested future directions, for research in mindfulness, that are relevant for teachers developing mindfulness programmes in the classroom. One area to focus on would be programmes or processes that improve people's abilities to use multiple perspectives. These authors also suggested looking at current programmes and finding ways to enhance the outcomes through the use of mindfulness (Langer & Moldoveanu, 2000b). Further research on this would be valuable for teachers, curriculum developers and teacher educators. It would consist of an investigation into mindful ways to approach testing and the writing of textbooks. This research would need to include the relevance of mindfulness to people of all different perspectives, cultures and backgrounds.

Crane et al. (2010) concluded, after evaluating a number of training programmes, that several key components are required for teacher training and teacher competence in mindfulness: personal practice, living out the subskills of mindfulness (eg. present-moment awareness, compassion, non-judgement, etc), understanding the value of 'being' mindful not just engaging in the exercises, how to relate to the students, and knowledge of group dynamics. It would be important for teachers creating a mindful learning environment in their classroom to develop these traits.

The participants in this study are likely to have met all of those criteria without having attended specific mindfulness teacher training. Certain skills needed when being 'mindful', such as relating to students and group dynamics, were included in their teacher training programme. However, over the year of this study, they developed a

personal practice and began 'being' mindful in their daily lives, as evidenced in their journals and interview transcripts. I therefore question the need for foundational, basic and advanced training as described by Crane et al. (2010). I do not disagree that training in certain subskills is needed, but wonder whether a university certificate at three different levels of proficiency is actually necessary.

From this research on effective strategies for working with children, an 'effective mindful teacher profile' could be developed to assist teachers in knowing the skills they personally need to develop to enhance their classroom practice. The skills in this profile would include those needed for teaching mindfulness effectively, and for creating a 'mindful' learning environment. This tool for observing teachers integrating mindfulness in the classroom would be useful for professional development and goal setting. The 'effective mindful teacher profile' could be developed for self and peer evaluation, to ensure quality delivery and integration. Crane et al. (2010) recommended that all of these mindfulness programmes for teachers could include observation and feedback of classroom presentations of mindfulness, especially when working with young children. This 'effective teacher profile' could be used when completing teacher observations to provide feedback to enhance the mindful learning environment created.

It might be useful for researchers developing this observation instrument to follow the strategies used by Bishop, Berryman, Cavanagh, and Teddy (2007) who crafted an effective teacher profile for working with Māori students in New Zealand. They interviewed students, whānau (family) and teachers and observed teachers when developing their profile (Bishop et al., 2007). I believe this design and implementation process contributed greatly to the success of the Te Kotahitanga project in increasing Māori student achievement, and could be used in developing an 'effective mindful teacher profile'.

Future research: The impact of mindfulness on children

The third major area for further study, that would be timely, would be an evaluation of the benefits of teaching mindfulness to children. Positive results would provide an evidential basis for the inclusion of mindfulness in schools, and for presentations to parents, school boards and other agencies. There are a number of mindfulness

programmes being used with children that have been the subject of studies to ascertain their value. Is it that specific programmes have more potential success with children of particular ages, or is it that the key principles are the important factor? If it is the key principles alone, then teachers could receive a more generalised training to teach mindfulness, rather than being 'indoctrinated' to teach a specific mindfulness programme. I sometimes wonder whether researchers attempt to demonstrate the value of mindfulness itself for children as part of social emotional learning, or to promote commercial success for a specific published mindfulness programme.

In developing a mindfulness programme for children, quantitative testing is useful as children cannot always articulate the experienced benefits. Burke (2010) completed a meta-analysis of studies of several mindfulness programmes for children, and concluded that there is a need for randomised studies with control groups and biological testing to quantifiably demonstrate results.

When working with children, I think it would be beneficial to conduct:

- a longitudinal study of the impact on the primary school students in both academic achievement and social competence,
- further study of anxiety reduction to complement those already completed (eg. Semple & Lee, 2008),
- action research in university initial teacher education programmes to assess
 the impact of incorporating mindfulness and mindful learning pedagogy across
 early childhood, primary and secondary teacher education programmes, and
- a review of how mindfulness in schools affects social emotional learning and classroom and schoolyard behaviour.

An additional aspect of research for children would be investigations of the effectiveness of using mindfulness with children who have different abilities or special needs (autism, ADHD, Down's Syndrome). I am aware of two studies for children with ADHD (Saltzman & Goldin, 2008; Zyklowska et al., 2008). Although the research on mindfulness has increased dramatically in the past several years (Black, 2010), there are still many opportunities for further study.

9.3 Completing the doctorate to complete the doctorate

I highly value the knowledge I have gained in completing this doctoral thesis. I have grown personally and professionally through the action of completing the doctorate as Nhât Hanh (1987) would have washed the dishes, mindfully aware of each part of the process. Not only have I extended my knowledge of mindfulness, mindfulness in higher education and mindfulness in schools, I have also learned more about the research process. This has included an understanding of the value of phenomenological study, in bringing to light what 'beings' (individuals) are experiencing in the world, as a tool to contribute to knowledge in any field. I feel revitalised in my own teaching as a result, and feel encouraged to continue to include a structured curriculum of mindfulness to my teaching. I begin each lecture with a mindfulness exercise to focus students and bring their attention to the class discussion. For each practice that is introduced, I explain, to the students, possible biological benefits including stress relief for them as individuals. Using examples from the participants' interviews and journals and my own use of mindfulness in the classroom, we also discuss ways to adapt each mindfulness exercise for the primary classroom, and to use mindfulness in their lesson planning and assessment of children.

I have also improved my ability to use mindful awareness and compassion with my students in each moment whether in dialogue, preparation, assessment or even through email. I believe strongly that mindfulness offers distinct advantages for teachers, and consequently for their students, by focusing attention and improving awareness, bringing a sense of calm to all interactions, and enhancing pedagogical practice. Intrator and Kunzman (2006b) discussed the wider societal benefit of programmes such as mindfulness training for teachers:

"Sustained, substantial investment in the personal, while aimed directly at the heart of teachers, is ultimately an investment in schools and student learning" (p. 25).

This study is one of very few that I am aware of that has used meditation as part of the methodology. This is an area to explore across a variety of research projects, using the *epistemology of love* as discussed by Zajonc (2009) or other contemplative inquiry models. As more studies use meditation as part of the interpretation or analysis

process, the acceptance of this methodological practice may increase. I believe mindfulness is a particularly useful interpretation tool for hermeneutic phenomenological studies. It is important for the researcher to be a mindfulness practitioner to fully understand all aspects of the participants' engagement with mindfulness. Using mindfulness as part of the data interpretation process is important for any study that assesses mindfulness itself or requires the researcher to 'sit with' the data to analyse the information and draw conclusions. I wish to reiterate here, the contribution of this study suggesting the potential for the use of mindfulness meditation in research as I have used it in data interpretation.

Early in this research, I proposed that a study of mindfulness may provide insights for beginning teachers. In the final analysis, this study provides some evidence to support mindfulness as a valuable component in initial teacher education, mentoring and professional development programmes. In addition, this research adds to the knowledge about the use of mindfulness itself within research design and analysis. Mindfulness provides an opportunity to actually be aware of our experiences in the moment, and to participate fully in them. Engaging in this mindful practice can only improve our understanding of new ideas and development of new concepts.

9.4 My advice for beginning teachers

I conclude this thesis by suggesting to beginning teachers that there is great potential for mindfulness to help them cope with the stresses of classroom teaching, and to help gain confidence and resilience to remain in their career. Further, integrating mindful practices into the way we plan, teach and assess will improve both our teaching, and our ability to meet individual children's needs.

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Appendix 1 Mindfulness practices introduced

These practices were initially introduced during the initial teacher education programme and then reviewed during the workshop prior to the commencement of data collection. Words such as "meditation" have a negative connotation for some people so when introducing the practices; I used words such as "relaxation", "focused awareness", "visualisation", to describe the activities in the teacher education programme.

Hart (2001b) instructed that periods of silence during mindfulness practice should help the students to focus inwardly creating a synergy from the group working together. He added that reminding students that contemplation brings balance to their lives through centring themselves this way to be more fully present and open at any time during the day (Hart, 2001b).

Initial teacher education students were asked to cultivate a beginner's mind as one when learning these exercises and when approaching class studies. May (2006) described the beginner's mind where the mind is open to seeing everything as if this viewing was the first one, without preconceived notions cultivated in past experiences and open to every new possibility. Further guidance for the process comes from Brady (2007) who discussed the value of centring students, questioning, awareness and community as an integral part of effective classroom pedagogy.

Key practices: These practices were adapted from Kabat-Zinn (2005) and May (2006) and then confirmed through personal communication with Jim Carmody during a mindfulness retreat in February, 2010.

Raisin exercise-using all five senses to notice and observe whatever is possible about an individual raisin for the individual. This process is completed very slowly and is designed to cultivate the 'beginner's mind' attitude when perceiving something new. This is followed up by a similar practice with a wrapped chocolate.

Sensations of breath- focusing on the sensations of breath including where it comes in and leaves the body; breathing in and breathing out. It is important to use the gerund form in all the exercises so that it doesn't sound like a command. For example, breathing in and breathing out rather than breathe in and breathe out. This can be done with the eyes opened or closed.

Body sensations in **body scan**-noticing and observing each part of the body starting with the toes of the left foot and moving all the way up to the top of the head. Again, this is a very slow process to build focus on a particular object. This can be done with the eyes opened or closed and is usually done lying on the floor.

Sitting meditation-paying attention to whatever comes into consciousness. When this is introduced, participants are directed to focus first on body sensations, then feelings, then sounds and then thoughts without getting attached to any particular one. The idea is to simply be aware of what is in consciousness without making judgement on whether it is good or bad, pleasant or unpleasant.

Mindful walking-observing and noticing what happens in the body when taking each step. Participants walk back and forth very slowly in a small area where there are no distractions without the 'walking' becoming methodical marching as it is important to focus on each step in each moment.

Visualisation-sitting with eyes closed and imaging that the body is strong, stable and unchanging like a mountain or lying down and imaging that the body is like a lake where life is going on underneath the surface no matter what is happening on the surface.

Reflective practice-contemplative look at teaching practice and/or mindfulness practice, accepting where the individual is without judging but also with the intention of progressing. This does not involve striving to improve which can create self doubt and increase stress. Moving forward takes intentional effort but should not result in anxiety.

Appendix 2 Interview questions

Interview Questions during the first year of teaching

Sample initial questions:

Tell me about using mindfulness practices personally.

Tell me about a mindfulness activity used in the classroom.

"Why do you think that happened?" or "Why do you think that you felt that way?" (Giddings & Wood, 2001, p. 16).

Additional question used depending on the interview are listed below.

These were based on suggestions from Tolich and Davidson (2003a).

How has your teaching changed?

Tell me about the mindfulness practices you have tried personally and in the classroom.

How were these mindfulness strategies incorporated into lessons? What else will you do?

Discuss contextual factors that may influence your success in the classroom.

What are the issues, challenges and problems?

Have you been able to address these issues, challenges or problems? Tell me about this.

What changes have you noticed? (for yourself and your students)

Have you used mindfulness yourself when preparing your lessons, assessing students?

What did you notice about effects on:

the classroom environment (interactions and disruptions)

the learning environment and individual children

personal development and coping strategies

personal motivation in classroom preparation, lesson delivery

your feelings about teaching next year?

Indicative follow-up questions after the first term of the second year of teaching (2011)

Based on information from Cohen-Katz, Wiley, Capuano, Baker and Shapiro (2005b), these questions were a starting point for the final interviews:

Have mindfulness practices changed how you view stressful events personally and in the classroom?

How has engaging with mindfulness affected interactions with others?

What kinds of practice are you still using? How often? What have you gained from personal practice?

With these practices, how has your relationships to thoughts, feelings and body sensations changed?