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PEDAGOGIES OF PRESENCE:

CONTEMPLATIVE EDUCATION ACROSS THE DISCIPLINES IN
AOTEAROA NEW ZEALAND

A Dissertation Presented in Partial Fulfilment of the Requirements for

the Degree of Doctor of Education

at Massey University, Manawatū, New Zealand

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ABSTRACT

This study investigated contemplative pedagogy and practice within New Zealand universities, in the form of both mindfulness interventions targeting wellness and connection, and classroom pedagogy fostering attentional, critical, and creative thinking. Little previous research had been undertaken on the topic in this country. The integrated research design developed for the project - Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED) - included two phases, an extensive exploratory survey phase ($n = 258$), and an intensive, in-depth interview phase ($n = 22$). Critical Realist abductive and dialectical analyses took place alongside statistical and thematic analyses.

The findings show that educators incorporate contemplative methods to address pressing issues ranging from student stress to climate change. Most contemplative teaching takes place within extant disciplinary framings. Key entry points into academia are through reflective practice in the contexts of professional education, critical social justice teaching, and creative projects. The study suggests that contemplative education arises in response to complex social factors involving several disconnects - with nature, people, the self, and the capacity for self-transcendence. This emergence is an outworking of historical forces and a response to research showing the potential of contemplative education for ameliorating difficult problems.

Keywords: contemplative education, mindful education, critical realism, mixed methods

DEDICATION

This dissertation is dedicated to the memory of my parents,

Vaughan Norman Baisley and Alma Cecilia Le Bel Baisley

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1 INTRODUCTION

What would it mean to teach as if life matters? This question, as soon as it arose in me, had a stilling effect. (Uhl & Stuchul, 2011, p. 1)

1.1 Rationale

As a tertiary educator, I find aspects of my task increasingly difficult. Fostering students' critical, analytical, and creative skills amidst digital distractions and an avalanche of sometimes misleading information, is increasingly challenging. Student attention (and my own) is more difficult to focus because attention itself has become a commodity, and many competitors vie for its capture. Many social and economic pressures seem to be affecting students, and the resilience and wholeness that underpin effective learning are often absent. Traditional supports and guides in the form of family, community, and religion have been displaced.

Students express concerns about climate change, injustice, and global conflict. International students worry about the relationships of their countries with the rest of the world. The potential for damage in this highly interconnected world has become great. Like many of my colleagues, I wonder how to best help students engage with compelling issues at personal, local, and global levels.

As I wrote this chapter, global student climate change action was underway (M. Taylor, 2019) and the Amazon rainforest is burning (Rodrigues, 2019). Climate change has formed an unavoidable backdrop to this study, and scientific consensus says that our planet may soon be unfit for human habitation (IPCC, 2018). As I edited the chapter, the world was under lockdown due to the COVID-19 pandemic. Given the magnitude of these and other challenges, educational approaches that take our situation seriously appear to be required. At the same time, these approaches need to foster resilience, hope, and the capacity to live with uncertainty while seeking solutions. These types of education will have to disrupt old patterns of thought and encourage openness, cross-disciplinary collaboration, and awareness of our connections to others and to nature.

While considering how to adapt my own teaching to meet these requirements, I encountered ‘contemplative education.’ This is the name of an emerging philosophy of tertiary teaching and is also becoming an umbrella term for transformative approaches targeting self-knowledge as a key to enabling personal and social change. One of its core ideas is that to solve problems, education must focus on the people solving them – their thought processes, relationships, and contexts. Without this inner and interpersonal focus, the same false assumptions, narrow perspectives, and business as usual approaches will continue to reproduce the same problems (Scharmer & Kaufer, 2013). Contemplative education constitutes a paradigm shift (Kuhn, 1962) in thinking – from the assumption that objective study of what is ‘out there’ is possible – to acknowledging that study of what is ‘in here’ and what is ‘between’ is also necessary.

Contemplative education draws upon wisdom traditions, religions, philosophy, psychology, and neuroscience to develop pedagogies and practices that help

people to see in new ways. These ways of knowing are reflective, reflexive, introspective, meditative, mindful, experiential, and embodied (Barbezat & Bush, 2013). Beginning with the holistic worlds of learners and their inter-relationships with others and the environment, contemplative teaching incorporates first-person, inner (Zajonc, 2013), and second-person, relational aspects (Gunnlaugson, 2009) along with the expected third-person, discursive elements of education (Forbes, 2016). A wide range of methods, from reflective journaling, to dialogue, to meditation, to physical practices such as yoga or walking, are encompassed (Gunnlaugson, Sarath, Scott, & Bai, 2014). These methods involve stillness and pausing, which can bring greater focus and depth. Some methods take place in relationship and promote ethical engagement. Core elements include reflexive inner awareness, “a different engagement with time” that allows inquiry into ‘being,’ and “the intention to be present to one’s experience” (Ergas, 2018, p. 254-255). Greater awareness of the inner worlds of learners harnesses an “inner curriculum” (Ergas, 2017).

Contemplative education may be defined as, “a set of pedagogical practices designed to cultivate conscious awareness in an ethical-relational context in which the values of personal growth, learning, moral living, and caring for others are nurtured” (Roeser & Peck, 2009, p. 1). According to Barbezat and Bush (2013), it carves out “a space for observation” where students may “gain insight” (p. 21). Thus, it adopts the Delphic maxim: “know thyself.”

Explicitly contemplative elements have come into use within several academic theoretical framings, including: Transformative Learning (Barner & Barner, 2011; O’Sullivan, Morrell, & O’Connor, 2002); Reflective Practice (Schön, 1983); Contemplative Practice (Miller, 1994); Integral Education (Esbjörn-Hagens, Reams, & Gunnlaugson, 2010); Spiritual Education (Simmer-Brown & Grace, 2011); and in a revival of Greek philosophy a way of life (Hadot, 2009; Hadot, Chase, Clark, & McGhee, 2013). Mindful educational approaches flowing from medical and psychological applications are becoming influential, particularly in primary and secondary curricula (Davidson et al., 2012), but also increasingly in tertiary education (McDonough & Lemon, 2018; Ramsburg & Youmans, 2013).

A recent bibliography (Schoen, 2019) shows that the majority of contemplative higher education references were published in 2013 or later. Influential earlier publications include calls for renewal of higher education and a focus on students' inner lives and purposes, rather than only on instrumental ends (Hart, 2004; Palmer, Zajonc, & Scribner, 2010; Zajonc, 2006a, 2006b). A large 2003 American survey study reports that undergraduate students come to higher education seeking spiritual meaning and inner purpose, but that faculty are unlikely to be involved in students' quests (H. S. Astin & Astin, 2009). More recent publications include edited volumes of teaching practice aiming to help educators interested in adopting this approach (Barbezat & Bush, 2013; Barbezat & Pingree, 2012; Gunnlaugson et al., 2014; Lin, Oxford, & Brantmeier, 2013). Special issues of journals have appeared, composed of conceptual and practical articles, for example, *Teachers College Record* (108(9) [2006]), *New Directions for Community Colleges* (151 [Fall 2010]), *New Directions for Teaching and Learning* (134 [Summer 2013]), and *Buddhist-Christian Studies* (33 [2013]). Philosophers have looked at concepts involved in contemplative teaching in a special issue of *The Journal of the Philosophy of Education* (49.2[2015]). Ways of integrating contemplative methods in various frameworks have been discussed, for example, in social justice teaching (Rendón, 2009). Most literature about contemplative education has been set in the American context.

While many contemplative pedagogies are already part of established approaches, contemplative teaching has been encouraged by the recent upsurge of research in mindfulness (Davidson et al., 2012). This includes a burgeoning body of medical and psychological studies and meta-analyses demonstrating the efficacy of mindfulness interventions (e.g. Baer, 2003; Chiesa & Serretti, 2009; Davidson et al., 2003; deVibe, Bjørndal, Tipton, Hammerstrøm, & Kowalski, 2012; Grossman, Niemann, Schmidt, & Walach, 2004; Hofmann, Sawyer, Witt, & Oh, 2010; Khoury et al., 2013; Schutte & Malouff, 2014). Although reviewers have also critiqued some aspects of this research, and although mindfulness is only one, optional part of contemplative teaching, its media profile, along with the weight of medical, neuroscientific, and psychological research evidence, has led to increased

perceptions of the validity of contemplative methods in general. Previously seen only as traditional and religious, contemplative practices now also appear modern and scientific, opening the door to their inclusion in academic courses.

Teaching framed as 'Mindful Education' has a growing presence in school settings, where use is reported to ameliorate problems associated with depression, suicide, and difficult behaviour. According to reviewers, mindfulness fosters Social Emotional Learning (SEL) and resilience of both students and teachers (Albrecht, Albrecht, & Cohen, 2012; Meiklejohn et al., 2012; Roeser, 2014). Examples of evidence-based school programmes include Mindfulness in Schools (Kuyken et al., 2013), Mindful Schools (Liehr & Diaz, 2010), and Learning to BREATHE (Broderick & Metz, 2009). In New Zealand, mindfulness is now taught in many schools including the more than 200 using the *Pause Breathe Smile* programme (Mindfulness Education New Zealand, 2019).

In higher education, contemplative methods are incorporated in two ways: through class teaching; and through mindfulness interventions run outside classes. These interventions may either be adjuncts to content courses, or separate offerings of student health and counselling services. A review of research evidence on the use of mindful teaching methods in higher education (Shapiro, Brown, & Astin, 2008) reports key evidence-based findings including: enhancement of cognitive and academic performance through improvement of attention and information processing; improvement of mental health and psychological well-being by decreasing stress, anxiety and depression and increasing emotional regulation; and development of the whole person by enhancing creativity, interpersonal relationships, empathy, and self-compassion.

Although research about contemplative teaching is growing rapidly, early in this study it was scarce overall, and in New Zealand appeared almost non-existent. There were a few interesting dissertations (e.g. Bernay, 2012b; Fraser, 2008), but even research articles on mindfulness were rare (e.g. Simpson & Mapel, 2011). The present study therefore aimed to further understanding of contemplative education in tertiary settings in *Aotearoa* New Zealand.

1.2 Research Questions

Little was known about contemplative education at universities in New Zealand, so this study was exploratory. The aim was to discover to what extent contemplative education existed, and what the larger social context must have been like for the phenomenon to have arisen. The overall research question was:

What is the character, extent, context, and purpose of contemplative education across the disciplines in *Aotearoa* New Zealand, and what factors have contributed to its emergence?

Research sub-questions were:

1. Which university educators use contemplative pedagogies and practices?
2. What aims do university educators have for adopting contemplative pedagogies and practices and what are the influences on their decisions?
3. How do university educators use and conceptualise contemplative pedagogy and practice?
4. How do university educators experience the implementation of contemplative teaching?
5. How do contextual factors (institutional, social, economic, political, religious, cultural, and historical) influence the emergence and implementation of contemplative teaching?

The remainder of this chapter explains the theoretical framework of the study, provides an overview of key concepts, and describes my stance as researcher.

1.3 Meta-Theoretical Framework – Critical Realism (CR)

This study was situated within the meta-theoretical position of Critical Realism (CR), which is able to accommodate varied disciplinary and theoretical literatures (Archer, Bhaskar, Collier, Lawson, & Norrie, 2013; Shipway, 2010; Willig, 1999). The literatures of contemplative education are situated within diverse paradigms that might be considered incommensurable in Kuhn's sense: within each literature,

observation is dependent upon different theories, tools of measurement, semantic understandings, and systems of classification (Kuhn, 1962). 'Paradigm wars' (Denzin, 2008) have beset social research. Critical Realism provides a principled way of seeing paradigms as perspectives on aspects of an open system within a complex, emergent reality. Ontology is believed to embrace an underlying intransitive truth, but epistemology is viewed as relativist - although reality does exist, human knowledge of it is partial and incomplete.

Further, Critical Realist meta-theory is emancipatory, concerned with problems such as social justice and climate change, and it highlights researcher praxis. Sufficiently expansive to hold transformative visions ranging from political to spiritual (Archer, Collier, & Porpora, 2013), this meta-theory is open to both secular and spiritual approaches to contemplation. CR sees reality as complex, addressing the multiple factors impacting on phenomena through 'laminations,' which include intrapersonal, inter-subjective, institutional, societal, cultural, historical, and global dimensions. CR foregrounds the thinking process in research and offers a dialectic for analysis. In addition, CR provides a way of understanding reflexivity as internal conversation, the way people navigate social context and mediate the interaction between their personal agency and social structure (Archer, 2007, 2012). In the present context of late modernity, according to Archer, we experience a 'reflexive imperative,' which means that exercise of personal choice has necessarily increased due to the pace of social change, the lack of certain ethical foundations, and the decline of religion and tradition.

1.4 Educational Theory

This study also uses pedagogical theories from the Scholarship of Teaching and Learning (SoTL) to consider the role of contemplative pedagogy in class teaching. In a recent book, Patricia Owen-Smith (2017) calls for a transformative integration of contemplative pedagogy and SoTL, saying,

Teachers can change the fabric of the world. Never has the call to assume this agency been more immediate and crucial than now.... We are called to

assume this power and authority in the service of our students, one another, and the planet. (Owen-Smith, 2018, p. 121)

Finding common ground between SoTL and contemplative education, which are both reflective, affective, and holistic, she says “both seek to transform higher education” (p, 1). She identifies core contemplative approaches that may be implemented across disciplines, including stillness and silence, space, reflection, listening, contemplative reading and writing, contemplative arts, and service learning. This nuanced volume also acknowledges the difficulties involved in incorporating contemplative pedagogy and practice in tertiary teaching, including: institutional structures; the ambiguity of terms such as ‘mindfulness’; ethical questions about the role of the affective dimension in education, the role of wisdom traditions, teacher preparation; and the difficulty of grading inner work.

Owen-Smith shows that contemplative approaches may be applied to SoTL across the disciplines. Within this meta-perspective, I also look at how contemplative teaching may be applied to specific disciplines and specific SoTL concepts. These concepts include: ‘signature pedagogies’ (Chick, Haynie, & Gurung, 2012; Gurung, Chick, & Haynie, 2009; Shulman, 2005a, 2005b, 2005c); ‘threshold concepts’ (Land, Meyer, & Flanagan, 2016; Meyer & Land, 2003, 2005, 2006); and ‘teaching bottlenecks’ (Middendorf & Pace, 2004).

Signature pedagogies, which are those teaching methods commonly used in a discipline to induct practitioners into their field, were originally described in professional education (Shulman, 2005b), but have since also been identified in other types of teaching. They involve the surface level of teaching practices, as well as implicit structures including beliefs, attitudes, values, assumptions, and dispositions.

A ‘threshold concept’ in an academic discipline is an idea that goes beyond core knowledge – once learned there is a change of state or quality in the learner, enabling new understandings. Such a concept is,

... akin to a portal, opening up a new and previously inaccessible way of thinking about something. [It] represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter, subject landscape, or even world view. (Meyer & Land, 2003, p. 1)

Threshold concepts are said to include distinctive features: they are “transformational” (the learner is changed); “irreversible” (the learner cannot un-see what they have seen); “integrating” (they allow the learner to see interconnections with other ideas); “bounded” (at the boundary of the discipline); and “troublesome” (they are difficult and often counter-intuitive). Because of this difficulty and unexpectedness, the learning process often involves spending some time in “a liminal space,” undergoing personal transformation that results in a change of identity and understanding, for example realising what it means to be a physician or teacher. Challenges sometimes arise for students because lecturers may not remember their own transformations. As experts, lecturer’s understandings are tacit, so they may not teach the concepts explicitly (Bradley, Burch, & Burch, 2015; Meyer & Land, 2003).

A final pedagogical theory is ‘teaching bottlenecks,’ which are places where student understanding seems to get stuck (Middendorf & Pace, 2004). These might involve threshold concepts and signature pedagogies. These teaching concepts aid understanding of how and why contemplative pedagogies are integrated into class teaching.

1.5 Background and Concepts

Key background information and concepts involved in the study are briefly explained below. They include the historical emergence of contemplative education, and the concepts of presence, contemplative inquiry, mindfulness, compassion and self-compassion, embodiment, inter-subjectivity, reflective practice, Transformative Learning, spirituality, and Māori wisdom (*mātauranga Māori*).

1.5.1 Emergence of Contemplative Education

Contemplation is arguably an intrinsic capacity of the human being, but one with perhaps less opportunity for expression in secular, urban, fast-paced, modern environments, and in instrumental education systems. Contemplation is fundamental to creativity and to the production and appreciation of literature, music, art, and architecture (Walsh, Bickel, & Leggo, 2015). Contemplative approaches have been included in Montessori (A. S. Lillard, 2011; P. P. Lillard, 1997) and Steiner schools (Bone, 2009). The separation of church and state has largely removed religious teaching from public education, and along with it, the use of religious contemplative methods. The reintroduction of these methods into public education has been facilitated by social and cultural events including increased East-West contact (Ergas & Todd, 2016) and the popular practice of meditation and Yoga. Alongside this, are modern perceptions that meditation may be taken out of religious context, and that spirituality need not involve a deity (Wilson, 2014).

The modern “re-emergence” of contemplative education (P. F. Morgan, 2015) has been linked to the 1995 founding of the Center for Contemplative Mind in Society (CCMIS, now CMind) in Massachusetts. CMind aims to “transform[s] higher education” and work towards “a more just and compassionate society” (CMind, 2000-2015). To build expertise in contemplative teaching in mainstream academia, CMind and its daughter organisation, the Association for Contemplative Mind in Higher Education (ACMHE), have created a resource hub, founded a journal, run conferences and training seminars, and supported ‘Contemplative Practice Fellows’ in implementing contemplative teaching at many North American universities.

The secularisation of religious meditation methods has become best-known through mindfulness interventions developed for healthcare and psychology. The original intervention, Mindfulness-Based Stress Reduction (MBSR), was developed at the University of Massachusetts by Jon Kabat-Zinn using elements of Zen, Vipassana, Tibetan Buddhism, and Yoga (Kabat-Zinn, 1990, 1996). Over eight weeks, MBSR participants do Mindfulness Awareness Practices (MAPs) including

body scans, sitting meditations, mindful eating, mindful walking, mindful awareness of routine daily tasks, compassion practice, and simple mindful Yoga. Meditators focus on an anchor such as the breath, but the mind soon wanders. The task is to notice, without judgment, and bring attention back to the breath. Repeatedly returning to the breath increases attentional control, as the mind is exercised like a muscle. Strengthening the capacity to notice without judgment increases acceptance and reduces emotional reactivity (McCown, Reibel, & Micozzi, 2010).

The core MBSR meditation is derived from Vipassana meditation as practiced in Burma/ Myanmar in a popular 19th century lay movement that attempted to restore religion, which was threatened by colonial rule. According to historians (McMahan, 2008; McMahan & Braun, 2017), the movement was innovative in making systematic meditation accessible to the laity. MBSR initially targeted stress and pain management, but when its success became known, was adapted for other medical and psychotherapeutic purposes. Kabat-Zinn maintains that even in a secular form, mindfulness is a path to deeper engagement that can lead to spiritual awakening (Kabat-Zinn, 2003, 2017), an assertion contested by others (Purser, 2019).

1.5.2 Presence

Contemplative education ideally begins with a teacher who is centred, grounded, and ‘present.’ Presence has been defined as “... a state of alert awareness, receptivity, and connectedness to the mental, emotional, and physical workings of both the individual and the group in the context of their learning environments, and the ability to respond with a considered and compassionate best next step” (Rodgers & Raider-Roth, 2006, p. 265). To be present to others, we must first be present to ourselves. We “teach who we are” (Palmer, 2010).

Increased presence allows a teacher to take a more measured approach, with time for pondering, listening, revisiting material, and reflecting on learning (O’Reilly, 1998). This teacher can create safe spaces where students become present also, and

where focus, openness, awareness of other perspectives, exploring of unexamined assumptions, holding contradiction, curiosity, dialogue, and transformation may be cultivated (Brady, 2007). Presence also may foster educator authenticity (Dencev & Collister, 2010; Kahane, 2009) and has been identified as a key characteristic of inspirational university teachers (Hay, 2011). Solloway (2000) describes the mechanism of presence as taking “advantage of the space between perception and cognition ... and allow[ing] the possibility of seeing others without cultural/personal codes as lenses” (p. 30). Quaker education as practised by teachers such as Mary Rose O’Reilly (1998), is predicated upon presence.

The struggle to build presence was documented in a one year phenomenological study of a new teacher (Meijer, Korthagen, & Vasalos, 2009). In another study, in-depth interviews were conducted over time, with three teachers said to be exemplars of presence (Kornelsen, 2006). Their key characteristics were identified as including openness, vulnerability, vitality, and willingness to live with chaos. A personal mindfulness or meditation practice is said to deepen teacher presence (Rodgers & Raider-Roth, 2006; Stieha & Raider-Roth, 2012).

1.5.3 Contemplative Inquiry

Physicist and well-known contemplative educator, Arthur Zajonc, has developed an epistemology of ‘Contemplative Inquiry’ (CI) to supplement the scientific method. He places this in counterpoint to the scientific epistemology of scepticism (Zajonc, 2006b). He says CI “not only yields insight (*veritas*) but also transforms the knower through ... intimate (one could say loving) participation in the subject of one’s contemplative attention” (p. 2). Rather than objectifying and being separate from the object of study, contemplative inquiry not only involves intimacy, participation, vulnerability, but also learning “to be comfortable with not knowing, ambiguity and uncertainty.” The result is insight and transformation of the knower. In the words of Goethe, in this kind of “gentle inquiry,” “every object well-contemplated create[s] an organ of perception in us” (Goethe, cited in Zajonc,

2006b, p. 5). Zajonc uses a range of exercises following in the tradition of Einstein's thought experiments and Fermi's problems.

An example of a contemplative scientific practitioner is Nobel-prize winner, Barbara McClintock, whose work with maize yielded ground-breaking discoveries in genetics. She called her research process, "less detached empiricism," saying she developed "a feeling for the organism," and an "openness" to it (Keller, 1983, p. 198).

1.5.4 Mindfulness and Mindfulness-Based Interventions

Mindfulness is often defined in the words of MBSR developer, Jon Kabat-Zinn, as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Black, 2011, p. 1). This definition captures what appear to be the mechanisms of mindfulness: intention, attention, and attitude (Shapiro, Carlson, Astin, & Freedman, 2006). A widely accepted operational definition involves two components, "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," and "a particular orientation toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance" (S. R. Bishop et al., 2006, p. 232). Mindfulness fosters awareness of the internal landscape of thoughts, emotions, and sensations. This observation of the inner landscape helps the practitioner achieve cognitive distance from unhelpful anxiety and rumination and has been shown to decrease the likelihood of relapse into depression (Allen et al., 2006; Chiesa & Serretti, 2011; Kuyken & Evans, 2014). Other research has highlighted the development of self-awareness and self-transcendence through mindfulness (Vago & David, 2012).

In addition to having positive impacts on medical problems (Greeson, 2009; Grossman et al., 2004) and psychological conditions (Grossman et al., 2004), it appears that mindfulness has a moderate positive effect on skills and attributes helpful in education. First, there is evidence that mindfulness improves cognition, including: memory (Jha, Krompinger, & Baime, 2007); visual attention processing (Hodgins & Adair, 2010); metacognition (Shapiro et al., 2008); and executive

control (Manna et al., 2010). Mindfulness produces more grey matter in the brain (Hölzel et al., 2011). Mindfulness studies point to positive improvements in affect, reduced emotional reactivity (Ortner & Zelazo, 2014), and reduced stress and anxiety (Cavanagh et al., 2013), which may enable better learning. Mindfulness also produces increased activity in the neural correlates of compassion (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008). Meta-analyses of research report benefits in many types of secular settings (e.g. Keng, Smoski, & Robins, 2011).

Despite their volume, mindfulness research results are regarded as preliminary, as researchers work to improve consistency of definitions, provide for replication, and include active controls in more studies (Van Dam et al., 2018). Further, questions around the use of mindfulness in interventions remain. Some Buddhists object to secularisation of mindfulness (Purser, 2019), and some non-Buddhists say it has not been secularised at all (Gunther-Brown, 2016). Calls have been made to clearly differentiate between secular and spiritually influenced programmes, perhaps by referring to the latter, as ‘Second-Generation’ (Van Gordon, Shonin, & Griffiths, 2015).

Langer’s Mindfulness

Ellen Langer, a Harvard social psychologist, worked independently of the medical and therapeutic mindfulness researchers to create a model of mindfulness uninfluenced by Buddhism or meditation. Langer’s Mindfulness/Mindlessness Scale (Langer, 1989, 1997) includes five components: openness to novelty, alertness to distinction, sensitivity to differing contexts, implicit awareness of multiple perspectives, and an orientation to the present (Langer, 1997). In common with other definitions, this construct does include engagement with the present moment, but does not involve acceptance without judgment; rather, there is active cognitive manipulation of stimuli. Mindfulness is contrasted with ‘mindlessness,’ which could include doing tasks on automatic pilot or zoning out in front of the television.

Langer's educational research has, for example, demonstrated the effectiveness of including ambiguity in teaching input, rather than non-negotiable absolutes. According to Langer, girls sometimes do poorly in math because of a greater willingness to follow rules and accept model answers, but if taught with ambiguity, they perform as well as or better than boys. Langer advocates conditional pedagogy, opportunities for focus, and perspective-taking (Langer, 1997; Langer, 1989). Studies report that improved learning is the result (Langer, Hatem, Joss, & Howell, 1989).

1.5.5 Contemplative Practices

Other contemplative practices have also been taken out of their religious origins and incorporated in public education, although none have yet been as widely researched as mindfulness. These include practices originating in Christianity, for example, *lectio divina* (sacred reading) (Ambrosio, Garr, Maloney, & Schlafly, 2012), which originally involved *lectio* (reading a passage of scripture), *meditatio* (thinking about), *oratio* (praying), and *contemplatio* (contemplative union). *Lectio* has been adapted for use in academic courses (Keator, 2017). In one example of this, a Georgetown University philosophy course uses an online platform with mini-lectures, music, art, audio readings, a forum, and a space for reflective journaling to aid 'contemplative reading' of Dante (Ambrosio et al., 2012). The text is first engaged with literally, then metaphorically, and finally reflectively. As a simpler class activity, contemplative reading could involve surface reading, reading again to analyse the content more thoroughly, reading again reflectively, writing a response in a journal, and perhaps discussing the reading with others.

'Beholding,' or looking deeply and contemplatively at an object, is incorporated in courses in the arts, architecture, design, and museum studies (Barbezat & Bush, 2013). Labyrinth walking is incorporated to augment reflectivity in some courses (Plugge & McCormick, 1997).

1.5.6 Compassion and Self-Compassion

Compassion interventions, both as part of MBSR, and in separate programmes, are becoming increasingly widespread in professional education. There, they combat burnout, which may lead to declining quality of care in professions including Medicine (Dhingra, Tewari, & Li, 2016; Dobkin & Hutchinson, 2013), Nursing (Dev, Fernando, Consedine, & Lim, 2018), Social Work (Lloyd, King, & Chenoweth, 2002), and Education (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013). In the New Zealand medical context, reportedly, “Many physicians enter medicine with a profound desire to help and care for others ... [but] sustaining compassion is ... [one of] the most central challenges to modern medical practice” (Fernando & Consedine, 2017).

Empathy is sometimes confused with compassion, but may lead to getting caught up in the emotions of a suffering person and burning out very quickly (Fernando, Skinner, & Consedine, 2017). In contrast, compassion is self-sustaining and does not lead to burnout, rather regulating emotions while acting on an urge to help a suffering person produces positive emotional feedback rather than depletion. Compassion interventions therefore help caring professionals to transform their empathy into compassion.

Self-compassion is often regarded as necessary for the exercise of compassion towards others. Self-compassion entails being kind to ourselves in any circumstance, realising that our experience is common to humanity, and taking a mindful approach to painful thoughts rather than identifying too much with them (Neff, 2003). High-achieving professionals are often extremely self-critical - a trait damaging to resilience. Resilience has been shown to increase with self-compassion, for example, in veterinary students (McArthur et al., 2017) and other helping professionals (Newsome, Waldo, & Gruszka, 2012). Self-compassion has also been shown to contribute to psychological health (Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007).

1.5.7 Embodiment

Contemplative methods also contribute to a greater awareness of ourselves as embodied (Damasio, 1999, 2005, 2012). The term ‘embodied mind’ means, “first that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological and cultural context” (Varela, Thompson, & Roach, 1991, p. 172-173). The reasoning process is enabled by somatic and emotional responses. Although the ‘self’ and ‘mind’ may seem to be located behind the eyes, they both emerge from the whole body and context.

Contemplative pedagogy is based on connection between body, mind, and emotions. In one example, Tom Culham (2013) teaches embodied ethics by synthesising an approach from Daoism, neuroscience, philosophy, and psychology. He argues that body, emotions, and the subconscious are deeply implicated in ethical decisions and behaviour, with the conscious mind often unaware of the basis of its decisions. In another example, educators use movement-based practices, such as Yoga, which affect all aspects of the person. Although Yoga has reportedly been “diminished” and altered in its move to the West, arguably it may be taught with integrity to enhance mind-body awareness (Lamb, 2013). In MBSR interventions, core components include the body-scan and Yoga, which aim to enhance bodily awareness. Methods such as Theatre of the Oppressed (Boal, 2013), People Sculpt (Giesler, 2017), and social presencing theatre (Scharmer & Kaufer, 2015) involve the whole person in role playing situations to bring dysfunctional systemic power relationships to light and re-imagine them.

1.5.8 Inter-Subjectivity

The mind and the sense of self also emerge from interconnections with others and with nature. Psychiatrist, Daniel Siegel, argues that the mind is an emerging embodied process, located not only in a person, but between a person and others

and nature (Siegel, 2018). Our interactions help to form us, not only metaphorically and emotionally, but epigenetically. Taking this a step further, we can develop awareness of ourselves as parts of whole systems, what Vietnamese Buddhist teacher, Thich Nhat Hanh, calls, ‘interbeing’ (Asher, 2003).

The educational movements, Big History (C. S. Brown, 2007; Burke, Behmand, & Simon, 2015; D. Christian & McNeill, 2011) and The Universe Story (Swimme & Tucker, 2011; Tucker, 2019) weave together history and cosmology to create a narrative that sees people as part of the universe, made of ‘stardust.’ This narrative has the potential to create a personal sense of meaning, and to engender responsibility towards others and the Earth. Bai, Cohen, and Scott (2013) sum up much environmental writing, saying, “... fundamentally the environmental problem is our manner of being on this planet and the nature of our relationship to the earth community” (p.5).

In addition to first-person inner approaches, contemplative education involves second-person, inter-subjective, relational awareness. Inter-subjectivity theory acknowledges not only individual points of view, but collective views of people together. Teaching approaches have been explored and developed, for example, in Bohmian dialogue (Bohm & Nichol, 1996); in management education (Scharmer, 2009); in contemplative teaching of jazz improvisation (Sarath, 2013); and in various higher education classrooms (Gunnlaugson, 2009, 2011; Gunnlaugson & Moore, 2009; Gunnlaugson, Scott, Bai, & Sarath, 2019). Olen Gunnlaugson has argued extensively that contemplative education is unbalanced without intersubjective approaches, which “inspire deeper shared and co-emergent contemplative states of knowing and generally move individuals toward a more common focus and collective discernment in their learning process” (Gunnlaugson, 2014, p. 305).

1.5.9 Reflective Practice

Reflective Practice is foundational to contemplative education, as well as to professional education and to critical academic approaches. The practice includes

looking for fresh insights by reconsidering concepts and events. Focus is reflexively turned back on ourselves to consider how our own thoughts, feelings, and attitudes have affected people, situations and our understandings. Reflexive pedagogy may develop openness and the perspective consciousness that underlie global citizenship (Harshman, 2017). Three main approaches include: engaging in reflective enquiry as a way of thinking and learning (Dewey, 1910, 1933); becoming a Reflective Practitioner in professional fields (Schön, 1983, 1987); and performing critical reflection that analyses socio-political contexts, inequality, and power (Brookfield, 2009; Freire, 1993; hooks, 2010). According to Lyons (2010), reflective practice is simultaneously a mode of thinking (Dewey), a way of knowing (Schön), and a mode of criticality (Freire).

1.5.10 Transformative Learning

Reflection that interrogates taken-for-granted assumptions, habits, and ways of thinking, is intrinsic to Transformative Learning approaches (Mezirow, 1991, 2000). According to Mezirow, the process of reflection is often triggered by a disorienting dilemma. In attempting to make sense of the dilemma, the practitioner attempts to identify previously unexamined assumptions and to reconsider their validity. This process requires awareness of one's own viewpoint as one of many perspectives, and openness to the perspectives of others. Reassessment may occur, and individuals move to a 'self-authoring' phase of development where deep transformation is possible. Kegan proposes a further stage of 'Self-Transforming Mind' (Illeris, 2009). Teachers set up situations that spark dilemmas, for example, by placing students in contact with other cultures (Harshman, 2017), and they assign reflective exercises that foster examining of assumptions and openness to new ideas.

Disorienting dilemmas tend to arise naturally and often in professional education, particularly during placements or internships when students encounter real-life situations related to their theoretical learning. Reflective writing tasks are therefore commonly used in professional practice to facilitate learning from these

encounters and to help students to process difficult emotional content arising from them (Brookfield, 1994). Some transformative educators emphasise the role of spirituality (Dirkx, 1997; O'Sullivan et al., 2002; Tolliver & Tisdell, 2006). Tolliver and Tisdell (2006) argue that to be transformative, learning should engage the whole self, including spirituality. For many adults, spirituality is after all, "... a major organising principle that gives their lives meaning and informs their life choices" (p. 3).

1.5.11 Spirituality

Spirituality is the source of contemplative teaching methods, but the concept is changing and contested, perhaps especially in academia. For Tolliver and Tisdell (2006), key aspects of spirituality in tertiary teaching are authenticity, acceptance, multiple ways of knowing, and acknowledgement of connection to culture and symbol. Drawing on several authors, they identify what they see as common to definitions of spirituality.

... spirituality is about a connection to what is referred to ... as the Life Force, God, a higher power or purpose, Great Spirit, or Buddha Nature. It is about meaning making and a sense of wholeness, healing, and the interconnectedness of all things. Spirituality is different from religion: it is about an individual's journey toward wholeness, whereas religions are organized communities of faith that often provide meaningful community rituals that serve as a gateway to the sacred. (p. 38)

Spirituality is increasingly less likely to be associated with organised religion, as noted in American studies (A. W. Astin, 2016). A New Zealand social survey reports increasing secularisation and loss of church adherents, with over 40% of the 1,027 respondents reporting having no religion (Vaccharino, Kavan, & Gendall, 2011, p. 89). At the same time, however, 30.5% reported being "spiritual," "with an interest in the supernatural" (p. 85). Further, while the term 'spiritual' may still denote a relationship with God or a transcendent power, it increasingly refers to non-deist meaningfulness or connection. For example, atheist neuroscientist, Sam Harris, recently published an entire book about it (S. Harris, 2014).

In search of a modern definition of spirituality, Weathers (2019) conducted a concept analysis across the empirical and conceptual literatures of Nursing, Social Work, Psychology, other Health Sciences, and Theology, arriving at the working definition, “Spirituality is a way of being in the world in which a person feels a sense of connectedness to self, others, and/or a higher power or nature; a sense of meaning in life; and transcendence beyond self, everyday living, and suffering” (p. 15). Although spirituality is complex, individual, and ambiguous, it is essential to health and to care, according to the author.

1.5.12 Māori Wisdom

In developing educational approaches, *Aotearoa* New Zealand’s Indigenous Māori population draws upon holistic concepts and traditions. The word, *ako*, embraces the meaning of both teaching and learning, which are considered inseparable (Ka Hikitia, 2008, cited in Ministry of Education, nd). Māori education and wellbeing are also considered inseparable. Māori education is often framed within the *Te Whare Tapa Whā* metaphor that describes wellbeing as a meetinghouse (*whare*) with four (*whā*) sides: spiritual (*wairua*), mental (*hinengaro*), family/social (*whānau*), and physical (*tinana*) (Ministry of Health, 2017). In Māori medium schools and language nests (*kōhanga reo*), prayer and ritual chant (*karakia*), song (*waiata*), movement (*haka*), proverbs (*whakatauki*), extended family (*whānau*), origins (*whakapapa*), and place (*turangawaewae*) are woven together. A longitudinal study of 625 Māori graduates supports holistic approaches, reporting keys to academic success as including family support, the desire to provide a better life for families, the provision of cultural spaces, a feeling of belonging and connectedness, and presence of supportive staff (Theodore et al., 2017).

The New Zealand Teachers’ Council requires graduating teachers to “have knowledge of *tikanga* (Māori beliefs, values, and cultural practices) and *te reo Māori* (the Māori language) to work effectively within the bicultural contexts of *Aotearoa* New Zealand” (New Zealand Teacher's Council, 2007, cited in C. Smith & Ritchie, 2013, p. 145). In a teacher education programme using these principles, C.

Smith and Ritchie (2013) report that students metaphorically journey together in a canoe (*waka*), are responsible for one another's success, are themselves regarded as treasure (*taonga*), protected by family, and engage in traditional activities such as song and blessings as part of their study. This philosophy (*kaupapa*) supports a way of being, the authors say.

To prepare Social Work students to take on a Bicultural Code of Practice, anti-racism teaching uses emotive, experiential “whole person/ soul learning” that guides students to “locate their own culture and situate their experiences in relation to Māori” (Simmons, Mafle'o, Webster, Jakobs, & Thomas, 2008, p. 367). Class activities include making collages, murals, and ‘human sculptures’ showing ways in which Treaty partners (Māori or non-Māori) have been portrayed in life. Through these sculptures, students “put their bodies on the line” (p.367). Workshops combine holistic approaches and Māori custom (*tikanga*).

1.6 Personal Statement

This research has formed a ‘capstone’ project for my work and study. My work has included employment in the disability and education sectors. For many years, I have worked with postgraduate and undergraduate international students across the disciplines, who are learning English for Academic Purposes (EAP). I have performed various roles including teacher, lecturer, coordinator, programme developer, and teacher educator. My formal study has ranged across Humanities, Social Sciences, and Business, and I have Masters’ degrees in Management and Applied Linguistics.

Although my own experiences as a contemplative practitioner and educator are not part of the data of this study, they have influenced my understandings. My personal contemplative experience came first through Christian contemplation, music, and spending time close to nature, and later also through Buddhist, Integral, brainwave entrainment, and MBSR mindfulness meditative approaches.

My interest in this topic has also flowed naturally from teaching EAP and from teacher education (Teaching English to Speakers of Other Languages, or TESOL)

because these already incorporate many contemplative aspects. They are experiential and embodied, give attention to affect, and include practices such as journaling, listening deeply, providing wait-time, and engaging in dialogue. Philosophically, they are informed by the ideal of the Reflective Practitioner (Schön, 1983, 1987). Methodologies such as Suggestopedia (Bancroft, 1978) have included music and meditative states. Further, studying *Te Reo Māori* (Māori language), at *Te Wānanga o Aotearoa* (The University of New Zealand), has given me experience as a learner in a course that includes the contemplative elements of meditation, relaxation, song, dance, marae visits, and community.

The format of the Doctor of Education programme allowed me to spread my study over several years, while continuing to teach fulltime. Over this period, I was able to apply some of the concepts I was learning about to my teaching. I was also fortunate to have many opportunities to participate in contemplative education and mindfulness courses, conferences, seminars, and workshops in New Zealand and in North America (Canada was my first home), in person and online. In doing so, I was privileged to meet many authors of contemplative literature and to connect with diverse communities of contemplative educators. These communities have included Māori language teachers, Quaker environmentalists, Spiritual environmental activists, Integral Theory educators, members of the Association for Contemplative Mind in Higher Education (ACMHE), Transformative Learning educators, *Theory U* social change activists, contemplative neuroscientists, clinical psychologists, medical clinicians, mindful primary and secondary teacher educators, Buddhists, Christian Meditation and Centring Prayer groups, Sufi contemplatives, Yoga, Qigong, and other embodiment practitioners, MBSR teachers, and staff mindfulness group members. I have been humbled and inspired - the project has been personally transformative.

1.7 Chapter Overview

This chapter has set the scene by introducing contemplative education, providing a rationale for the research, stating the research questions, and explaining key

concepts. Contemplative education has been presented as a response to multiple crises in our interconnected world.

Chapter 2 explains Critical Realist meta-theory and the ways it enabled analysis through its embrace of mixed methods, its understanding of ontology, and its provision of research tools including the six-stage explanatory framework, which enables inference, and the dialectic, which deepens analysis.

Chapter 3 reviews the contemplative education literature from different disciplines and theoretical perspectives, showing how it addresses disconnects with nature, people, self, and the capacity for self-transcendence. The chapter then moves on to review research evidence for the efficacy of contemplative practice in enhancing wellness, relationships, attention, criticality, and creativity. Studies using contemplative pedagogies across the disciplines are described.

Chapter 4 outlines the development of the Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED) for this study, explaining how Critical Realism was applied throughout each Mixed Methods phase.

Chapter 5 reports the extensive survey results and reflects on what they mean for the research questions. The linking of the two research phases is explained by outlining how the survey results informed the development of the interview guide, and how an invitation in the survey identified the interview participants.

Chapter 6 reports the findings of the intensive interview phase of the research. This chapter is structured according to the moments, or stages, of the Critical Realist dialectic, and reports the overall situation of participants, the problems and constraints they identified, their aims and motivations for using contemplative methods, their praxis, their reflexivity, and the ways they found meaningfulness. Ways that participants used pedagogies and practices and how they integrated them in signature pedagogies to teach threshold concepts and target teaching bottlenecks, are described.

Chapter 7 interprets the study overall, providing an overall picture of contemplative education that integrates the Critical Realist tools described in Chapter 2, the analysis of literature in Chapter 3, the results reported in Chapter 5, and the findings discussed in Chapter 6.

Chapter 8 then concludes the study by outlining its contribution, limitations and implications, and suggesting further research.

2

META-THEORY: CRITICAL REALISM

... reflection ... can play a part in ushering in a better life and a better world... This is philosophy as enlightened common sense and as ... agent of emancipatory change. (Bhaskar, 2016, pp. 4-5)

2.1 Introduction

Critical Realism (CR), the over-arching meta-theory for this study, enables the study of complexity and a search for causal tendencies. Further, because this meta-theory is emancipatory in intent, it facilitates focus on contemporary problems such as climate change and injustice, as well as on the suffering endemic to the

human condition. Although employing difficult terminology and explanations, CR provides simplifying heuristics that aid research.

Critical Realism is a generative framework, able to hold intrinsically multi-disciplinary questions. CR can incorporate extensive research methods to describe the scope and context of contemplative education, and intensive methods to explore the meanings given to contemplative practice by educators. The frame embraces the situations in which these educators work, what CR calls their 'thrownness' into contexts shaped by personal, interpersonal, institutional, disciplinary, cultural, socio-economic, political, and historical forces. Within this frame, a wide range of paradigmatic positions ranging from post-positivism to constructivism, and a range of perspectives on spirituality may be accommodated. The transformative impulse of this meta-theory resonates with that of contemplative education. Critical Realism is inclusive of perspectives, having addressed science (Bhaskar, 2008 [1978]), social science (Bhaskar, 1998), and metaphysics (Bhaskar, 2002a, 2002b).

However, although much has been written about CR as a philosophy, less has been written about its application in methodology. As Roy Bhaskar has said, practical application should be CR's "soul and heartbeat" but there has been "a dearth of ... texts," and for those wishing to use critical realism in research, it is not "obvious how exactly one is to 'do it'" (Bhaskar, 2014, v). Further, few research methods courses discuss CR in any depth, if they mention it at all (Mooney, 2015). This lack of attention is in some ways understandable. CR is complex, uses philosophical language, and exists in different versions, which include the Basic, Dialectical, and Philosophy of metaReality (PMR). The publications outlining CR are voluminous, and therefore, it is drawn upon strategically and to varying extents. Further, only a minority of applied researchers have attempted to incorporate CR dialectic, and some have explicitly rejected "the spiritual turn" (Creaven, 2014).

In recent years, in attempts to build resources for applied CR, education authors and doctoral writers have deliberately included more detailed and nuanced descriptions of their thinking. Examples include elaboration of the dialectical

process in a study of Somali community organisers in England (Haji-Abdi, 2013), discussion of the learning processes in Activity Theory (Nunez, 2014), and examination of structure and agency in higher education in England (Shahrar, 2016). In this spirit, the thinking behind the design and conduct of the present study are explained more fully than might be usual.

In this study, Critical Realist (CR) meta-theory was used to frame a mixed design. Mixed research is also a challenging and contested field, with a history of paradigm wars and incommensurability disputes (Denzin, 2010). Therefore, thoughtful and principled explanations of the linkages between values, philosophical assumptions, and the decisions about methodology and methods are required (Greene, 2006). Researchers must “fully explicate their methodologies” and provide “philosophical clarity” (Howes, 2017, p. 450) regarding their design.

An overview of the CR meta-theoretical framework for this research and the design and mixed methods through which it was implemented is shown in Table 2.1, below. CR meta-theory, with its transformative axiology, realist ontology, and relativist epistemology, is then further explained in the remainder of this chapter.

Table 2.1: Philosophical basis of the research inquiry

Metatheory	Critical Realist:
Axiology	Research provides understandings that may facilitate transformative work towards betterment of the human condition 'Being' has intrinsic value
Ontology	Realist
Epistemology	Relativist (interpreted through CR lens)
Ethical Judgments	Explanatory Critique
Inquiry Logics	Abductive, retroductive, and dialectical reasoning processes within the Six-Stage Explanatory Framework
Disciplinary Theories	Contemplative Inquiry, Mindfulness Teaching & Learning (Reflective/Contemplative Practitioner, Transformative Learning (TL), Signature Pedagogies, Threshold Concepts, Teaching Bottlenecks)
Methodology	Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED) developed for this study by adapting and integrating mixed and CR designs within CR frame
Data collection	Exploratory extensive survey (quantitative & qualitative) Intensive semi-structured interviews
Data analysis	Quantitative: descriptive statistics Qualitative: analytic resolution (theoretical Thematic Analysis)
Combining Findings	Survey results further explored through interviews; all findings considered in the abductive, retroductive, and dialectical processes
Dissemination of Findings	Conference papers & workshops; thesis; articles

The version of Critical Realist (CR) meta-theory adopted in this study is its final one, the Philosophy of metaReality (PMR) (Bhaskar, 2002a, 2002b; Bhaskar & Hartwig, 2010). PMR encompasses the following features: an emancipatory axiology; a deep, stratified, realist ontology that addresses the incommensurability

disputes besetting mixed research, a wide range of understandings of spirituality; a relativist epistemology that embraces the complex, open, emergent nature of the world and acknowledges the fallibility of knowledge; a belief in the possibility of rationally judging between alternatives; a central role for disciplinary theories in analysis; the use of analytical thinking tools including an overall explanatory framework embracing abduction, retroduction, and dialectic; and a model of structure-agency interaction. Each of these points is elaborated below.

2.2 The Need for Meta-Theory

Because contemplative education has been investigated through various research approaches within science, social science, and metaphysics, and because contemplative educators are found throughout the university, it was necessary to choose a theoretical foundation like CR that considers all these approaches to be valid.

2.2.1 Axiology: Transformative

Critical Realist (CR) emancipatory axiology (Bhaskar, 2009) is congruent with the belief expressed in the contemplative education literature that research is value-laden and may potentially produce knowledge that benefits society. The aim of this study was to explore transformative contemplative educational practice, and then document and disseminate knowledge of this practice, thereby benefiting educators, students, and the wider society. To this end, opportunities were taken to present research in progress and to have conversations with educators. This research aim resonates with the aim of CR to be a 'serious' theory, intended to generate knowledge with intrinsic power to further human emancipation (Bhaskar, 2013). Researchers aim to reveal causes of injustice and misinformation and work towards 'absenting' these (Bhaskar, 2016). The CR research community has, for example, published on issues including: disability (Bhaskar & Danermark, 2006; Gable, 2014); environment (Bhaskar, Frank, Hoyer, Naess, & Parker, 2010; Lotz-Sisitka & Price, 2016; Price, 2015); wellbeing (Bhaskar, Danermark, & Price,

2018); and education (Lotz-Sisitka, Wals, Kronlid, & McGarry, 2015; Wilkinson, 2014a, 2014b).

2.2.2 Ontology: Realist and Stratified

Adoption of Critical Realism (CR) allowed inclusion of research literature from across the disciplines, both qualitative and quantitative. The rationale for interdisciplinarity in CR rests in its ontology, which is real, deep, open, complex, and emergent. Because ontology is dynamic and complex, epistemology is necessarily relativist and fallible (Bhaskar, 2016). With this understanding, and using a term from Locke, Bhaskar says CR “under-labours” the path to knowledge, in other words, it clears the ground of philosophical debris, such as paradigm incommensurability disputes, and provides a principled way forward (Locke, 1979 [1689], cited in Bhaskar et al., 2018, p. 40).

In Critical Realism (CR), ontology is conceptualised as stratified into progressively deeper layers of reality, with most being inaccessible to direct human study. Bhaskar uncoupled ‘being’ from human experience and understanding of it, metaphorically dividing reality into strata: the observable world in awareness (the Empirical); the manifest world including aspects not necessarily in personal awareness (the Actual); and the invisible underlying structures and powers that may sometimes be inferred (the Real). See Figure 2.1, below, which highlights the role of structures and mechanisms in the domain of the Real in generating events in the domains of the Actual and Empirical.

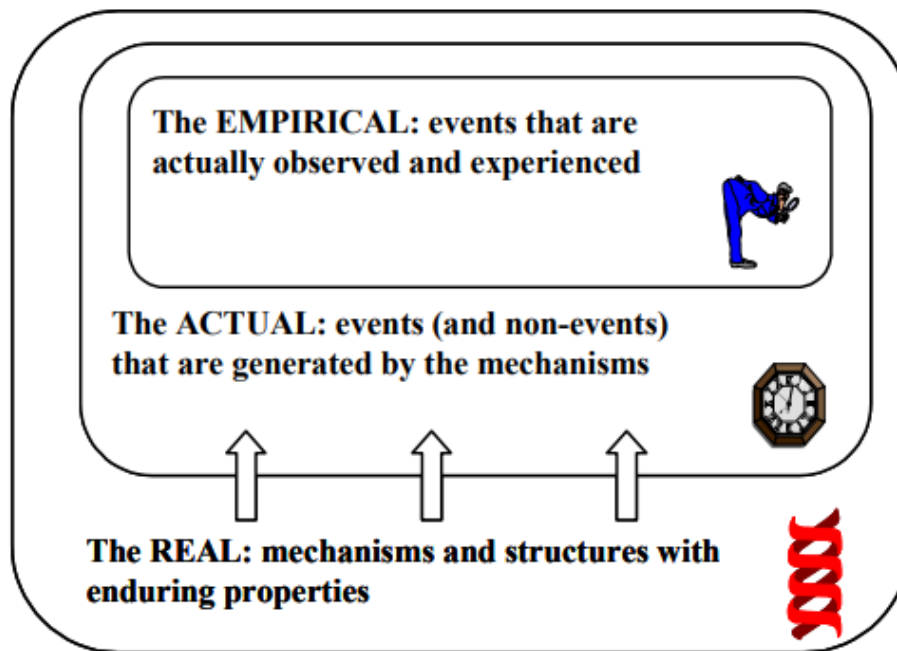


Figure 2.1: *The three domains of the Real* (Mingers, 2002, p. 299)

Critical Realist ontology has found practical application in change management. Using the metaphor of an iceberg, a seminal analysis by contemplative educator, Otto Scharmer (2013), focuses on the underlying paradigms of thought that influence the visible world. At a deep level of the Real, Scharmer identifies what he terms, 'Source.' Re-connecting with 'Source' may change paradigms and in turn, galvanise social change. See Figure 2.2, below.

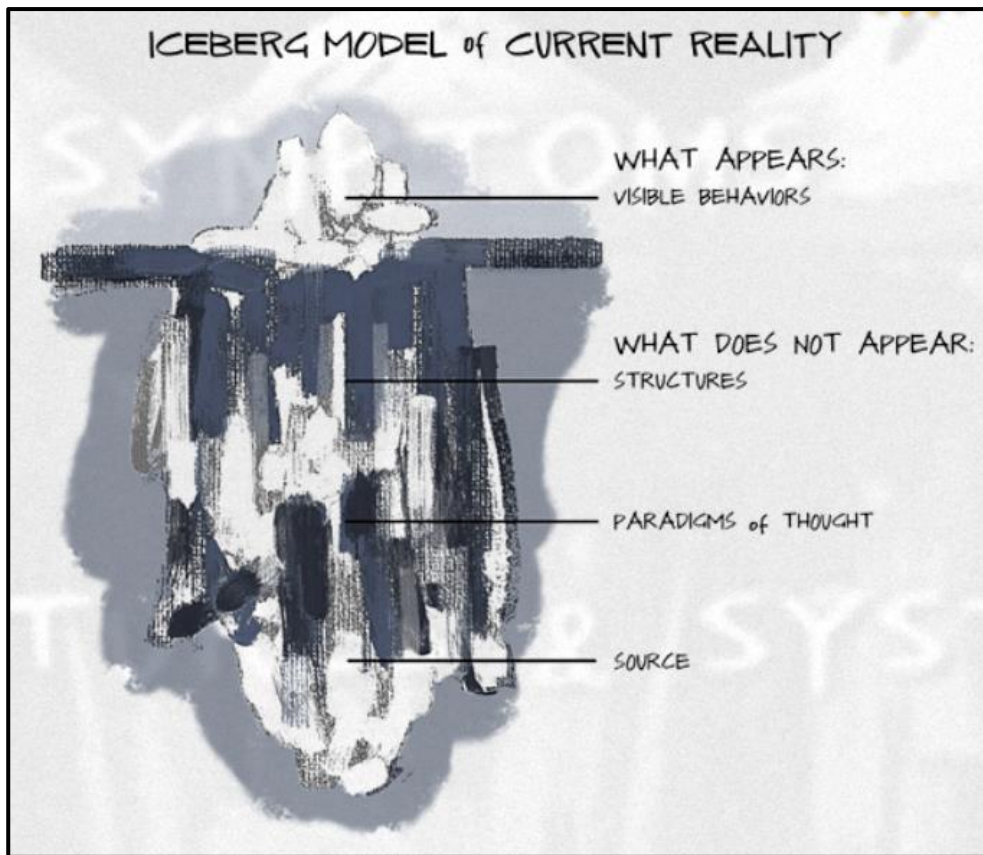


Figure 2.2: The iceberg model of current reality Scharmer, (2013)

<https://www.presencing.org/aboutus/ego-to-eco> CC License by The Presencing Institute - Otto Scharmer <https://www.presencing.org/resource/permission>. Attribution-ShareAlike 3.0 Unported (CC BY-SA 3.0)

Scharmer and his colleagues at MIT Sloan Management School work with governments, institutional leaders, and the general public to generate solutions to social and institutional problems. Another researcher who envisages CR ontology through the metaphor of an iceberg, is Amber Fletcher (2017).

2.2.3 Epistemology: Relativist

Adopting the Critical Realist (CR) vision of stratified reality and a “re-vindicated” ontology has allowed the present research to embrace literatures that use the epistemologies of both science and the social sciences (Bhaskar, 2016). According to CR, although the world is real, human experience of the real is partial, and human knowledge of the real is relativist, constructed and interpreted. Researcher understandings can achieve “degrees of practical adequacy,” not absolute truth

(Sayer, 2004, p. 8). Fuller, richer perspectives may be judged to give better understandings of social realities or life-worlds, however. Thus, the three core principles of basic CR, important for positioning the research, are these: realist ontology, relativist epistemology, and judgmental rationalism. Put simply, reality exists; our ways of understanding reality are perspectival, partial and flawed; and we can make rational, although provisional, judgments between alternative explanations.

2.2.4 Causation

One aim of the present research was to understand why contemplative education has arisen. CR enables inferences that shed light on causation, even though causal tendencies are largely hidden. These inferences are incomplete and subject to revision, not only due to hiddenness, but because social worlds are open to continual dynamic change and emergence. In them, new entities, events, structures, and powers may emerge in any strata, and knowledge, ideas, and even misunderstandings are deemed to have real powers.

This openness of social worlds leads CR researchers to be sceptical about the explanatory power of both statistical and hermeneutic analyses. Statistically identifying regular patterns yields incomplete understanding because the actual effects of causal mechanisms, such as “social structures, positioned practices, relations, roles, [and] resources,” acting in concert, cannot be predicted, and may not be regular (Fleetwood & Ackroyd, 2004). Because of varying contexts and contingencies, they must be inferred, and “... are usually only painstakingly reconstructed...” (Ackroyd, 2004, p. 155). Because the hidden strata of Reality cannot be understood through calculating statistical regularities in the visible layer of the Empirical (Sayer, 2000), some CR researchers, following Lawson (1998), refer to them as ‘demi-regularities.’ These semi-predictable patterns are so named to highlight that human agency is only somewhat predictable and greatly affected by context.

Although statistical regularities cannot explain things in themselves, they do provide a starting point for further, in-depth, contextualised, qualitative investigation. CR recognises the value of qualitative research because understanding is “essentially interpretive” (Maxwell, 2004, p. 7-8). However, while qualitative research deepens understanding, it is no more able than quantitative research to explain causes. This is because the hidden strata of social reality are also largely inaccessible to its hermeneutic and phenomenological approaches. Meaning-making, while crucial to study of the social world, “does not exhaust it” (Fairclough et al., 2002, cited in Fleetwood, 2004, p. 34). Further, in any given research study, the research participants may be only partially aware of underlying causal mechanisms (Ackroyd, 2004, p. 154).

Critical Realism thus finds that neither positivism nor constructivism can identify causal tendencies in the strata underlying visible social worlds - it therefore has developed methods of inferring from research results to these strata (Corson, 1991; Danermark, Ekstrom, Jakobsen, & Karlsson, 2002). CR asks “what must the world be like for [events] to occur?” (Mingers, 2004, p. 5). Inferences are arrived at through abductive and retroductive analysis, discussed below. In the present study, this analysis involved questions such as, “What must the world be like for the phenomenon of mindfulness to have arisen? What must academia be like for contemplative pedagogy to have appeared and to be shaped in particular ways?”

2.2.5 Mechanisms of Social Action

In Critical Realism (CR), humans are held to have real agency, and to operate within real structures. In Bhaskar’s Transformational Model of Social Action (TMSA) (Bhaskar, 1998), further developed in Archer’s Morphogenetic approach (Archer, 1982; Porpora, 2013), structure and agency operate in a dialectical relationship, forming and being formed by one another in a dynamic process. Social structures pre-exist all individuals born into the world, constraining and enabling them. In turn, at birth human agents begin to impact structures, and are further impacted by them. The result of the interaction may be that structures are

reproduced, or that they are transformed. People navigate this structure-agency interaction through reflexivity, which Archer (2007) calls the tool people use to “make their way in the world.”

Reflexivity has become extremely important, according to Archer, because in today’s late modernity, traditional norms cannot guide action, and conscious choices must be made about an unprecedented number of things. In empirical studies, Archer has identified four types of reflexivity, and she reports that the way they are exercised is changing. She says that ‘communicative reflexivity,’ which involves making decisions in concert with others, is waning, ‘autonomous reflexivity’ remains unchanged, and both ‘meta-reflexivity,’ which is functional, and ‘fractured reflexivity,’ which is dysfunctional, are greatly increasing (Maccarini, 2013). Contemplative practice works directly with reflexivity to enhance it, heal the stress and disfunction that excessive reflexivity can engender, and facilitate positive personal transformation.

2.2.6 Complexifying Ontology with Laminations (Dimensions)

Critical Realist (CR) ontology is enriched through consideration of reality in terms of multiple dimensions, called laminations. Laminations are used to develop ecological analytical schema, including the Seven Scalar Social Being, which includes the levels: sub-individual, individual, micro (interpersonal), meso (institutional), macro (society as a whole), mega (geo-historical), and global or planetary. Other schematic laminations involve geo-historical space-times (‘rhythmics’) (Bhaskar, 2014, p. xi).

Researchers modify laminated schema to suit the purposes of their studies. For example, Price (2014) takes issue with studies reporting that South Africa’s social indicators show gender equality. Her argument begins with social laminations, seeing each as inter-penetrating all the others, so that, for example, an individual’s psychology is simultaneously affected by face-to-face interaction, culture, society, geo-history, and global trends. Then she uses an analysis based on the laminations to consider factors including global patterns of inequality, the history of apartheid,

poverty, and male disempowerment, arguing that a CR analysis exposes the limitations of studies relying upon decontextualised statistical regularities.

Other applied examples of laminations have been developed for fields including: education (physical, biological, psychological, social, curricular, and moral-political) (G. Brown, 2009); global warming (cultural, socio-institutional, socio-ecological, ecological, and cosmological/atomic/chemical) (Cornell & Parker, 2010); and disability (physical, biological/physiological, medical or clinical, psychological, psycho-social, socio-economic, cultural and normative) (Bhaskar & Danermark, 2006). The heuristic of laminations has helped to contextualise contemplative education within multiple dimensions and contingencies, and to consider theoretical explanations for aspects of its enactment in tertiary study. In Table 2.2 below, factors that might have an impact on the genesis and enactment of contemplative education have been identified at each lamination level.

Table 2.2: Laminations (dimensions) of reality and examples of factors that may affect the emergence and enactment of contemplative education

Dimensions (Laminations of Scale)	Examples
Cosmic Planetary/ Global	Non-duality/ ground of being/ cosmic envelope/ implicate order/ Absolute/ God Climate change, environmental change, population growth
Mega-level	Colonisation, de-colonisation, neo-colonisation; urbanisation; globalisation (communication, internet, travel, religion, culture, global capitalism, global military industrial complex, resource wars); science and technology; digitalisation; consumer culture; commodification of education, wellness, spirituality, attention; secularisation; modernity; mass movements of people; social changes including breakdown of communities and families; science and technology (medicine, cognitive neuro-science); religions and wisdom traditions; Big History, Universe Story
Macro-level	Government policies and resourcing of education and healthcare; academic disciplinary theories and approaches; disciplinary approaches to CE
Meso-level	University teaching and research roles, citizenship, activist roles
Micro-level	Teaching and learning relations (pedagogies and practices), workplace relations
Individual level of biography	Personal history including social roles, positions, training, experiences (CE experience and training - professional, personal, religious)
Intra-individual level	Biology, embodiment, cognition, psychology, spirituality, reflectivity, reflexivity, mindfulness, contemplation

2.2.7 Re-Enchantment and Spirituality

Spirituality, as the source of contemplative practice for significant numbers of participants in this study, needed to be embedded in the theoretical framework. In the last, Philosophy of metaReality (PMR) stage of Critical Realism, reality is understood as spiritual or 're-enchanted' (Bhaskar, 2002a, 2002b). Thus, ontological strata and lamination levels are seen to be intrinsically spiritual and non-dual. The idea of re-enchancement is a response to the idea of the secularisation of modernity and the gradual replacement of value and meaning with instrumental, material goals. This phenomenon was famously described by Max Weber, who said: "The fate of our times is characterized by rationalization and intellectualization and, above all, by the 'disenchantment of the world'" (Weber, 1917, cited in Gane, 2002, p. 12).

In framing the spiritual, CR continues its ontological argument: even if we cannot measure spirituality in the Empirical realm, and whether or not we have personal experience of it in the Actual realm, it may exist in the Real (Archer, Collier, & Porpora, 2013). Further, we may see evidence of its effects. According to those researchers who have accepted PMR, the 'cosmic envelope,' or 'ground of being,' or 'non-duality,' or 'implicate order,' or God, may be ontologically real - but we apply relativist, constructivist, partial, flawed, perspectival tools to perceive this reality. While there is no definitive way of choosing between perspectives, PMR views 'being' as having intrinsic value. Understandings more likely to lead to the good of all may therefore provisionally be rationally judged better than others, although difficulties in making judgments are acknowledged (Bhaskar & Hartwig, 2010).

The metaReality understanding of re-enchancement allows for positions ranging from atheist, to religious, to spiritual but not religious. Leigh Price, who has published using the PMR frame (Price, 2015), says that she finds it compatible with her own atheist stance. At the same time, metaReality may be used to frame research involving a variety of spiritualities, including Christianity (Archer et al., 2013), Confucianism (Seo, 2008), Indigenous spiritualities (Smallwood, 2011), Eco-

philosophy (Bhaskar, Høyer, & Næss, 2012), and Islam (Haji-Abdi, 2013; Wilkinson, 2014a, 2014b, 2015). There is robust debate within the CR fold, but the meta-theory overarches the tensions, preserving both totality and diversity in interpretations of the spiritual and non-spiritual.

2.2.8 Ethics and Explanatory Critique

Ethics are an important consideration in contemplative education. Ethical judgment is partly addressed in Critical Realism (CR) by Explanatory Critique, which provides a way of moving from social analysis that reveals inequities, absences, and constraints to action to remove them. Moving from ‘is’ to ‘ought,’ it “opens the possibility of extending realism into the realm of values and morality, finding an ‘intransitive dimension’ underlying moral thought” (Bhaskar & Collier, 1998, p. 389).

2.2.9 Inquiry Logics

Critical Realist (CR) analytical approaches that have been applied in this research include use of abductive and retroductive thinking within an overall explanatory framework, and two versions of dialectical reasoning.

Abduction and Retroduction

Abductive and retroductive modes of thinking, in concert with deductive and inductive modes, were employed to (provisionally) identify causal mechanisms (Bhaskar, 2016). While deduction reasons logically from premises to a conclusion, and induction reasons from observations to conclusions, abduction uses conclusions to infer premises, thus generating or choosing explanatory theory, and retroduction uses thought experiments to discover “what qualities must exist for something to be possible” (Danermark et al., 2002, p. 80). In practice, abduction and retroduction take place together. In this study, the literature was investigated to generate theories about contemplative education in New Zealand universities (Chapter 3), and the survey and interviews tested these theories.

Retroduction involves abstract, ‘transfactual’ reasoning, and “the idea of going back from, below, or behind observed patterns or regularities to discover what produces them” (Blaikie, 2004, p. 972). This allows for consideration of possible phenomena that cannot be directly measured empirically. CR highlights retroductive reasoning because this provides a method for provisionally inferring to causal mechanisms. This is the thought process used in scientific hypothesis formation, according to CR authors, although not always explicitly (Bhaskar et al., 2018). Through “creative activity involving disciplined scientific imagination and the use of analogies and metaphors,” it provides fresh insights (Blaikie, 2004, p. 973).

Abductive and retroductive inferences are subject to revision and may be tested, for example, through comparative cases (Danermark et al., 2002, p. 80-81). Making these kinds of inferences necessitates addressing context. In the present study, participants in different situations and disciplines were included.

Six Stage Explanatory Framework

In the present study, the Critical Realist (CR) six-stage explanatory framework was adopted as a vehicle for abductive and retroductive analysis (Bhaskar & Danermark, 2006; Danermark et al., 2002). The framework begins by describing a research object in all its complexity, using both extensive and intensive methods. Second, analysis resolves the research object into dimensions or aspects, identifying those that will be emphasised. Third, through abduction, the aspects are re-described and interpreted through theoretical lenses. Fourth, in the retroductive stage, questions are asked to uncover what must be the case for the situation to exist. In the fifth stage, the various theories and abstractions of stages three and four are compared to see which have the best fit, or possibly to find complementarity. Finally, in the sixth stage, the theories and abstractions are concretised and contextualised through applied methods (Danermark et al., 2002, pp. 109-111). This explanatory framework is summarised in Table 2.3, below. However, explanation does not take place in a manner as tidy as the table might suggest; it is recursive, iterative, and messy.

Table 2.3: The stages in an explanatory research study based on Critical Realism (Danermark et al., 2002, pp. 109-111)

Stages	Explanation
Stage 1:	Description
Stage 2:	Analytical Resolution
Stage 3:	Abduction/ Theoretical Redescription
Stage 4:	Retroduction
Stage 5:	Comparison between Theories and Abstractions
Stage 6:	Concretisation and Contextualisation

Dialectic

This study also made use of CR dialectic in its final version to deepen the six-stage explanatory framework. There are two versions, Dialectical Critical Realism (DCR) and the extended dialectic in the Philosophy of metaReality (PMR). The dialectic acknowledges the possibility of spirituality and has been rejected by many critical realists (e.g., Creaven, 2002, 2014).

Bhaskar's Dialectical Critical Realism, with stages of 'non-identity,' 'negation,' 'totality,' and 'praxis,' built on previous versions of dialectic, including those of Hegel, and Marx and Engels (Norrie, 2009). Hegel's Idealistic version saw dialectic as the unfolding of Absolute Mind and used the terms, 'identity,' 'negation,' and 'totality.' Marx and Engels "extracted the rational core" from Hegel to form Dialectical Materialism with stages of 'thesis,' 'anti-thesis,' and 'synthesis.' In Bhaskar's version, the first term, 'non-identity,' stresses that reality exists in itself, and is not coterminous with human ideas about it. His second term, 'negation,' stresses the role of absence as real and causal. His third term, 'totality,' is understood to be always becoming and emergent rather than having a fixed end. The final term, 'praxis,' highlights the emancipatory role of epistemology in identifying absences and ills that are part of the totality, and of ethical practice in

absenting or eliminating them (Bhaskar, 2008). Hence, the full title of Bhaskar's treatise on dialectics is *Dialectic: The Pulse of Freedom* (Bhaskar, 2008).

The dialectic of negation and absence can be thought-provoking and disruptive. Price says that "absence is the key to dialectical critical realism," claiming that this key improves on the dialectics of both Hegel and Marx, which are "teleological" (Price, 2015, p. 28). In an example from education, Wilkinson (2014a) uses a Critical Realist analysis to identify what he names "the absent curriculum," the lack of curriculum content about Islamic history, as contributing to the alienation of Muslim boys in Britain.

In the Philosophy of metaReality (PMR), Bhaskar adds three more stages to the dialectic (Bhaskar, 2002a; Bhaskar et al., 2018). First, the 'praxis' resulting from the first four moments of the dialectic becomes the subject of 'reflexivity.' The following moments of the dialectic are 'meaningfulness' ('spirituality' or 're-enchantment'), and 'unity' ('non-dual awareness'). For Bhaskar, non-duality is always already the ground of existence, although we may not be aware of this at any given time. In the present study, understanding of participants' personal reflexivity and the ways that contemplative practice fosters meaningfulness through spirituality are part of the data and the literature (Gunnlaugson et al., 2014; Janesick, 2015).

The seven stages, or 'moments' of the complete dialectic, including Bhaskar's original names for each moment (Hartwig, 2007; Norrie, 2009) and more recent alternative names (Bhaskar et al., 2018), are listed in Table 2.4.

Table 2.4: Stages of Bhaskar's MELDARZ/A dialectic

Stage	Re-named, with Description
1M (First Moment) – non-identity, structure	Being as Such (structured, non-identical, containing difference)
2E (Second Edge) – negativity, process (so-called because it is on the edge of becoming something new)	Being as Process (change presupposing absence, negation, contradiction)
3L (Third Level) - totality (holistic causality) (so-called because it is a new level)	Being as Totality (whole, containing holistic causality, internal relations)
4D (Fourth Dimension) - transformative agency (intentional causality)	Being as Incorporating Transformative Praxis (human action)
5A (Fifth Aspect) – Reflexivity	Being as Incorporating Reflexivity
6R (Sixth Realm) – (Re)-enchantment	Being as Meaningful (not nihilistic)
7Z/A (Seventh Zone) – Awakening (non-duality)	Being Prioritises Identity over Difference and Unity over Split
Source: (Hartwig, 2007, p. 12)	Source: (Bhaskar et al., 2018, p. 80-81)

Two recent applied education studies have made use of the dialectic. Schudel (2017) writes about environmental education in South African schools. She uses the first four stages (MELD) to illustrate the process of the transformative learning of teachers and students who try to improve the nutrition of children and communities. She re-describes the dialectical stages as: “knowledge of what is and what is not”; “knowledge of what could be”; “knowledge of what should be”; and “knowing what can be.” In the second example, taken from a book based on his doctoral dissertation, Haji-Abdi (2013) writes about Somali community organisers in England, and uses all seven stages of dialectic to analyse the organisers and their constraints and possibilities in context. (See Table 2.5, below). In a further example, Nunez (2014), analyses Activity Theory through the stages of the dialectic to give a “pluralist, more complete explanation of learning dynamics” (p. xvi). The present study makes particular use of the MELDARZ/A dialectic in reporting the findings.

Table 2.5: MELDARZ/A dialectic in two education studies (Haji-Abdi, 2013; Schudel, 2017)

Stage	Nutrition Education in Schools in South Africa	Somali Community Organisers (SCO) in England
1 st Moment- non-identity	Knowledge of ‘what is and what is not’: statistics on nutrition and poverty, government policies, community realities	Defines the current situation of the SCO co-ordinators.
2 nd Edge – absence, constraints, negation	Knowledge of ‘what could be’: becoming; identifying absence and constraints and possibilities; specifically, lack of nutritious food, poor soil, limited knowledge of gardening	Internal and external constraints which coordinators encountered ... and absences in their personal skills.
3 rd Level - totality	Knowledge of ‘what should be’: realisation by learners of their human rights, their personal responsibility, and their responsibility to their communities	Totality brings together their situation in 1M and constraints and absences in 2E that hindered them - to raise their consciousness to bring change.
4 th Dimension – transformative praxis	Knowing ‘what can be’: uniting theory and practice, specifically increasing food grown in school feeding gardens, skilfully obtaining community grants	Transformed transformative praxis (agency): to end the contradictions and divisions within SCO co-ordinators
5 th Awakening – reflexivity	NA	SCO coordinators reflect on their experience since the establishment of the organisation
6 th Re-enchantment - spirituality	NA	Realisation of the co-ordinators of the ever-needed support which they offered to their fellow members
7 th Zone- unity, non-duality	NA	Awakening following their reflection and their realisation of their hard work and the need to work together

2.2.10 The Role of Domain Theories

Disciplinary theories relating to contemplative education are used to conduct Critical Realist (CR) analysis in Stage 3 of the explanatory framework, particularly in the abductive analysis of qualitative data (Ackroyd, 2004). These theories are discussed in Chapter 3 in the literature review. Pedagogical theories used in the analysis are introduced in Chapter 1, Section 1.4.

2.2.11 Critical Realist Rationales for Mixed Methods

The philosophical explanations above led to the adoption of Critical Realist meta-theory. Within this framework, Mixed Methods design was used. Using multi-methodologies is necessary because the world is complex and research questions are multi-layered. However, difficulties and confusion may result from combining paradigms. McEvoy and Richards (2006) argue that Critical Realism is “anti-conflationist,” and that it avoids problems inherent in paradigm switching because of its principled approach to combining methods. Mixed approaches are desirable because quantitative exploration can discover hidden or unrecognised patterns and relationships. These may then be further examined in qualitative research, which has the strength of being open to emerging themes and to the unexpected.

Mingers (2003) concludes a critique of statistical modelling by saying that modelling may be very useful in a Critical Realist sense, “as a way of discovering patterns of events that reveal the presence of underlying structures; conceptualising, and exploring the behaviour of possible generative mechanisms; and conducting analyses to test out possible explanations” (p. 10). However, he takes issue with positivistic use of statistics, detached from context.

Some Critical Realist (CR) justifications for mixed research are held in common with philosophical pragmatism, which is widely used in Mixed Methods studies. The basic pragmatic justification is that different questions require different methods, methods are complementary, and combining them produces fuller, richer understandings of research questions (Johnson, 2015). Mixed research helps

to replace simplistic, reductionist, neoliberal understandings of ‘what works’ with holistic, integrative understandings from multiple paradigms (Johnson, 2009; Lather, 2004).

The concept of incommensurable paradigms may itself, be contested. According to Johnson (2009), written disputations often rely upon ‘straw person’ arguments and out-dated understandings. Constructivists and post-positivists do agree on many issues, including the perspectival nature of the world, the way that theories and experiences shape perception, the existence of more than one explanation for a phenomenon, the openness and complexity of social worlds, and the impossibility of complete objectivity.

Some authors have substituted other terms for ‘paradigm,’ which has become associated with ‘paradigm wars’ in the social sciences (Denzin, 2010). While continuing to stress the essential nature of “shared examples of successful practice,” which he says are the ‘paradigms’ of scientific communities, Kuhn (1974, p. 22) himself, laments the way that the term expanded to encompass all shared commitments of scholars in a field. For these commitments, or “cognitive operations”, encompassing “symbolic generalisations, models, and exemplars” he substitutes the term, ‘disciplinary matrix’ (p. 3). Other suggested alternative terms include: ‘stance’ (Greene, 2006); ‘cluster’ of assumptions (Biesta, 2010); ‘mixed model’ (Tashakkori & Teddlie, 1998); and ‘shared beliefs in a research community’ (Morgan, 2007, as cited in Teddlie & Tashakkori, 2010, p. 53). Critical Realists have contributed the terms, ‘constellation’ of concepts (Hartwig, 2007); and the idea of mixed methods research as a “flexible toolkit of different methods and lenses” (Maxwell, 2011, p. 29). Instead of seeing paradigms as all-or-nothing positions, or as intellectual straitjackets, we may picture them as guides for the research process.

However, at the same time, CR is principled in its methodological choices and interpretations – all flow from its axiology and ontological assumptions. We cannot simply adopt CR to justify a standard Mixed Methods study, rather, CR philosophy must help to shape the design. For example, in sequential mixed studies, CR

designs would not use quantitative methods to verify qualitative data because they are deemed to be intrinsically incapable of this.

2.3 Conclusion

With a Critical Realist (CR) ontological base, different epistemologies, methodologies, and methods may be utilised when studying the various aspects of contemplative education. CR meta-theory is not only amenable to but presupposes multiple methodologies because of its concern for a thorough understanding of research objects in context. A philosophical commitment to CR has provided a principled rationale for drawing upon research ranging from medical to phenomenological. Reality is construed differently through each of these epistemological lenses, and each contributes to fuller, although still partial, understanding. CR inclusively embraces the complexities of the natural and social worlds with visions of humanity ranging from biological to spiritual.

Adopting Critical Realism has had implications for research design, conduct, analysis, and interpretation. These implications have included:

- Emancipatory focus on providing knowledge to ‘absent ills’
- Inclusion of multiple disciplines and ways of knowing
- Understanding of ontology as real and stratified
- Acknowledgement that knowledge is relative, situated, fallible and partial
- Ability to choose rationally between alternative understandings
- Inference to underlying causal tendencies
- Inclusion of multiple dimensions or laminations in research
- Importance of contextualisation
- Application of CR ontology and epistemology to questions of spirituality
- Use of statistical regularities to identify areas for further study
- Valuing of in-depth, qualitative methods to understand meanings
- Overall analytical processes using abductive and retroductive reasoning
- Use of domain theories in abductive redescription of research findings
- Dialectical reasoning

- Acknowledgement of the role of reflexivity in the articulation of human agency and social structures

Not only were Critical Realist concepts used to shape the overall design of this study, but Bhaskar's invitation to draw upon the heuristic devices in Critical Realism's large toolbox as required in each phase of the research, has been accepted (Bhaskar, 2014). See Table 2.6, below.

Table 2.6: Critical Realist tools and heuristics used in this research study

Tool	Research Phase	Purpose
Ontological Strata (Real, Actual, Empirical)	Analysis, interpretation	To aid abductive and retroductive search for underlying mechanisms of causation
Epistemological Relativism	Mixed data collection and analysis	To include many perspectives to produce fuller understanding
Judgmental Rationalism	Literature, analysis, interpretation	To choose between alternative descriptions and theories
Explanatory Critique	Design, interpretation	To shape ethical response and aim to produce knowledge with potential to improve the human condition
Laminations	Literature review, analysis, interpretation	To gain holistic, contextual, complex understandings
Six-Stage Explanatory Framework	Design, analysis, interpretation	To explain the research phenomenon
Abduction	Literature review, analysis, interpretation	To choose and generate theory within the six-stage explanatory framework
Retroduction	Literature review, analysis, interpretation	To infer causal tendencies within the six-stage explanatory framework
Dialectic (absence, praxis, reflexivity)	Literature review, analysis, interpretation	To deepen analysis and interpretation within the six-stage explanatory framework
Dialectic (re-enchantment)	Literature review, data collection, analysis, interpretation	To be inclusive in acknowledging different perspectives on spiritual and material understandings
Transformational Model of Social Action (TMSA); Morphogenesis	Analysis, interpretation	To acknowledge the interplay between structure and agency and the reflexive imperative
Use of Domain Theories	Literature review, analysis, interpretation	To explain the research phenomenon; used within the abductive re-description in the six-stage explanatory process

The overall message of Critical Realism is that life has value and that research can potentially provide knowledge and understandings to transform the human situation. This principle and the implications for research, summarised above, are built into the design explained in Chapter 4. First however, the literature relating to contemplative education is described in Chapter 3, following.

3

LITERATURE REVIEW

The response to the present conceptual crisis must be to embrace the adventure and harness the potential for transformative learning that is implicit in such uncertain times. (Nelson, 2006, p. 115)

3.1 Introduction

This chapter sketches the shape of the contemplative education literature up to the present time. First, it introduces the small number of previous similar studies and provides an overview of New Zealand literature. Then it describes the two main categories of literature - mindfulness intervention studies, and studies on contemplative pedagogy. The chapter next analyses four global challenges through the lens of contemplative literature: connection with nature; connection with people; connection with self, and connection with the capacity for self-

transcendence. The potential of contemplative pedagogy and mindfulness interventions to contribute to addressing these challenges is then discussed. The complex factors contributing to the emergence of mindfulness and contemplative education are also introduced.

3.2 The Shape of the Literature

Contemplative pedagogy and practice fall within the emerging, interdisciplinary field of ‘Contemplative Studies,’ according to contemplative scholar, Louis Komjathy (2018). Arguing for this field’s “transformative potential in various areas of inquiry” (p. 1), he also refers to it as “diverse, decentralised, and experimental” (p. 4), with literature being produced by scholars in many communities - “humanities, social science, religion, hard sciences, clinical science, education, peace studies, and creative arts” (p. 20). Further, this literature is growing.

The explosive growth of mindfulness research is sometimes illustrated by hockey stick-shaped graphs. A search for ‘mindfulness’ in Scopus, for example, shows an increase from one publication in 1979 to 2,476 publications in 2019, with an overall total of 14,797 peer-reviewed articles, chapters, books and conference papers. The contemplative and mindful education literatures have also grown rapidly, but not so meteorically. Figure 3.1, below, shows an indicative Scopus search that produced 1,149 results (14 with New Zealand affiliations) over a similar period (1980 - 2019). The most interesting thing about the figure, in the context of this study, is that most publications appeared after the study began in 2013. The literature review has therefore been ongoing and iterative. The survey in the first phase of the research was shaped by the early literature, the interviews in the second phase also benefited from later studies, and the final interpretation drew on even more recent work.

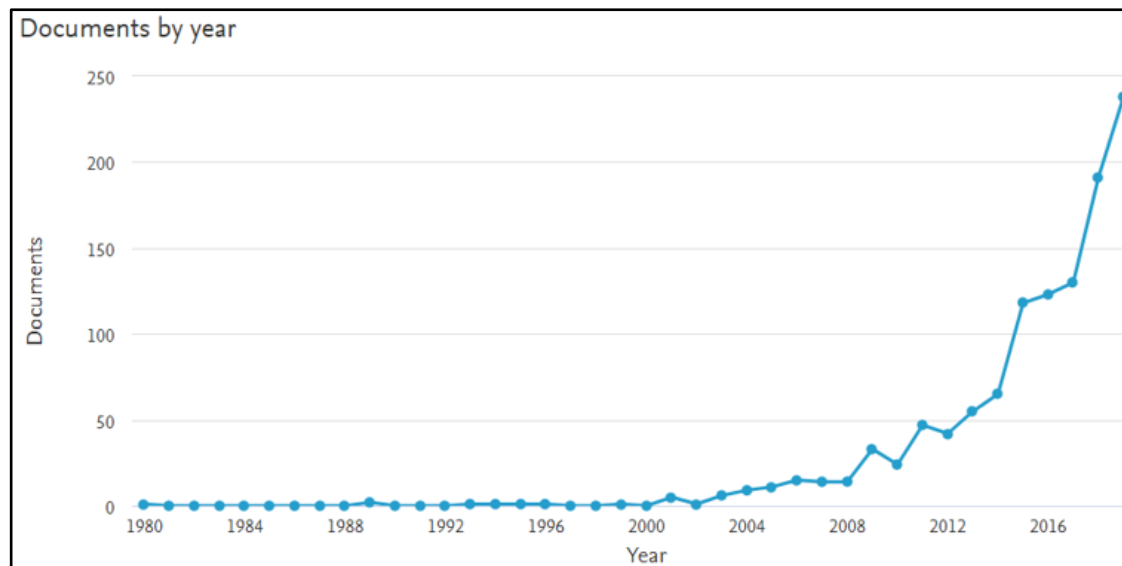


Figure 3.1: Scopus search for ((((mindfulness OR contemplative) AND (teach OR learn* OR student* OR pedagog*) AND ("higher education" OR college OR university OR postsecondary OR "post-secondary" OR tertiary)))), 1980-2019*

Because of the initial scarcity of literature, the search began with the framings, ‘contemplative’ and ‘mindful,’ but was widened to include others such as ‘transformative,’ ‘integral,’ ‘spiritual,’ and ‘holistic.’ The mindfulness literatures of Medicine, Psychotherapy, Psychology, Cognitive Science, and the scholarship about contemplative traditions were also consulted. The search included several databases: Discover, Google Scholar, Index New Zealand, PsychINFO, Scopus, Web of Science, ERIC, Education Source, JSTOR, and The American Mindfulness Research Association (AMRA).

3.2.1 Previous Studies of Educators across the Disciplines

Two studies were particularly instructive in developing the present research. The first, an exploratory Mixed Methods study, was undertaken to gauge the extent of transformative and spiritual education in North America (Duerr, Zajonc, & Dana, 2003). Beginning with an online survey ($n = 117$), it followed up with 14 respondent interviews and 8 expert interviews. The authors report that despite “notable initiatives,” transformative/spiritual education was found to “still exist primarily

among individual faculty within classrooms rather than as a departmental or institutional strategy” (p. 177).

The second study was a Mixed Methods evaluation of the Center for Contemplative Mind in Society (CCMIS) Contemplative Practice Fellowship Programme, from its inception in 1997 to 2009 (Craig, 2011). The study included a survey ($n = 72$) and interviews ($n = 10$), and also drew on previous evaluation reports (Kilmburg-Salter, 2003; Scribner, 2000) and the reports of the 158 Fellows who had been funded for a period of one year each. Some key findings were the “deeper sense of personal and professional integration” that Fellows reported experiencing when teaching contemplatively, and the importance of community and support for contemplative educators (p. 2). Fellows perceived that contemplative teaching “improved the classroom learning experience and had a significant positive impact on students’ personal lives” (p. 3), for example, there were waiting lists for some courses. However, there was no direct measurement of student response.

A small number of recent interview studies of tertiary contemplative educators are now also available. Beer et al. (2015) interviewed 17 higher education professionals including faculty and administrators about how they integrated contemplative practice and mindfulness in their work and daily life. Themes emerging from the study included the importance of mindfulness practice for being present and for achieving work/life balance. In integrating contemplative practice, educators had to traverse multiple roles, and found that practice made their communication more intentional and less reactive. Interconnectedness through relationships was important, and some participants experienced isolation because of lack of understanding in their workplace. Overall, participants stressed the potential of contemplative practice to be transformative in the lives of staff and students. In another study, Daria Pizutto (2019) interviewed 19 faculty working in public and private 4-year colleges in America. Her respondents were recruited via the CMind email list and came from Humanities and Social Sciences. She reported her participants’ perception that using contemplative methods helped to address the social and emotional needs of their students.

3.2.2 New Zealand Literature

The present research undertook to address gaps in knowledge about New Zealand, so this literature review begins by considering studies with New Zealand connections. According to Simpson and Mapel (2011), the first 40 New Zealand clinicians were trained in MBSR in 2005. In Psychology, Alan S. W. Winton was an early and widely published contributor to research on mindfulness-based care of people with autism and intellectual disabilities (e.g., Singh et al., 2004; Singh et al., 2006). In the field of Information Systems, Kay Fielden (2005a), produced a conceptual study modelling mindfulness as a complex, multi-layered phenomenon, which is “an essential quality of integrated wisdom within inquiring organisations” (p. 211). The author also explored the use of journaling to develop the critical reflection skills of postgraduate students (Fielden, 2005b). Other early New Zealand publications included a series of Occasional Papers containing presentations made at Auckland University of Technology (AUT) School of Education conferences held by the Mindfulness Special Interest Group. In these, contemplative educators narrate their journeys to mindful teaching, describe their methods, and discuss the theories upon which they draw. In 2012, articles presented the approaches of Krishnamurti and Varela (Begg, 2012), and reflected upon a workshop conducted by special visitor, Arthur Zajonc. One such reflection described using Zajonc’s “two-phase template for contemplative thinking and meditation... [which] started with focused concentration ... followed by ‘making space’ for deeper insights so that new thoughts and knowledge could be acquired,” (Bernay, 2012a, p. 43).

By the second decade of the 21st century, mindfulness was being advocated as an effective therapy by the New Zealand Mental Health Foundation (Mental Health Foundation, 2012). Ex-patriot researcher, James Carmody, was co-publishing studies showing that mindfulness practice increased grey matter in the brain (Hölzel et al., 2011). Medical educators were beginning to include mindfulness in courses at the Universities of Otago and Auckland. The efficacy of MBSR was measured in a wait-list study of 29 people with different types of chronic health

problems (Simpson & Mapel, 2011), and positive health improvements in the MBSR group, were indicated by self-report measures.

In what he claims to be the first published study of mindfulness and education in New Zealand, Tim Mapel (2012) reports that increased focus and reduced stress resulted from incorporating a brief opening mindfulness practice in classes involving 49 of his students who were studying towards social work, counselling, or psychotherapy qualifications at Eastern Institute of Technology. In *Teacher Education*, a hermeneutic phenomenological study of five beginning teachers, that collected data through journals and interviews, reported benefits of mindfulness practice including increased wellbeing, reduced stress, greater focus, and less emotional reactivity (Bernay, 2012).

By the end of this project in early 2020, New Zealand publications on mindfulness interventions had grown in number. They include an edited book that comprehensively analyses the characteristics, strengths, and weaknesses of mindfulness-based intervention research (Krägeloh et al., 2019). The chapter authors critically discuss the commercialisation of mindfulness, its over-application, the ambiguity of its role as secular and spiritual, challenges in definition, and its role as “state, trait, skill, or practice.” Chapters review difficulties in using self-report mindfulness measures, attempts to use more rigorous quantitative research designs, problems in communicating about mindfulness because of the cultural and religious embeddedness of language, and the potential of enriching research understanding by using mixed and qualitative designs.

A critique of the claims of mindfulness, in the form of a meta-analysis with a first author working in New Zealand, maintains that effects of mindfulness on pro-social behaviour in adults have been overstated (Kreplin, Farias, & Brazil, 2018). In *Marketing*, a New Zealand study by Dresler and Perera (2019) examined the sudden appearance of mindfulness colouring books. The interview study involved 15 women, and the authors report that “Doing colouring can achieve a distinctive form of mindfulness with therapeutic qualities” (p. 862), and enhance concentration, awareness, regulation, spirituality, and wellbeing.

Mindfulness in school education now takes place in over 200 schools using the *Pause Breathe Smile* (PBS) intervention, which was designed for the New Zealand curriculum (Bernay, Graham, Devcich, Rix, & Rubie-Davies, 2016; Rix & Bernay, 2014). Medical educators report on how they incorporate mindfulness interventions in physician education (Moir et al., 2015; Moir, Yelder, Dixon, & Hawken, 2018), and on the importance of physician compassion (Dev et al., 2018; Fernando & Consedine, 2014; Fernando et al., 2017). The *Koru Mindfulness* intervention, targeting ‘emerging adults’ (between 18 and 29 years of age) (Greeson, Juberg, Maytan, James, & Rogers, 2014; Rogers, 2013), is being brought into use at university level. In an example of a conceptual study, Cognitive Psychology researcher, Heather Buttle, argues that the role of spirituality be considered in meditation research (Buttle, 2013, 2015). A growing number of doctoral dissertations and master’s theses on mindfulness are being completed, mostly in Psychology.

Although New Zealand ‘mindfulness’ publications continue to grow in number, New Zealand literature identified as ‘contemplative education’ or ‘mindful education,’ remains scarce. The present study, however, reveals contemplative teaching hidden in plain sight within critical, creative, and reflective approaches throughout higher education, as discussed in the findings in Chapter 6. The remainder of this chapter moves from a focus on New Zealand to a focus on global literature.

3.2.3 Types of Contemplative Education Literature

Research into contemplative education is largely divided into two types – that on Mindfulness-Based Interventions (MBIs) - and that on classroom pedagogy, also sometimes referred to as Contemplative Inquiry (CI). MBI research is generally conducted by Medical, Psychology, and Neuroscience researchers, sometimes in collaboration with educators, while CI studies are conducted by educators across the disciplines. MBIs are largely concerned with wellbeing, and CI with reflectivity, criticality, and creativity. Professional education may include both. Mindfulness

studies are outcomes-based, while most published articles about contemplative pedagogy are conceptual pieces or accounts of pedagogical action research, conducted reflectively with the aim of improving teaching practice.

In a recent mapping study of mindfulness education studies, Ergas and Hadar (2019), refer to these two patterns as ‘mindfulness *in* education’ (MBIs) and ‘mindfulness *as* education’ (CI). Their scope is education research framed as ‘mindfulness’ at all levels from primary to tertiary, and they include 447 peer-reviewed papers published between 2002 and 2017. At higher education level, these include 128 “field-based studies” and some conceptual papers (Ergas & Hadar, 2019) (p. 17). Their scope overlaps with that of the present study, which is ‘contemplative education,’ subsuming mindfulness, and including tertiary level only.

Interestingly, even within the set of literature framed as ‘mindful education,’ Ergas and Hadar identify a “split discourse,” referring to tensions between psychological framings on the one hand, and framings from Buddhism, wisdom traditions, and “epistemology” on the other (p. 30). If the sample of studies is widened to include ‘contemplative’ framings as in the present research, the split in discourse is even greater. In this study, a significant part of this split is attributed to disciplinary variations in paradigms, approaches, and pedagogies.

Although Ergas and Hadar’s map appeared after completion of this study, it provides helpful insights. Table 3.1, below, sums up the contrasts it reveals between mindfulness *in* education (MBIs) and mindfulness *as* education (CI). Mindfulness *in* education is described as: effects-oriented; psychological; focused on wellbeing and [Social Emotional Learning] SEL; delivered through mindfulness interventions; and present at all levels of education from primary to tertiary. In contrast, mindfulness *as* education is described as: process-oriented; framed within Buddhism, wisdom traditions, or epistemology; focused on self-knowledge, transformation, professional education, criticality, and spirituality; implemented through pedagogy; and present almost exclusively in higher education (Ergas & Hadar, 2019, p. 30).

The table also notes the distinction between research methods used in MBI studies, which are largely quantitative and empirical, and methods used in pedagogical studies, which are mostly self-studied, conceptual, and qualitative.

Table 3.1: Differences between studies on mindfulness in education and mindfulness as education studies, 2002-2017 (Ergas & Hadar, 2019, p. 30), used with permission

Table 5. The two main patterns of mindfulness in education 2002–2017

	Mindfulness <i>in</i> education	Mindfulness <i>as</i> education
• Characteristic	• Effects-oriented, scaffolding education	• Process-oriented integrated in education
• Framing of practice	• Psychological	• Buddhist, wisdom-traditions, epistemological
• Framing of role in education	• Well-being, physical and mental health. SEL, academic performance, skills and cognitive functions, education in the professions	• Processes of teaching and learning, Self-knowledge, transformative and life-long learning, education in the professions, critical pedagogy and social inclusion, spirituality in education
• Modality of implementation	• MBIs (usually outsourced)	• Contemplative pedagogy and cross-curricular approaches
• Ages	• Across ages	• Higher education with very few examples in primary schools
• Research method	• Empirical (mostly quantitative)	• Diverse, mostly self-studied and conceptual but rarely quantitative
• Examples	• Napoli <i>et al.</i> , 2005; Bakosh <i>et al.</i> , 2016; Flook <i>et al.</i> , 2010;	• Berila, 2014; Magee, 2016; Tarrasch, 2017

Reviews of research report that contemplative methods in higher education may bring about improvements to mental health and wellbeing, attention and creativity, connection and relationships, understanding of content, and mastery of skills (Barbezat & Bush, 2013; Shapiro et al., 2008). Tertiary studies are still relatively few however, and pedagogies and practices vary greatly, making

comparisons difficult. As Ergas and Hadar (2019) found for mindful education studies, contemplative education studies are also dominated by teacher accounts of practice, conceptual pieces, and advocacy of the potential of contemplative methods. There is implicit reliance on the evidence provided by wisdom traditions and scientific mindfulness research.

However, the quantity of research-based studies is growing. David Sable (2012), for example, studied effects on the critical thinking dispositions of students that were brought about through mindfulness and reflective activities that included journal writing, listening, and dialogue, utilised over a period of eleven weeks. His Mixed Methods study reports:

... statistically significant gains in the average number of indicators of critical thinking dispositions appearing in student journals, and ... increased self-confidence, engagement with multiple points of view, and an unexpected sense of connectedness that was stronger between students who disagreed with each other than between students who found easy agreement in their interaction. (p. xii)

In a preliminary study in Medical Education, 55 students used self-report questionnaires to provide feedback on the effectiveness of a medical curriculum called MaRIS, which incorporates contemplative pedagogy. Results indicated improvements in cognitive, affective and psychomotor areas (Chan et al., 2020). In a neuroscience study involving 265 students, “personal brain investigations” took place at the start of each class (Levit Binnun & Tarrasch, 2014). An extra 10-minute exercise four times each week followed by writing “lab reports” was also completed by 102 of the students. Exercises included, for example, breath focus, “investigating magnets of attention”; “investigating the relationships among emotions, sensations, and thoughts”; and “investigating emotional valence” (p. 5). Most students doing this extra practice completed a survey. From the total pool of students, 43 completed a follow-up quiz one year later. Overall, students reported satisfaction with the exercises, and the students who did extra exercises remembered class material better, were better able to make connections with content, and showed enhanced skills including increased awareness and attention

Themes that consistently emerged included: “silence,” “awareness,” “self-care,” and “wholeness.”

In another example, a study conducted in an undergraduate physics course with 66 students measured the effectiveness of somatic practice, meditation, and pointing out of electromagnetic phenomena. The goal was to address what is reported to be a surprising but common problem – physics instruction makes students less aware of the connections between physical principles and personal experience (Coalson, Feldman, & Krusberg, 2020). After the instruction, most students reported greater awareness of electromagnetic phenomena in daily life, and about half reported greater awareness of interdisciplinary connections and greater curiosity. Nine students expressed initial scepticism, but all ended by appreciating the contemplative practices.

In addition to these studies directly measuring outcomes, a growing number of studies in widely varying subjects report educator and student perceptions of the effectiveness of contemplative teaching. Examples include a study set in an Interior Design studio classroom in which students participated in contemplative practices while designing a hospice along contemplative principles (C. Christian, 2019). In another example, a survey study of 71 Sociology students reported positive student perceptions of the effectiveness of mindfulness practices for enhancing understanding of the connection between the individual and society (Song & Muschert, 2014). In a further example, undergraduate nursing students positively evaluated teaching methods that included reflecting on a domestic violence vigil, journaling, breathing exercises and guided imagery (Fiske, 2017). Creative writing and education students reported valuing contemplative writing practices (Hall & Archibald, 2008).

While research rigour is increasing, at the same time, many tertiary studies are carried out by the teachers themselves. Ethical requirements for research may be met by conducting the research after students have completed the course and received their marks. For example, the impact on critical reflective practice of Social Work students taking part in contemplative pedagogy and mindful practice,

was measured through qualitative interviews with 10 of the 21 students in the class a year after their course had ended (Wong, 2013).

The Association for Contemplative Mind in Higher Education (ACMHE) has worked to fill gaps in higher education contemplative teaching and research, hosting resources, including webinars, educational curricula, and a new bibliography of research (Schoen, 2019). (This bibliography includes over 400 listings, but several of these are cross-referenced, so appear more than once).

Research into the effects of pedagogy on outcomes such as grades are limited and challenging to carry out because of the multiple complex factors present in tertiary courses. Like other forms of teaching, contemplative pedagogy is difficult to research in ways that afford comparisons – it is highly contextual and dependent upon contemplative practitioners. Nevertheless, research of different types in widely varying situations has shown promising results. The next section turns to contemplative education literature to analyse global challenges.

3.3 Contemplative Analyses of World Challenges

Contemplative education is often seen as providing the opportunity to address current problems in new ways (Zajonc, 2006b). The premise is that it can help humanity to overcome disconnects between action known to be needed and actual behaviour, and to ameliorate the stress and unwellness of the late modern condition.

A further development of the iceberg model of ontology introduced in Chapter 2 (Figure 2.2) analyses the contributors to world problems at visible and hidden levels of Reality (Scharmer & Kaufer, 2013). In this model, visible symptoms are divided into three categories: ecological, social, and spiritual/cultural. Underlying these symptoms, the authors identify eight structural ‘disconnects’ between human behaviour and underlying real limits, including those between: the speculative financial economy and the economy of real value; the growth imperative and the real resources of the Earth; the concentration of wealth in a few hands and the needs of the poor; institutional leadership and the real needs of

people; consumption and wellbeing; governance and people's needs; and systems of ownership and the common good (p. 5-8). See Figure 3.2, below.

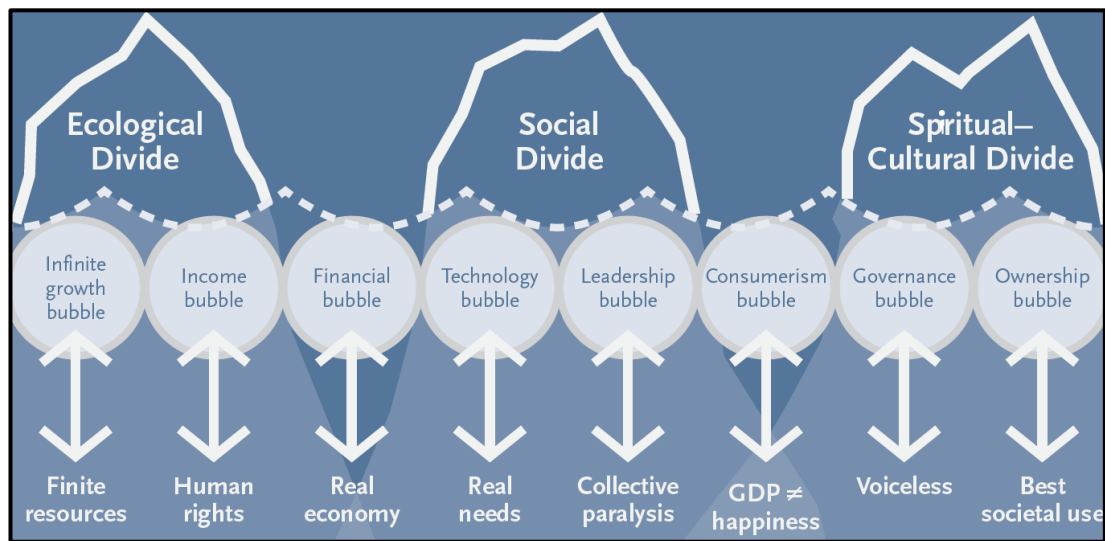


Figure 3.2: Iceberg model showing world problems as visible symptoms and underlying structural 'disconnects' (bubbles) (Scharmer & Kaufer, 2013, p. 14), used with permission

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In the iceberg analysis above, the surface symptom of the infinite growth bubble, for example, is the large ecological footprint resulting from excessive growth and limited resources. The surface symptoms of the consumerism bubble include depression and lack of wellbeing resulting from production and marketing of goods that do not provide real satisfaction. Improvement would require reconnecting with other people and with the inner self to find sources of happiness other than material ones.

To bring about positive change in these inter-related planetary, cultural, socio-economic, political, and institutional dimensions, the authors target the mental paradigms of leaders and influencers. Their key thesis is that leaders need to prioritise 'eco-system' thinking rather than self-interest and then transform the societies in which they live. In their work with corporate executives, government leaders, students, and the public, the authors use contemplative approaches, including reflection, mindfulness, dialogue, deep listening, compassion walks, and

social theatre (Scharmer, 2009). They implement *Theory U*, a social change process originally developed through interviews with transformational leaders (Scharmer, 2009; Scharmer & Kaufer, 2013). *Theory U* involves recognising ‘blind spots’ and misconceptions, listening deeply to others, observing situations, taking a ‘deep dive’ to ‘connect with source’ and reflect on the ‘emerging future,’ ‘prototyping,’ and testing proposed solutions (Senge, Scharmer, Jaworski, & Flowers, 2004). The creators aim to bring about widespread grassroots social change.

A parallel analysis of the present world situation is found in a recent Critical Realist publication, which identifies economic, ecological, and normative (moral and political) crises (Naess & Price, 2016). This analysis:

... throw[s] light onto the nature and causes of three different but strongly interconnected crises in contemporary societies worldwide: an economic crisis, an ecological crisis and a normative (moral and political) crisis. These crises are reflected in the profoundly inequitable distribution of wealth, resources and life opportunities around the world. (p. 1)

In their analysis, Naess and Price (2016) make arguments similar to those above, referring, for example, to the conflation of “human needs with market demand” and the ignoring of real environmental limits by orthodox economics, which they say “acts as a source of mystification, or causally efficacious illusion” (p. 2).

In the field of contemplative neuroscience, researchers explore the possibility that people can change themselves from the inside out by using recent discoveries in neural plasticity. Meditation is reportedly “the only [known] model for the conscious self-regulation of plasticity” (Loizzo, Neale, & Wolf, 2017). This plasticity may be harnessed to compensate for cases where people are out of equilibrium with their current environment (Gluckman & Hanson, 2008), where ‘mismatches’ between drivers that have aided survival as a species and the current reality have arisen (Li, Vugt, & Colarelli, 2017). Meditative exercises have been suggested by contemplative psychologists, for example, “taking in the good,” which counters a “negativity bias” that seems to result from a survival need to prioritise danger (Hanson & Mendius, 2009). Another example is mindful eating interventions that

target a mismatch involving overeating in the presence of plenty, perhaps evolved to cope with periodic famines. These theories of mismatches lend biological and neuroscientific support to the analysis of disconnects.

This literature review builds on the iceberg metaphor and Critical Realist depth ontology to analyse the contemplative education literature in terms of symptoms visible in various contexts (Empirical and Actual strata), and underlying structures and mechanisms (Real strata). The result is a model of hypothesised causal tendencies giving rise to contemplative education, and of its potential impacts (Table 3.2). The categories used in the model include: disconnect with nature; disconnect with other people; disconnect with self; and disconnect with the capacity for self-transcendence. The table provides indicative references.

Table 3.2: Iceberg model showing disconnects at Empirical, Actual, and Real levels and the potential action of contemplative practice at the level of Source, (developed by the author with reference to Bhaskar, 2016, and Scharmer & Kaufer, 2013)

Disconnects with:	Nature	People	Self	Self-Transcendence
EMPIRICAL - Surface Symptoms:	Symptoms: Climate change (O’Sullivan, 2002; Uhl & Stuchel, 2011)	Symptoms: Injustice, inequity, aggression (Berila, 2016; Naess & Price, 2016)	Symptoms: Stress, Unwellness, burn-out (Daya & Hearn, 2018; Rudaz, Twohig, Ong, & Levin, 2017) Distraction Escapism (Kabat-Zinn, 2005)	Symptoms: Alienation, dis-enchantment (Landy & Saler, 2009)
ACTUAL: Contextual	Over-consumption (Bahl et al., 2016)	Rich/ poor, social breakdown (Scharmer & Kaufer, 2013)	Information overload (Carr, 2010), attention capitalism (Doran, 2017), excessive choice (Gorski, 2016)	Displaced (family, community, religion) (Taylor, 2007) Replaced (globalisation, science, technology) (O’Sullivan, 2001)
REAL: Deeper Disconnects / Mismatches	Mismatch: Consumption / Limits (Fischer, Stanzus, Geiger, Grossman, & Schrader, 2017)	Mismatch: Success drivers / good of all	Mismatch: Overload / Wellbeing Evolutionary responses (Hanson, 2009)	Mismatch: Traditional stories / new cosmologies (Gotschall, 2013; Swimme & Tucker, 2018)
	↑	↑ Contemplative Pedagogy and Practice ↑		↑
SOURCE / POTENTIAL: Contemplative Education	Connection with nature (Eaton et al., 2017)	Connection with others (relationships, compassion), ethics, action (Davidson et al., 2012)	Connection with self (calm, resilience, attention, criticality, creativity, embodiment) (Barbezat & Bush, 2013)	Spiritual connection / self-transcendence (Kabat-Zinn, 2013)

Table 3.2 first indicates a disconnect with nature. At the Empirical level, the most striking symptom of this is climate change. In the contemplative literature, climate change is attributed not only to factors such as increased population, but also to over-consumption. This may be a greater or lesser factor in various Actual contexts. Overconsumption is said to flow from mismatches between evolutionary drives to consume and natural limits (Bahl et al., 2016; O'Sullivan, 2002) at the underlying level of the Real.

The second disconnect is that with people. This disconnect is exemplified in different contexts at the Empirical and Actual levels, by injustice, inequity, and aggression (Naess & Price, 2016). Underlying these symptoms, at the level of the Real, are evolutionary tendencies to prioritise the needs of self over the greater good. The third category, disconnect with self, is visible in the symptoms of stress, burnout, distraction, and general lack of well-being (Kabat-Zinn, 2005). Contexts include information overload (Carr, 2010) and attention capitalism (Doran, 2017). Beneath these are deeper evolutionary stress responses, including fight, flight, and freeze (Hanson, 2009).

The fourth and final disconnect, with the capacity for self-transcendence, is shown in alienation and dis-enchantment (Landy & Saler, 2009). Underlying these symptoms is the displacement of traditional ways of finding meaning through family, community, and religion (Taylor, 2007), and their replacement by globalised, urbanised, technological, digital worlds. Humans are storytelling animals, according to Gottschall (2013) and it is argued that there is a need for new stories through which humanity can find purpose (Swimme & Tucker, 2018).

Table 3.2 shows yet another deeper level of the Real. Following Scharmer (2013), it has been named, 'Source.' At this level has been placed the reported potential of contemplative practice to foster capacities including: re-connection with nature (Eaton, 2017; O'Sullivan, 2002); compassion for other people (Kirby, 2017; Seppala, 2017); re-connection with the self, including attention and equanimity (Goleman & Davidson, 2017), criticality (Sable, 2012; 2014) and creativity (Sarath, 2006; 2013); and reconnection with the capacity for self-transcendence (Vago & David, 2012),

including spirituality (de Souza, Bone, & Watson, 2016; Dirkx, 2001). Contemplative practice may bring the practitioner into resonance with an underlying non-dual (Ergas, 2011; Seo, 2008), pre-cognitive 'ground of being' level (P. F. Morgan, 2012).

The disconnects identified in Table 3.2 constitute educational challenges. The ways these challenges are addressed in the contemplative education literature are further discussed, below.

3.3.1 Connection with Nature

The first category of educational challenge derived from Table 3.2 is to work towards greater connection with nature. Sustainability is so central, according to transformative environmental educator, Edmund O'Sullivan, that "... all our educational ventures must finally be judged within this order of magnitude" (2002, p. 2). Contemplative practice helps to establish new ways of thinking, for example by fostering the identification of assumptions and openness to other perspectives. Further, practitioners of mindfulness may be supported in changing habitual patterns of consumption (Bahl et al., 2016; Fischer, Stanzus, Geiger, Grossman, & Schrader, 2017; Stanzus et al., 2017).

Humankind needs to see itself as inseparable from the environment, as the universe "become conscious of itself," and to escape from its "technological entrancement," according to environmental educator, Thomas Berry (1998, as cited in Laszlo, Combs, & Berry, 2011). The 'universe story,' which positions humanity in this way (Swimme & Berry, 1992), is now taught at Yale University through courses, films, publications (Swimme & Tucker, 2011), and Massive Open Online Courses (MOOCs) (Grimm & Tucker, 2018).

Integral Education is another approach arguing that climate change needs to be addressed from inner (contemplative) as well as relational and systems approaches (Esbjörn-Hargens, 2010a, 2010b). Integral theorists make this argument because they hold that phenomena are enacted simultaneously from four perspectives:

subjective first-person (cognitive, emotional, psychological, spiritual); subjective second-person (inter-subjective, relational); objective singular (biology, architecture, teaching materials); and objective third-person plural (systems) (Esbjörn-Hargens, 2007, 2010b; Esbjörn-Hargens & Zimmerman, 2011; Wilber, 2005). All are implicated in any climate change approach.

Sustainability is an “adaptive problem,” rather than a “technical problem,” that could be solved if sufficient resources were invested, according to Eaton, Hughes, and MacGregor (2017). Adaptive problems “throw into question not only our taken-for-granted problem-solving methods, but often challenge deep-seated habits of mind and values” (p. 5). The authors argue that these adaptive problems require us “to completely reinvent how we go about living in the world and, fundamentally, how we *think* about the world we live in” (p. 5), a process facilitated by contemplative practice. In the same vein, Wamsler (2018) says that to bring about more effective climate action, we need “inner transition,” which “describes change within individuals that relate to their (expanded) consciousness and is associated with changes in values and behaviour. Inner transition is supported by indigenous, religious, or spiritual practices such as mindfulness” (p. 1121-1122).

Eaton et al. (2017) also highlight the need to acknowledge emotional responses in teaching for sustainability, quoting an undergraduate student who said, “My biggest issue is just showing up for class, what’s the point when we’re headed for extinction?” (p.3). Similarly, Karen Litfin (2016), educator in Global Environmental Politics, says that the grief, despair, fear, and guilt experienced by herself and her students in the face of environmental crisis, led her to develop contemplative teaching methods. Through journaling and guided meditations, her students explore questions such as, “Who am I in a changing climate?” and consider the “riddle” of their own role (p. 121). She aims to end evasion of real issues such as consumption, but at the same time, awaken creativity and hope.

Environmental educators, Uhl and Stuchul (2011), also call for contemplative education that brings about new ways of being, moving from separation consciousness to relational consciousness, from ways of thinking that are

mechanistic, simple, separate, product-oriented, and physical - to those that are organic, complex, connected, process-oriented, and soulful (p. 13). Scholar of environmental politics, and author of *Living through the End of Nature*, Paul Wapner (2010), uses contemplative teaching to raise student awareness, and sees activism as a path to spiritual awakening. In one course, for example, he raises student awareness about the cost displacement of waste - to people living downstream, to later generations, and to other species (2018). He requires his students to carry all their waste with them for a week and to do reflective exercises, including writing a letter to someone who will be affected by this waste downstream. He hopes to awaken ethical engagement and connection and provoke action.

3.3.2 Connection with Other People

The second educational challenge is to foster connection with people. Many school-based studies report the effectiveness of using mindfulness curricula (Davidson et al., 2012; Roeser, 2014). A growing number of reviews and meta-analyses report positive results for Social and Emotional Learning (SEL) programmes, while urging approaches to future research that will allow for better comparisons to be made (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Waters, Barsky, Ridd, & Allen, 2015).

Compassion is also a developing area of study from perspectives including biology, evolution, epigenetics, and interventions (Seppala, 2017). A recent review found eight compassion interventions in use with a variety of populations (Kirby, 2017). Initial clinical results are promising, but standardisation and further research are advocated. Compassion is also related to connection with the self and with self-compassion. In medical education, the potential of mindfulness and compassion interventions to address physician burnout and improve patient care has been highlighted (Dobkin & Hassed, 2016a; Fernando & Consedine, 2014; Fernando et al., 2017). Compassion interventions have also been used in teacher education to

foster teacher prosocial behaviours so teachers may, in turn, foster these in their students (Lavelle-Heineberg, 2016).

Peace-making and restorative justice education sometimes make use of contemplative methods, for example in the use of a circle process in classroom seminars (Kitchen, 2013). An edited volume (Brantmeier, Lin, & Miller, 2010) reviews the educational use of peace-making practices derived from several religions, including Confucianism, Judaism, Islamic Sufism, Christianity, Quakerism, Hinduism, Tibetan Buddhism, and Indigenous spirituality. In the Buddhist practice of *Tonglen*, for example, practitioners breathe in the pain and suffering of a widening group of beings and breathe out compassion. In *Ho'oponopono*, a Hawaiian practice of forgiveness, practitioners work towards conflict resolution. In another study, on a course in peace and justice, the mindful writing of memoir is utilised to deepen awareness of social justice issues (Denton-Borhaug & Jasper, 2014). In teaching argument essay writing, Keith Kroll (2013) utilises embodied approaches from Aikido to build a pedagogy he calls, “the open hand – arguing as an art of peace.” Marilyn Nelson (2006) describes her teaching of a creative writing course in which she uses methods for fostering inner peace that can lead to outer peace, including listening to silence, musing, freewriting, journaling, and poetry writing.

Contemplative educators who focus on intersubjectivity also see this as fostering peace. Dialogue is the key to developing *I-Thou* relationships in the sense of Martin Buber (Bai et al., 2013, p. 14-15). Dialogue is not mere conversation, but involves a ‘being’ mode, deepening empathy. Dialogue facilitates a co-creative, collaborative approach to teaching and learning (Phillips & Napan, 2016).

3.3.3 Connection with Self

The third educational challenge flowing from the disconnects in Table 3.2, above, is to restore connection with self. According to a growing number of systematic reviews and meta-analyses, mindfulness has a moderate effect on wellness, attention, cognitive skills, and creativity. For example, mindfulness interventions

have been shown to ameliorate burnout and high stress in professions including Medicine (Daya & Heath Hearn, 2018), Healthcare (Lo et al., 2018; Lomas, Medina, Itailvtzan, Rupperecht, & Eiroa-Orosa, 2018), Mental Health (Rudaz, Twohig, Ong, & Levin, 2017), Nursing (van der Riet, Levett-Jones, & Aquino-Russell, 2018), Education (Zarate, Maggin, & Passmore, 2019), and Social Work (Trowbridge & Mische Lawson, 2016).

Government bodies increasingly look to mindfulness to enhance wellbeing and stimulate innovation. A United Kingdom government report recommends that mindfulness interventions be implemented in health, education, workplaces, and the criminal justice system. According to the report, mindfulness has a clear role in developing ‘mental capital,’ which is described as “the cognitive and emotional resources that ensure[d] resilience in the face of stress, and the flexibility of mind and learning skills to adapt to a fast-changing employment” (Foresight Report, as cited in The Mindfulness All-Party Parliamentary Group, 2015). The authors argue that the potential of mindfulness “... should be of real interest to policymakers given the importance of improving productivity, and nurturing creativity and innovation in the UK economy” (p. 6). In New Zealand, the Mental Health Foundation (2012) promotes mindfulness, partly through the *Pause Breathe Smile* programme, which utilises the *Te Whare Tapa Whā* holistic model of wellbeing that is part of the New Zealand Curriculum (Bernay, Graham, Devcich, Rix, & Rubie-Davies, 2016; Rix & Bernay, 2014).

Restoring the capacity to pay attention is another challenge identified in Table 3.2 and addressed by contemplative educators. Incapacity to focus has flow-on effects for the ability to think critically and creatively. One author (Carr, 2010) refers to superficial approaches to knowledge resulting from information overload and digital distraction as ‘The Shallows.’ In the ‘attention economy’ (T. H. Davenport & Beck, 2001), also known as ‘cognitive capitalism’ (Moulier-Boutang, 2011), marketers and neuro-marketers keep consumers on a consumption treadmill. The requirement of endless growth is endless dissatisfaction and endless want. “... [B]y ‘manipulating the gnawing sense of lack ... the attention economy insinuates its

basic message deep into our awareness: the solution is consumption' (Loy, 2009, as cited in Doran, 2017, p. 14).

Peter Doran (2017) argues that our society needs to restore a 'mindful commons.' He points out that what we perceive to be reality is formed by where we put our attention – our very reality is now in the control of market forces. "[T]he colonization of consciousness" is an even greater threat than the environmental one, he argues (Hershock, 2006, as cited in Doran, 2017, p. 7). Reveley (2014) makes a related claim that 'digital capitalism' overloads psychic and attentional systems, freezes emotional intelligence, and precludes deep understanding (p. 806). He cites studies arguing that in consumer society, people are depressed, "mentally overburdened and exhausted by the constant pressure to make choices" (Brinkman, 2008, as cited in Reveley, 2014, p. 814). The situation is worsened by digital capitalism, which produces attention deficit, he says.

The ability to focus attention is foundational to education, yet the education system does not directly train students in this skill. Mindfulness advocates look to meditative technologies to enable intentional and attentional approaches to consumption and production. Kabat-Zinn's MBSR intervention is designed to address the modern "attention deficit disorder" that he says we all experience in our society (Kabat-Zinn, 2005).

In dealing with crises, mindfulness and contemplative approaches are able to replace the natural stress responses of fight, flight, and freeze, with more effective and healing ones, according to a guide for clinicians (L. Davenport & van Susteren, 2017). In 129 studies, fighting strategies of "arousing regret or fear" were the least successful in bringing about sustainable behaviour change (Curfman, 2009, as cited in L. Davenport & van Susteren, 2017, p. 37). Further, too much exposure to a message could create a "paradoxical environmental numbness." Unhelpful flight responses include illusory "unrealistic optimism," and "personal greenwashing" (perhaps recycling bottles but driving an inefficient car). The freeze reactions result from overwhelm or ambivalence in dealing with complexity, and from the drastic, difficult, and uncomfortable nature of necessary changes. Healing and

resilience-building practices are therefore necessary alongside action in dealing with problems such as climate change.

3.3.4 Connection with the Capacity for Self-Transcendence

The final challenge listed in Table 3.2 is to restore the capacity for self-transcendence, which may be defined as “the capacity of an individual to expand self-boundaries toward a mature, broader perspective on life” (Fiske, 2019, p. 266). This involves relationships, enables meaning making, and can occur through spiritual practice. A need for self-transcendence may be hard-wired into the human being, however, with traditional ways of making meaning in decline, and with increasing disconnection from nature, it may be more difficult to exercise this capacity.

Scholars have argued that our age is secular (C. Taylor, 2007). While welcoming a decline in superstition and fundamentalism, many argue that secularism contributes to a sense of alienation and groundlessness (Bauman, 2000). Further, the privatisation of religion adds to the burden of choice and puts increased demands on personal reflexivity (Gorski, 2016). Steve Bruce (2017) argues that privatised religion no longer plays a necessary role in politics, law, regulation, community, marriage, birth, or death. Religious practice is not central to most lives, rather relationships with God are more “consultative” and “therapeutic.” People can individually choose religions or parts of them, and systems of intergenerational continuity are weak. Bruce says, “For many of us religion has become like any other consumer product” (p. 10).

Other scholars have countered that we have entered a post-secular age, citing the resurgence of Islam, and saying that other religions also continue to have influence although in different spheres than in the past (Habermas, 2008). Further, although Western religions are in decline, Eastern religions and practices such as Yoga have arisen. Colin Campbell (2007) says that contact with the East has fundamentally changed ways of thinking and being, including “essential primary assumptions concerning reality and truth, time and history, the cosmos, and the nature of

humankind” (p. 363). At the same time, in the West these religions and practices have become more secular versions of themselves. For example, Yoga has become a kind of exercise, Buddhism a therapy for stress relief, and Feng Shui an adjunct to home decorating.

Analysts have also identified attempts to ‘re-enchant’ the secular world in non-religious ways, for example, through “the rise of populism, the return of tribalism ... the re-enchantment of science and the return to craft” (Suddaby, Ganzin, & Minkus, 2017). To fill a “God-shaped void”, there are several requirements, according to Landy and Saler (2009). These include mystery and wonder, order and purpose, significance, redemption, “a new, intelligible locus for the infinite,” “spaces which somehow possess the allure of the sacred,” “everyday miracles, and secular epiphanies” (p. 2). Secular pastimes that attempt to re-enchant life include absorption in literature, creation of fantastical fictional worlds, immersion in stadium sports, and encountering the unknown at the limits of science.

The role of contemplative education in these developments is complex. On one hand, it appears to be part of the march of secularism - extracting contemplative practices from traditional religions and re-purposing them for academia, business and health would be unthinkable except in a secular context. On the other hand, academia, business, and health used to be in themselves, enchanted. Thus, the re-purposing of meditative practice may perhaps be seen as re-enchantment - a way to bring spirituality (with or without religion) back into daily life. In this view, contemplative and mindful practices partly fill the hole left by the decline of religion.

3.3.5 Source

The potential of contemplative pedagogy and practice has been placed at the level of ‘Source,’ at the bottom of the Real in Table 3.2, above. Scharmer (2001) refers to ‘Source’ as a place of deep knowing and learning, a place of “not yet embodied knowledge” (p. 141). He says that Schön’s (1983) ‘reflection-in-action,’ and Csikszentmihalyi’s (1990) ‘flow,’ tap into it (cited in Scharmer, 2001, p. 143). *Theory*

U (Scharmer, 2009) refers to it as ‘presencing,’ a term combining ‘presence,’ and ‘sensing’ what is emerging.

Other authors, both secular and spiritual, have also identified contemplative practice as taking place at a deep, ground level. Mindfulness, for example, has been referred to as “a post-secular hack of non-duality,” providing a path to non-dual awareness (Arat, 2017). This concept builds on Kabat-Zinn’s assertion that mindfulness (secular or religious) is a “universal dharma” (Kabat-Zinn, 2013). These ideas are compatible with the Philosophy of metaReality (PMR) conceptualisation of an intrinsic, underlying, non-dual aspect of Reality which is always already present (J. Morgan, 2003). This idea is ‘practical mysticism,’ with an applied, everyday quality, one not incompatible with ‘reflection-in-action,’ ‘flow,’ and ‘presencing,’ referred to above.

3.3.6 Summary

Advocates say contemplative education can help to address current challenges by fostering several capacities: connection with nature (including awareness of being part of nature and sustainable behaviour); connection with others (including improved relationships, increased compassion, ethical engagement, and action); connection with self (including calm, resilience, equanimity, focus, critical thinking, creativity, and embodiment); and the capacity for self-transcendence (including spiritual connection and meaningfulness). Indicative summaries of research include: for mindfulness and other forms of meditation (Goleman & Davidson, 2017); for compassion (Seppala, 2017); for mindful education (Schonert-Reichl & Roeser, 2016); and for contemplative higher education (Shapiro et al., 2008). Below, pedagogy and practice are discussed more fully.

3.4 Contemplative Responses to Challenges

Considering the existential, social, and environmental problems outlined above, many have argued that new ways are needed to think about global problems. Institutions of higher learning are positioned to lead the way in addressing these

challenges. Maureen O'Hara (2006) urges educators to think beyond providing workers for a global economy and instead invoke a “new mission” of creating sustainability. Our approach must contend with uncertainty, complexity, and ambiguity in a new form of “education for uncertain times,” she says. Contemplative educational responses to world challenges are discussed below, in terms of the literature about Contemplative Inquiry (CI) and Mindfulness-Based Interventions (MBIs).

3.4.1 Contemplative Inquiry and Pedagogy

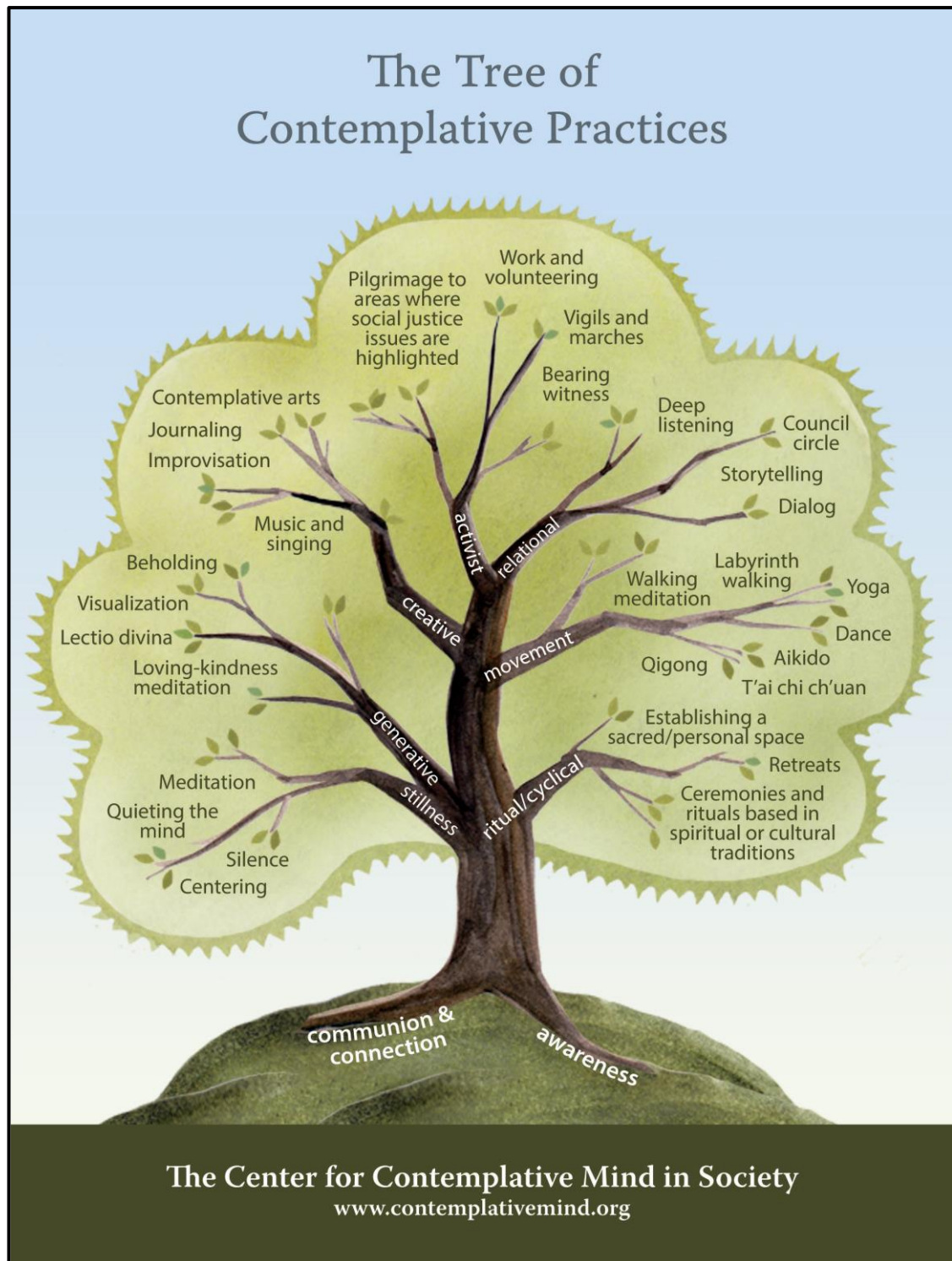
Contemplative educators supplement rational ways of knowing with “other ways of knowing” (Palmer et al., 2010). Any teaching activity may be made more contemplative, for example by incorporating a centring practice at the start, leaving wait-time after asking a question, adding reflective time before beginning a task, having students journal about their insights, spending a few minutes freewriting before doing analytical writing, re-designing speaking activities so that participants listen to each other without interruption, or including time for deeper reading (Barbezat & Bush, 2013). Contemplative teaching may thus be regarded as an approach.

Contemplative and mindful education have been framed within a variety of paradigms: religious and spiritual (Simmer-Brown & Grace, 2011); holistic (Schoem, Modey, & St. John, 2017), Indigenous (Kennedy & Jefferies, 2009; Nee-Benham, Maenette, & Cooper, 2000); reflective professional practice (Korthagen, Hoekstra, & Meijer, 2014; Schön, 1983); Transformative Learning (Tolliver & Tisdell, 2006); social justice (hooks, 1994); Inquiry Learning; (Napan, 2012) and contemplative Creative Arts (Caranfa, 2006; Gradle, 2011). Augmenting this mix is the cross-disciplinary stream of Contemplative Education (CE) conceived as a recently arising restorative philosophy and activist movement stemming from advocacy by organisations such as the Contemplative Mind in Society (CMind) (Bush, 2011). Through its sponsoring of Contemplative Practice Fellows, described above, many contemplative educators in America have become associated with CMind (Craig,

2011). Other organisations working for environment, peace, and justice initiatives that foster contemplative education include the Garrison Institute and the Fetzer Institute. North American universities including Brown, Duke, Emory, Georgetown, Leslie, Michigan, Rice, Simon Fraser, Stanford, and the University of California have contemplative initiatives.

Contemplative Pedagogy Across Disciplines

Contemplative practice embraces a whole range of activities including centring, deep reading, deep listening, dialoguing, journaling, freewriting, storytelling, arts, music, Yoga, Qigong, walking meditation, sitting meditation and activist practices (Barbezat et al., 2014). The Center for Contemplative Mind in Society (CMind) has a widely reproduced image showing a tree of contemplative practices, available from their website for training and academic use (Figure 3.3, below). (The more recent entry of ‘mindful education’ onto the higher education scene is highlighted by its non-inclusion in the tree, which was published in 2011).



*Figure 3.3: The tree of contemplative practices, concept & design by Maia Duerr; illustration by Carrie Bergman (CMind, 2011)
Available for training and academic use without permission, from
<https://www.contemplativemind.org/practices/tree>*

In recent years, there has been a rich outpouring of journal special issues in the contemplative education field. The earliest, a special issue of *Teachers College Record* (108(9) [2006]), includes chapters that: advocate the benefits of and rationale for contemplative teaching (e.g. Rockefeller, 2006); describe development and implementation of courses, for example, for teaching peace and tolerance (Hill, Herndon, & Karpinska, 2006); and describe a unique first-year undergraduate course that combines physics, philosophy, psychology, poetry, art, and the development of contemplative capabilities Zajonc (2006b). Examples of article topics in the special issue of *New Directions for Community Colleges* (151 [Fall 2010]) include: examination of the use of contemplative methods to combat stress and burnout among human services practitioners (Griswold, 2010); explication of a range of pedagogies (Haight, 2010); and arguments for use of contemplative practice and pedagogy (Repetti, 2010).

In a special edition of *New Directions for Teaching and Learning* (134 [Summer 2013]), well-known contemplative writers recount their teaching method, its rationale, and implementation. For example, Rhonda Magee reviews contemplative developments in legal education (Magee, 2013). Another chapter describes a project in which graduate education students select special items and place them in a 'cajita' (container), thus "... develop[ing] a cultural autobiographical story told in carefully selected artifacts such as family photos... [that] honor ancestry, family struggles, and triumphs ..." (Kanagala & Rendón, 2013, p. 42). In a further chapter, DuFon and Christian (2013) describe the formation of staff and student groups promoting mindful and contemplative teaching on a university campus. Zajonc reviews the history and development of contemplative pedagogy (Zajonc, 2013). *Buddhist-Christian Studies* (33 [2013]) also released a special issue in 2013. One article (Fort, 2013) makes the case for a field of Contemplative Studies as a Liberal Art, to involve both third-person and first-person (meditative) study. Utterback (2013) describes her teaching of Medieval Christian contemplative practices at university and provides a self-examination of the ethics of doing so.

In the *Journal of the Philosophy of Education* (49.2[2015]) contemplative special issue, the question is asked, "... can Heidegger's conception of thinking as a form of attention to being, illuminate pedagogy?" (Lewin, 2015, p. 221). With the aid of insights from Greek and Daoist philosophers, Culham (2015) explores how virtue may be incorporated in secular higher education. Hyland (2015) cautions that mindfulness detached from Buddhist and ethical roots has been reified, changed, instrumentalised, and severed from the source of its transformative power. In further articles, the role of meditation in cultivating "negative capability," the capacity to live with ambiguity and doubt, is explored (Todd, 2015); attempts to use contemplative pedagogy to restore the art of improvisation to classical music education and restore meditation to philosophy are examined (Sarath, 2015); the argument is made that ethics and mindfulness should be brought out of separate interventions to transform daily education (O'Donnell, 2015); and mindful education is said to provide a "meta-pedagogical injunction on where to attend" (p. 203), in other words, to include inner (as well as outer) focus (Ergas, 2015).

Studies of contemplative pedagogy and practice have recently also been augmented by several cross-disciplinary books (Barbezat & Bush, 2013; Gunnlaugson et al., 2014; Lin et al., 2013; Schonert-Reichl & Roeser, 2016). Intersubjectivity is specifically addressed in two volumes (Gunnlaugson, Scott, Bai, & Sarath, 2017; Gunnlaugson et al., 2019). Other authors have examined how contemplative methods target the relational, affective domain. For example, Terry Hyland (2009) argues that the mindful "therapeutic turn" in education partly offsets the trend towards mechanistic and economic approaches.

Cross-disciplinary aims for contemplative teaching involve attention, critical epistemology, creativity, and reflective practice. Attention is arguably the cornerstone of education, and vital to the quality and character of the consciousness we bring to study. To understand distraction, David Levy's (2014; 2016) students use software to monitor their behaviours while writing assignments.

Critical epistemology is the target of class activities that enhance, complement, and deepen analysis (Sable, 2010, 2012). Contemplative activities foster several

dispositions of critical thinking, including “open-mindedness,” “inquisitiveness,” and “honesty in facing one’s own biases” (P. A. Facione, 1990, p. 13). In a volume rich with practical exercises, Ira Rabois (2016) explains how mindfulness and Socratic questioning deepen critical thinking. Critical social justice teaching is addressed by authors including Laura Rendón (2009), who stresses that emotion and thinking go together in a holistic model she calls, *sentipensante* (heart-mind). She theorises contemplative teaching in intersectionality and anti-racism teaching. Beth Berila (2016) uses Yoga within a feminist lens to help students mindfully explore how power relationships are embodied in their own thoughts, emotions, behaviours, and physicality. Andrea Hyde (2013) reports reading Freire in parallel with doing Yoga and breathing meditations in a graduate education seminar: “For a model of reflection on practice, we focused on Freire’s ‘epistemological knowing’—holding one’s teaching practice apart as an object of study. Through the addition of yoga, we found that we could examine the body and mind in this way, and thereby examine the self who teaches” (p. 117).

Creativity is fostered through contemplative writing approaches that are interwoven with embodied practices. Christy Wenger (2015) uses Yoga to cultivate an approach to writing that counters the “disembodied” setting of academia where people tend to live in their heads. Yoga poses foster intentional awareness, relaxation, openness, balance, and focus. Says Wenger, “My practice of yoga has been a space for me to enact my feminism. Through yoga, I continue to learn acceptance of my body while not reducing myself to it” (p. 23). Natalie Goldberg (2006) incorporates Zen in her writing classes, finding that stillness and beginner’s mind generate creativity.

Reflective professional practice enhances critical thinking and client/patient care in many disciplines. With the seminal concept of the Reflective Practitioner, Donald Schön (1983) challenged the idea that technical expertise, content knowledge, and theoretical models were sufficient to guide professional practice in actual situations (Chapter 1). Application was always messy and complex, and therefore practitioners needed to think on their feet – to reflect-in-action – and to learn from their experience by reflecting-on-action.

John Miller ([1994]2013) urges that Schön's ideas be deepened to develop the concept of the Contemplative Practitioner. He argues that regular personal meditative practice can deepen reflection by enabling professionals to be more present, flexible, and able to respond to each individual student. "In a sense, the teacher is an on-the-spot researcher who must be ready with new methods based on an intuitive sense of what is appropriate for the student that she is dealing with" (p. 22). The "meditative stance" includes openness, release, acceptance, being not doing, and viewing meditation as both gift and method of inquiry. Other teacher education studies have continued Miller's work on combining reflectivity and contemplative presence (Solloway, 1999, 2000). Some though, suggest that "managerial" approaches to education with their mandated controls currently militate against professionalism and reflexivity in education (M. Ryan & Bourke, 2013).

The deepening of reflective practice through contemplative practice has been recommended in Social Work. There, content about oppression and diversity can be controversial, confronting, and emotional, triggering anger, shame, guilt, defensiveness, grief, and self-censorship (Mishna & Bogo, 2007). Safety and respect, however, need to be balanced with uncomfortable provocations that uncover assumptions.

Aristotle's concept of practical wisdom, or *phronesis*, is sometimes drawn upon to re-envision professional reflective practice. An interdisciplinary study of *phronesis*, whose chapters discuss how to build practical wisdom into teaching and practice in several fields, refers to a disjunct between theory and practice in the professions, saying that too much professional knowledge is positioned instrumentally (Pitman & Kinsella, 2012). The authors define *phronesis* as,

... practical wisdom or knowledge of the proper ends of life ... an intellectual virtue that implies ethics. It involves deliberation that is based on values, is concerned with practical judgment and is informed by reflection. It is pragmatic, variable, context-dependent, and oriented toward action" (p. 12).

Disciplinary Pedagogy

Pedagogical approaches may vary across academic disciplines, as the following brief examples indicate. Contemplative Arts and Humanities methods have included: deep pondering of literature (Ambrosio et al., 2012); jazz improvisation (Sarath, 2013, 2015); mindful approaches to theatre (Su, 2018); use of ethics and subjective experience together with history and critique in religious studies (Roth, 2006; Simmer-Brown & Grace, 2011); and consideration of the pursuit of happiness in behavioural economics (Barbezat & Bush, 2013). Language Teaching approaches have combined existing theories about reducing anxiety with mindfulness (V. P. Smith, 2012), and made use of freewriting (Elbow, 1989; Garretson, 2010). Social Sciences teaching examples include: enhancing criticality by using contemplative approaches to Freirean social justice work (Freire, 1993; Thompson, 2018); using Yoga to assist feminist studies students in identifying internalised oppression (Berila, 2014); using mindfulness to strengthen Social Work student self-care (Pyles & Adam, 2016); using ‘co-creative inquiry’ in Social Work to collaboratively create knowledge in dialogue (Phillips & Napan, 2016); giving Psychology students a taste of mindful therapies such as Acceptance and Commitment Therapy (ACT) (Wolf & Serpa, 2015); and engendering sustainable thinking through spending time in nature (C. Smith, 2009; Uhl, 2003).

In Business, methods have included incorporating pedagogies to strengthen Practical Wisdom and ethics in leadership (Küpers & Pauleen, 2013; Senge, 2006), and advocating mindfulness programmes in workplaces (Tyler, 2013). Information Science teaching has involved having students record and reflect upon their digital behaviour (Parry & Zain, 2013), and in librarianship, contemplative methods have supported academic strategies (Reale, 2017). Health Sciences teaching often enacts contemplative education as mindfulness-based interventions aiming to improve health (Kabat-Zinn, Lipworth, & Burney, 1985; Ludwig & Kabat-Zinn, 2008), and as compassion-based practices to improve care (Epstein, 2018). Science teaching has explored connections through Platonic dialogue in Physics classes (Zajonc, 2006), and pondering diagrams in Chemistry (Francl, 2016). Law classes have adopted

contemplative approaches, not only to restore balance to law students' lives, but to aid dispute resolution (Riskin, 2014) and begin the "reconstruction" of law "in support of inclusion and liberation for all" (Magee, 2013, p. 32). In *Teacher Education*, a trilogy of new edited books addresses many aspects of contemplative approaches to teacher preparation and contemplative pedagogy (Byrnes, Dalton, & Dorman, 2017; Dalton, Dorman, & Byrnes, 2018; Dorman, Byrnes, & Dalton, 2017). The authors contend that teaching in itself, is a contemplative practice. Teacher educators use contemplative methods to enhance teacher "habits of mind" (Roeser, Skinner, Beers, & Jennings, 2012).

As the overview above makes clear, there are now a variety of resources available to assist the contemplative educator to develop pedagogy. There are also a few phenomenological studies of mindful teaching and learning, including a study of the experiences of New Zealand teacher education students taking part in a mindfulness intervention (Bernay, 2014), an examination of the 'ground of being' experiences of students and academics in a range of contemplative courses in American institutions of learning (P. F. Morgan, 2012), and a study of the experiences of contemplative academic educators in New Zealand (Dorrestein, 2015). In another phenomenological study, Luke Wolcott (2013) examines contemplative processes that improve mathematical reasoning, including reflectivity, introspection, intersubjectivity, and understanding the role of "ambiguity, metaphor, and paradox."

Philosophical explorations of contemplative education include those by educational philosopher, Oren Ergas, who has canvassed a wide range of concepts. For example, he raises a controversy in the contemplative education arena about whether the instrumental use of wisdom practices devalues them, arguing that the valuing of present moment inner experience and attributing meaningfulness to it constitutes a "re-construction" of education regardless of intent (Ergas, 2015). In another article, he argues that mindfulness can help the teacher to reclaim identity as a unique self in the face of performativity pressures (Ergas, 2017a). Elsewhere, he advocates incorporating embodied awareness practices such as Yoga in education, in order to overcome Cartesian dualism and the Western view of the

body as a “hindrance to knowledge” (Ergas, 2014). In a further publication, he argues that education, as a developmental process, involves a hidden curriculum that he names, “the insufficiency of now,” and proposes that mindful approaches help to address this lack (Ergas, 2019).

Critique

In contrast to the field of mindfulness, there has so far been little published critique of contemplative pedagogy. Komjathy (2018) urges the field to adopt both “generous reading and critical evaluation” (p. 4). From the perspective of an insider, he critiques a tendency towards conflation of diverse practices in the belief that all aim for the same goal. Komjathy rather, sees each practice as distinct, shining light on a different aspect of reality, or possibly “realities” (p. 6). He further takes issue with popular downgrading of what is considered ‘contemplative’, referring to “connoisseurs of meditation” (p. 42). Further, he maintains that versions of contemplative pedagogy that are self-consciously not religious also “potentially involve [their] own form of dogmatism, evangelism, and sectarianism, namely conformity to cultural relativism, scientific materialism, social constructionism, and scientific (scientistic) reductionism” (p. 173). Komjathy also observes that notwithstanding its strengths, contemplative teaching is likely to draw criticism in academia because it is “indeed challenging and potentially subversive,” threatening required norms (p. 39).

3.4.2 Mindfulness Interventions

While the contemplative and mindful education literatures have grown in number and scope, mindfulness intervention research often seems to be interpreted as at least potentially validating other forms of contemplative practice. The claims made for mindfulness are therefore doubly important to educators. This section outlines the science of mindfulness and then briefly traces its transition from Buddhist practice to wellbeing intervention and classroom pedagogy. The studies that have been carried out on other meditative practices also lend weight to claims of

educational benefits, for example, Transcendental Meditation (Roeser & Peck, 2009; Tanner et al., 2009).

Mindfulness as Science

Mindfulness is said to be accessible to all - when tapping into it we are simply reclaiming a natural capacity (Kabat-Zinn, 1990). Nature evokes it, and readers, poets, artists, dancers, musicians, and athletes all tap into it. Anyone who engages deeply in a task is experiencing the related phenomenon of 'flow' (Csikszentmihalyi, 1991; Kee & John Wang, 2008). Mindful states may be intentionally accessed through meditation, somatic practices such as Yoga or walking, and awareness in performing daily activities (Hanh, 1991). Mindfulness has a long history in the meditative traditions - Hinduism, Taoism, Judaism, Christianity, Sufism, and Indigenous religions all have systems that foster it - but Buddhism has developed what is arguably the most highly nuanced technology of attentional awareness. As modern society has become secular, urban, and fast-paced, it has largely lost access to the skills of meditation. Jon Kabat-Zinn (1996) argues that people are rarely here and now, but usually regretting the past, looking to the future, or trying to escape from both.

Since its launch in 1979 in a stress reduction clinic at University of Massachusetts Medical School, targeting chronic pain, the Mindfulness-Based Stress Reduction Intervention (MBSR) has given rise to numerous adaptations. Mindfulness is effective in reducing stress, so it is perhaps not surprising that it has also been found to speed the healing process, first in a psoriasis study (Kabat-Zinn et al., 1998), and then in studies on many other physical ailments (Kabat-Zinn, 2005). In healthy meditating subjects, studies have also shown it to improve immune response to influenza vaccines, and found that changes in brain activity are correlated with immune response (Davidson et al., 2003).

Many mindful psychotherapies have been developed, for example: Mindfulness-Based Cognitive Therapy (MBCT), originally developed to prevent relapse into depression (Segal, Williams, & Teasdale, 2013); Acceptance and Commitment

Therapy (ACT), for a variety of psychological conditions (Hayes, Strosahl, & Wilson, 2012); and Dialectical Behaviour Therapy (DBT), for borderline personality disorders (Linehan et al., 1999). Other interventions include: Mindfulness-Based Eating Awareness Training (MB-Eat); Mindfulness-Based Mind Fitness Training (MBMFT) for the military; Search Inside Yourself (SIY), Google's employee mindfulness programme; and many more (McCown et al., 2010).

Mindfulness practice increases activity in brain areas associated with positive emotions including happiness (Davidson et al., 2003), and a stronger effect is found in studies of Buddhist monks, who also produce extremely high levels of the Gamma waves associated with compassion (Lutz et al., 2008; Lutz, Greischar, Rawlings, Ricard, & Davidson, 2004). After compassion meditation training, healthy adults have been shown more likely than controls to increase their redistribution of funds to victims (Weng et al., 2013).

Meditation has been shown to change the brain physically in several ways (Slagter, Davidson, & Lutz, 2011). As shown in Functional Magnetic Resonance Imaging (fMRI) studies, mindfulness increases brain activity in regions associated with emotional regulation (Vago & David, 2012) and attention (Lutz et al., 2009). Further, it increases the amount of grey matter in areas involved in learning and memory processes, emotion regulation, self-referential processing, and perspective taking (Hölzel et al., 2011). fMRI research provides support for other mindfulness measures, including: measures of attention such as Stroop Word Colour Task (Kozasa et al., 2012); self-report measures (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006); and third-party observations.

Mechanisms of mindfulness have been theorised in relation to Kabat-Zinn's definition (Allen et al., 2006). "Paying attention in a particular way" increases metacognition and monitoring of attentional focus. This allows 'decentring' or seeing thoughts as transient representations of reality, not as reality itself, generating metacognitive insight. MBSR patients, for example, can see that "they are not their pain." Paying attention "... on purpose in the present moment" improves identification of unhelpful rumination about the past or neurotic

focusing on the future, thus reducing tendencies to depression or anxiety. Paying attention to whatever the present moment brings reduces distraction, avoidance and suppression, and paves the way for acceptance. Paying attention “nonjudgmentally” means merely noticing and not evaluating what arises, which enhances openness to new ideas and experience, and facilitates cognitive flexibility. For example, in a study of clinical use of MBCT and autobiographical memory, patients made fewer overgeneralised judgments about their past. Their more mindful, nuanced awareness significantly ameliorated depression (Williams, Teasdale, Segal, & Soulsby, 2000, as cited in Allen et al., 2006).

Defining mindfulness as a construct that can be researched is still problematic. Validated, self-report mindfulness instruments vary on whether mindfulness is one facet or many, and on what exactly these facets are (Baer et al., 2008). Dorjee (2016) has attempted to define an overarching interdisciplinary ‘contemplative science’ into which mindfulness and other meditative practices could fit. She suggests seeing these practices as ways to modulate “the metacognitive self-regulatory capacity (MSRC) of the mind and associated modes of existential awareness (MEA)” (p. 1). Contemplative science would study the way that intentional, disciplined meditation and introspection modify attention, awareness, and self-regulation and alter the meditator’s sense of self and wellbeing.

Mindfulness in Education as Intervention and as Pedagogy

In primary and secondary schools, mindfulness interventions are increasingly adopted to foster Social and Emotional Learning (SEL) by improving student resilience, relationships, and emotional regulation, and by reducing depression, suicidal thoughts, and behaviour problems (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Studies report that mindfulness training works in schools just as it works in other settings, however, again, reviewers urge more rigour in research, and call for rich, qualitative studies (Davidson et al., 2012; Meiklejohn et al., 2012; Roeser et al., 2012).

Studies also report evidence of increased teacher mindfulness, which enables greater emotional awareness, empathy, compassion, listening, and teaching self-efficacy. Examples of teacher programmes include: Mindfulness-Based Wellness Education (MBWE), based at Ontario Institute for Studies in Education (OISE); and the Garrison Institute's Cultivating Awareness and Resilience in Education (CARE) programme, based on the Prosocial Classroom model (Meiklejohn et al., 2012). Mindfulness training develops capacities including taking in data through all senses, non-judgment, flexibility, regulation of emotion, and resilience in bouncing back, as well as empathy and compassion (Roeser et al., 2012).

Critique

The enthusiastic adoption of mindfulness in many spheres was, perhaps inevitably, followed by a backlash, and much research was said to be flawed. The original MBSR programme, for example, had by 2012 been the subject of over 3,000 studies and several systematic reviews (Baer, 2003; Carmody, 2009; Grossman et al., 2004): however, only 39 of the 3,000 studies met the criteria that would enable meta-analysis (deVibe et al., 2012). School-based studies of MBIs were said to need Randomised Controlled Trials with active controls, qualified teachers, consistent definitions, and more rigorous reporting (McKeering & Hwang, 2019).

Further, studies began to report potentially distressing effects of meditation, especially in long retreats (Lindahl, Fisher, Cooper, Rosen, & Britton, 2017). Trauma sensitive approaches (Treleaven, 2018) are now appearing, as it is acknowledged that a practice requiring inner inquiry may dredge up disturbing or triggering thoughts and feelings. The quality of teacher training is also being targeted, and standardised systems of certification developed (Crane et al., 2013).

Development of Mindfulness

Mindfulness as science stands on the shoulders of the traditional practice of mindfulness as path to awakening, a disciplined and scaffolded means of stabilising attention and cultivating self-awareness and compassion. For example, the efficacy of meditation for increasing attention has been demonstrated in studies involving

monks, where brain activation correlated with hours of practice (Brefczynski-Lewis, Lutz, Schaefer, Levinson, & Davidson, 2007), and studies have explored the impact of meditation on compassion (Davidson & Harrington, 2001).

The development of mindfulness involves historical, socio-economic, and politico-cultural forces, as well as the personal agency of influential individuals. The move of mindfulness into the West, where it has grown among educated groups, and the parallel transformation of Buddhist mindfulness into secularised mindfulness, has been examined by Jeff Wilson (2014). He argues that Buddhism has been adaptable through its history, meeting the needs of each new setting as it moved from India to China, Japan, and other parts of Asia. In America and other parts of the West, Buddhism now embraces scientific worldviews and individualised searches for awakening. One particularly meaningful change has been the increased access to meditation by the laity, which has shaped Buddhist modernism.

According to Wilson (2014) and McMahan (2008), mindfulness meditation as we know it, is a relatively new development. Originally one part of The Noble Eightfold Path (right understanding, right thought, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration), mindfulness practice apparently waxed and waned in different regions and historical periods. Primarily an activity for monks, it supplemented liturgy, study, and other types of meditation such as visualisation (Tibetan Buddhism) and *koan* (Zen). However, in 18th century colonial Burma, it experienced a resurgence in a popular lay movement that had arisen to stem the decline of local religion. The practice spread and was brought to the West by Burmese-trained teachers who also began to emphasise its health benefits, but it remained a small movement until the 1970s.

The growth of Western Buddhism was encouraged by two Buddhist exiles, Vietnamese monk and peace activist, Thich Nhat Hanh, who promotes engaged (activist) Buddhism, and the Tibetan Dalai Lama, who positions meditation as a scientific path to happiness. The Dalai Lama has established partnerships with Western neuroscientists who have included Francisco Varela, well-known for seminal work on autopoiesis, the self-organisation of the mind (Varela, Thompson,

& Rosch, 1991). Also pivotal to the spread of Buddhism, according to Wilson (2014), was the work of a small group of Theravada-trained American mindfulness teachers including Joseph Goldstein, Sharon Salzberg, and Jack Kornfield. These teachers founded meditation centres based on lay meditation rather than on monastic communities, minimised the role of traditional beliefs and rituals, and combined meditation with psychology. The influence of “elite” groups of idealists such as these on the spread of mindfulness is also argued by Jaime Kucinkas (2019), who conducted a study involving over 100 interviews with meditation teachers, corporate leaders, academics, and politicians.

A growing literature written by other Western Buddhists contests the extraction of mindfulness from its roots and the way it is practiced in MBSR, however (Purser, 2014). Original mindfulness is neither primarily about the present moment nor is it non-judgmental, according to Dreyfus (2011), rather it involves remembering to recollect teaching and to make right judgments as part of a process of purification. Without its surrounding ethics, wisdom teaching, and community, mindfulness practice is reductionist and misleading, according to Purser (2019). He argues that it is particularly harmful because in the popular mind, this “limited” technique is confused with the original. Purser takes issue with the presentation of mindfulness both as “secular” and as a “universal Dharma,” arguing that “... Kabat-Zinn’s essentialist and universalizing rhetoric ... has led many to believe that, as isolated subjects, they have private access to the essence of the ‘dharma,’ independent of their own dominant cultural values” (p. 100). He says, “A truly revolutionary mindfulness would challenge the Western sense of entitlement to happiness irrespective of ethical conduct” (p. 18).

Another charge is that mindfulness has become commodified and is now part of an umbrella phenomenon of commodified spirituality (Carrette & King, 2005). In the United States alone, the meditation market was estimated to be worth 1.21 billion dollars in 2017 (The US meditation market: Market Data Enterprises off-the-shelf industry report, 2017, cited in Webwire, 2017).

Critics agree that mindfulness works to reduce stress and increase wellbeing, but say it is only a shadow of the original Buddhist practice (Bodhi, 2011). Further, they argue that it might be harmful to increase people's coping mechanisms - if greater equanimity leads practitioners to accept unjust conditions instead of trying to change them, mindfulness becomes a servant of the powerful. Stripped of its ethics, "wrong" mindfulness can help anyone to achieve any goal, however questionable. Denatured Western Buddhism, according to Slavoj Žižek, is the perfect religion of capitalism, allowing one:

... fully to participate in the frantic pace of the capitalist game, while sustaining the perception that you are not really in it, that you are well aware how worthless the spectacle is—what really matters to you is the peace of the inner self to which you know you can always withdraw. (Žizek, 2006, as cited in Møllgaard, 2008, p. 168)

The so-called McDonaldisation critique, which seems to have sparked the mindfulness backlash, argues that increasing the appeal of mindfulness to corporations by extracting it from its ethical and liberating context, amounts to "a Faustian bargain" (Purser & Loy, 2013). In counterpoint, an interesting observation may be made about the commodification of mindfulness and its use by corporates: in a society predicated upon consumer capitalism, the only means of engagement is through commodities (Wilson, 2016). Since commodities are ubiquitous, involvement with the society must involve them. However, according to Wilson, critiques of mindfulness are useful in drawing attention to the worst excesses of commercialism.

3.4.3 Laminations (Dimensions) with Impact on Contemplative Education

As the discussion above indicates, in the transformation of ancient Buddhist religious practice into modern, scientific, medical, and psychological intervention, we see the interplay of structure and personal agency at all lamination levels. Global developments shaping mindfulness have included colonisation and decolonisation, secularisation, and East-West religious and cultural influences. Capitalist economics and political regime changes have influenced events.

Research foundations and universities have provided sponsorship. Further, the agency of individuals has been powerful, for example, Buddhism has spread throughout the West through the influence of leaders such as Thich Nhat Hanh and the Dalai Lama. Mindfulness has been secularised and included in medical and psychotherapeutic interventions directly through the work of Jon Kabat-Zinn and the other scientists who have verified its efficacy and adapted it for other situations.

Complex factors involving all lamination levels are involved in contemplative education. In Chapter 2, factors likely to affect contemplative education were posited. Below, Table 3.3 lists bodies of contemplative education literature that were indeed found in the literature search, along with indicative studies for each.

Table 3.3: Dimensions (laminations) and bodies of contemplative education literature, with indicative studies

Dimensions (Laminations)	Examples of Studies
Cosmic	<ul style="list-style-type: none"> • Non-duality/ ground of being/ cosmic envelope/ implicate order/ Absolute/ God
Planetary/ Global	<ul style="list-style-type: none"> • Climate change (Eaton et al., 2017; Scharmer & Kaufer, 2013)
Mega-level	<ul style="list-style-type: none"> • Science (medicine, neuroscience, psychology) (Kabat-Zinn, 1990) • Attention capitalism (Moulier-Boutang, 2011) • Mindful Commons (Doran, 2013, 2017) • Digitalisation (Levy, 2007a, 2007b, 2016) • Dis-enchantment (Gane, 2002) • Re-enchantment (Landy & Saler, 2009; Suddaby et al., 2017) • East-West contacts (colonisation, de-colonisation, neo-colonisation, globalisation); Buddhism and Buddhist modernism (McMahan, 2008, 2012; McMahan & Braun, 2017) • Élite influence (Kucinkas, 2019) • Big History (C. S. Brown, 2007; Burke et al., 2015; D. Christian & McNeill, 2011) • Universe Story (Grimm & Tucker, 2018; Swimme & Berry, 1992; Swimme & Tucker, 2011) • Reflexive Modernity (Archer, 2012; Martí, 2015)
Macro-level	<ul style="list-style-type: none"> • Government policy (The Mindfulness All-Party Parliamentary Group, 2015)

Dimensions (Laminations)	Examples of Studies
	<ul style="list-style-type: none"> • Educational Curricula (Mental Health Foundation, 2012; Rix & Bernay, 2014) • Professional mores, Reflective practice (Miller, [1994]2013; Schön, 1983, 1987) • Mindfulness research and interventions (Davidson et al., 2003; deVibe et al., 2012; Kabat-Zinn, 2003; McCown et al., 2010; Williams & Kabat-Zinn, 2013) • Contemplative Studies (Komjathy, 2017) • Mindful education (Albrecht et al., 2012; Ergas & Hadar, 2019; Jennings & Greenberg, 2009) • Contemplative Inquiry (Zajonc, 2006b, 2013) • Inter-subjectivity (Gunnlaugson, 2009, 2011; Gunnlaugson et al., 2019) • Theories & framings, e.g. Integral (Esbjörn-Hargens et al., 2010), spiritual (Simmer-Brown & Grace, 2011), Māori (Kennedy & Jefferies, 2009)
Meso-level	<ul style="list-style-type: none"> • University provision of mindfulness courses
Micro-level	<ul style="list-style-type: none"> • Pedagogies (Barbezat & Bush, 2013; Gunnlaugson et al., 2014; Lin et al., 2013)
Individual level of biography	<ul style="list-style-type: none"> • e.g. roles of Kabat-Zinn, Dalai Lama, Thich Nhat Hanh (Wilson, 2014)
Intra-individual level	<ul style="list-style-type: none"> • Phenomenology (Bernay, 2012b; Dorrestein, 2015; P. F. Morgan, 2012)

3.5 Conclusion

This chapter has discussed selected literature relevant to contemplative education. Contemplative authors have discussed the potential of contemplative methods to positively affect issues such as climate change. The literature on contemplative pedagogy reports the value of its use across disciplines for fostering attention, deepening criticality and creativity, and for enhancing professional practice and encouraging engagement with issues. Mindfulness research shows overall moderate positive benefits for physical and psychological health, cognitive functioning (including attention, critical and creative thinking), enhanced relationships and emotional intelligence, connection with nature, and support for meaningfulness and personal transformation.

At the beginning of this study, there was little literature about contemplative or mindful tertiary education, although the medical and therapeutic mindfulness literature was already extensive. In New Zealand, there was no clearly identifiable body of contemplative education studies, so initial questions were simple ones. Did contemplative educators exist in this country? Were educators using contemplative methods to address social issues? How were they doing this? What did it mean to teach contemplatively? What pedagogies and practices could be used in the classroom? How was this phenomenon experienced, and what was leading to its emergence? The following chapter describes the research design and methods.

4

METHODOLOGY

To do full justice to reality, we must engage it from different perspectives ... It is a lesson in humility that quantum theory forces to our attention ... (Wilczek, 2015)

4.1 Introduction

This study aimed to explore the previously little-researched phenomenon of contemplative education within New Zealand universities. The research began with an extensive, mostly quantitative phase involving a large-scale, cross-sectional university educator survey. The survey results fed into the next stage involving intensive, qualitative semi-structured interviews with 22 participants who exemplified aspects of contemplative teaching.

The design flowed from the research questions specified in Chapter 1 and was shaped by Critical Realist meta-theory described in Chapter 2 and the investigation of literature discussed in Chapter 3. The present chapter describes 'Critical Realist Mixed Methods Sequential Explanatory Design' (CRMMSED), which was developed for the study by adapting and integrating a Mixed Methods design within the framework of Critical Realism. The chapter begins by outlining ethical considerations, and then explains design, methods, and analysis.

4.2 Ethical Considerations

The goal of ethical consideration is to ensure that no harm results from research. Ethical considerations, as detailed in the application to the Massey University Human Ethics Committee, included: respect for persons; minimisation of risk of harm to participants, researcher, groups, and universities; informed and voluntary consent; respect for privacy and confidentiality; avoidance of conflict of role; and social and cultural sensitivity.

Regarding respect for persons, all procedures were designed to maximise feelings of validation of the participants (for example, communication to organise interviews, settings and conduct of interviews). The main potential for harm seemed to lie in the possibility of breaching confidentiality, and therefore there was strict adherence to procedures to safeguard this. Survey participants were completely anonymous, with no tracking of IP addresses. Pseudonyms were used for interviewees in stored data, analyses, and discussion. Data were pooled, easily identifiable details were changed, and universities of interviewees were not identified. Confidentiality of all participants was maintained. Storage of hard and digital data was carried out in accordance with Massey University's protocols. Data and consent forms were kept in locked or password protected storage and only the researcher and supervisors had access.

The survey invitation included information about the research, and participation constituted consent. For the interviews, informed consent was ensured through full explanation on information sheets and in person. Interview participants had

the right to ask questions, to withdraw from the study at any time, to withdraw their data, to decline to answer any question, to turn off the recorder, to ask questions of clarification, to check transcription summaries for accuracy and to receive a summary of the findings of the completed research.

Ethical approval was obtained from Massey University through submission of an application and supporting documents (Chapter 4 Appendix 4.1.1 to 4.1.6). A further full ethics application with documentation resulted in approval to conduct research at Auckland University of Technology (AUT) (Chapter 4 Appendix 4.2.1 to 4.2.5). Quoting Massey University approval resulted in permissions for five other universities, two of which approved email invitations be sent, and three of which required that survey invitations be posted in online staff newsletters (Chapter 4 Appendix 4.3). Citing staff stress, exhaustion, and ‘over-researching’ in the aftermath of the Christchurch earthquakes, the University of Canterbury declined permission. (See Chapter 4 Appendices 4.4 and 4.5 for the survey and interview guide, and Appendix 4.6 for survey structure and analysis tables).

4.3 Research Design

Critical Realist (CR) meta-theoretical assumptions framed the research design, which was also shaped by domain-specific understandings in the areas of contemplative science, learning, and teaching (Figure 4.1, below). In order to apply Critical Realist philosophy, the Mixed Methods Sequential Explanatory (MMSE) design and the CR six-stage explanatory framework (Danermark et al., 2002) were adapted and integrated. MMSE was reinterpreted to fit within CR meta-theory, and the six-stage explanatory framework was augmented with Bhaskar’s dialectic (Bhaskar, 2008, 2018). The Mixed Methods data collection and analysis took place alongside the Critical Realist analysis. There is ample precedent for embedding Mixed Methods designs within theoretical frameworks, for example, in transformative research (Mertens, 2007, 2011, 2013, 2015; Mertens & Hesse-Biber, 2012).

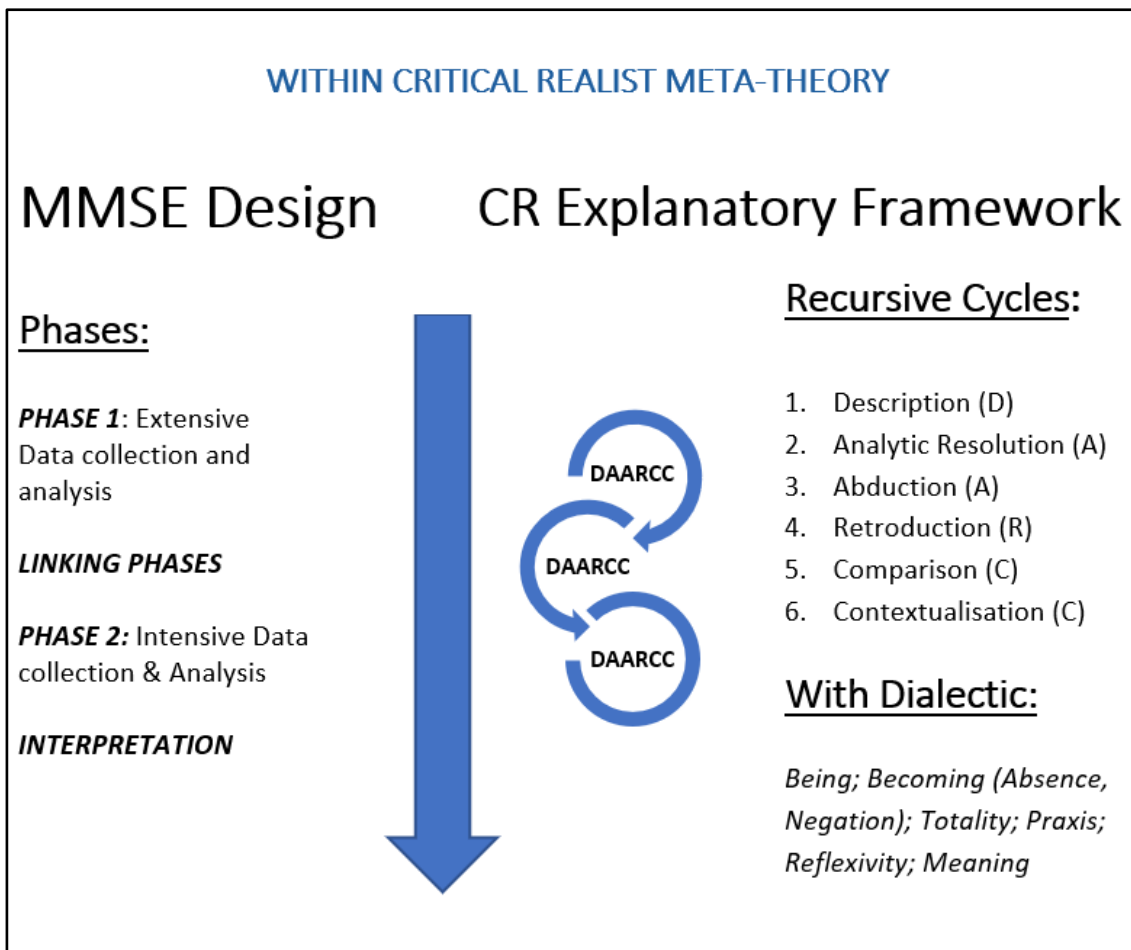


Figure 4.1: Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED), (developed by the author by integrating and adapting Danermark et al., 2002 and Ivankova et al., 2006)

4.3.1 Adapting the Mixed Methods Sequential Explanatory Design (MMSE)

The original Mixed Methods Sequential Explanatory (MMSE) design is defined in Mixed Methods taxonomies (Creswell, 2012), and exemplified in Ivankova’s research on student persistence (Ivankova, 2004; Ivankova, Creswell, & Stick, 2006; Ivankova & Stick, 2006). The first of its two phases is quantitative, and the second, qualitative. Phase 1 identifies important factors and statistical regularities, and Phase 2 examines these more deeply, and “explains” them (Ivankova, 2004; Ivankova et al., 2006; Ivankova & Stick, 2006). Procedural adaptations to MMSE were not needed in this study, however philosophical alignment to CR premises was required.

The procedures of each MMSE phase are listed in Figure 4.2 below, beside their main products. The names of the phases have been changed from ‘quantitative’ and ‘qualitative’ to ‘extensive’ and ‘intensive,’ both because that is the distinction stressed in CR (Sayer, 2000), and because the initial survey was intrinsically a mixed method including both quantitative and qualitative items (Bazeley, 2017). The study thus began with an exploratory extensive phase (survey), followed by an explanatory intensive phase (interviews) (Edwards, O'Mahoney, & Vincent, 2014; Zachariadis, Scott, & Barrett, 2013). The statistical regularities identified have been conceptualised for CR as ‘demi-regularities,’ which are provocations for further exploration. As Zachariadis et al. (2013) has said,

Generally speaking, the most profound and widely recognized approach to mixed methods, in line with CR's retroductive methodology, is to use extensive methods to identify and establish demi-regularities with data patterns, which are then used to guide intensive research that will uncover the mechanisms, agencies, and social structures that produce the behavior ... (p. 864)

In Mixed Methods shorthand, the present study could perhaps be referred to as quanQUAL (Creswell, 2015). Although it equally emphasised the two phases, the survey phase was already an intrinsically mixed method, including both quantitative and qualitative elements.

Phase 1 involved designing and administering a cross-sectional, online, SurveyMonkey survey ($n = 258$) including both closed and open questions. The products of Phase 1 were numeric and textual data. Qualitative survey data helped to clarify the quantitative answers. The quantitative and qualitative phases were linked in two ways: identifying interview participants; and developing interview questions. An interview invitation at the end of the survey elicited responses from potential participants who were emailed with further information. The survey results and the further questions they raised, helped in developing the interview guide.

Phase 2 provided the main intensive, qualitative data collection. Individual, semi-structured, 60 to 90-minute, in-depth interviews ($n = 22$) were conducted face-to-

face or by Skype. Data were audio and textual (recordings of interviews, transcripts and some course materials). Thematic Analysis (Braun & Clarke, 2006, 2014; Fereday & Muir-Cochrane, 2008) was performed with the aid of NVivo. Further, the analysis and interpretation were expanded to include the CR six-stage explanatory framework. Analysis proceeded iteratively, using inductive, deductive, abductive, and retroductive reasoning. Coding and generation of themes were both data-driven (bottom-up), and theory-driven (top down). Products were NVivo codes, themes, memos and categories. Finally, further integration took place when extensive and intensive findings were interpreted together, and explanations considered. The products were discussion, limitations, contribution, implications, and suggestions for future research.

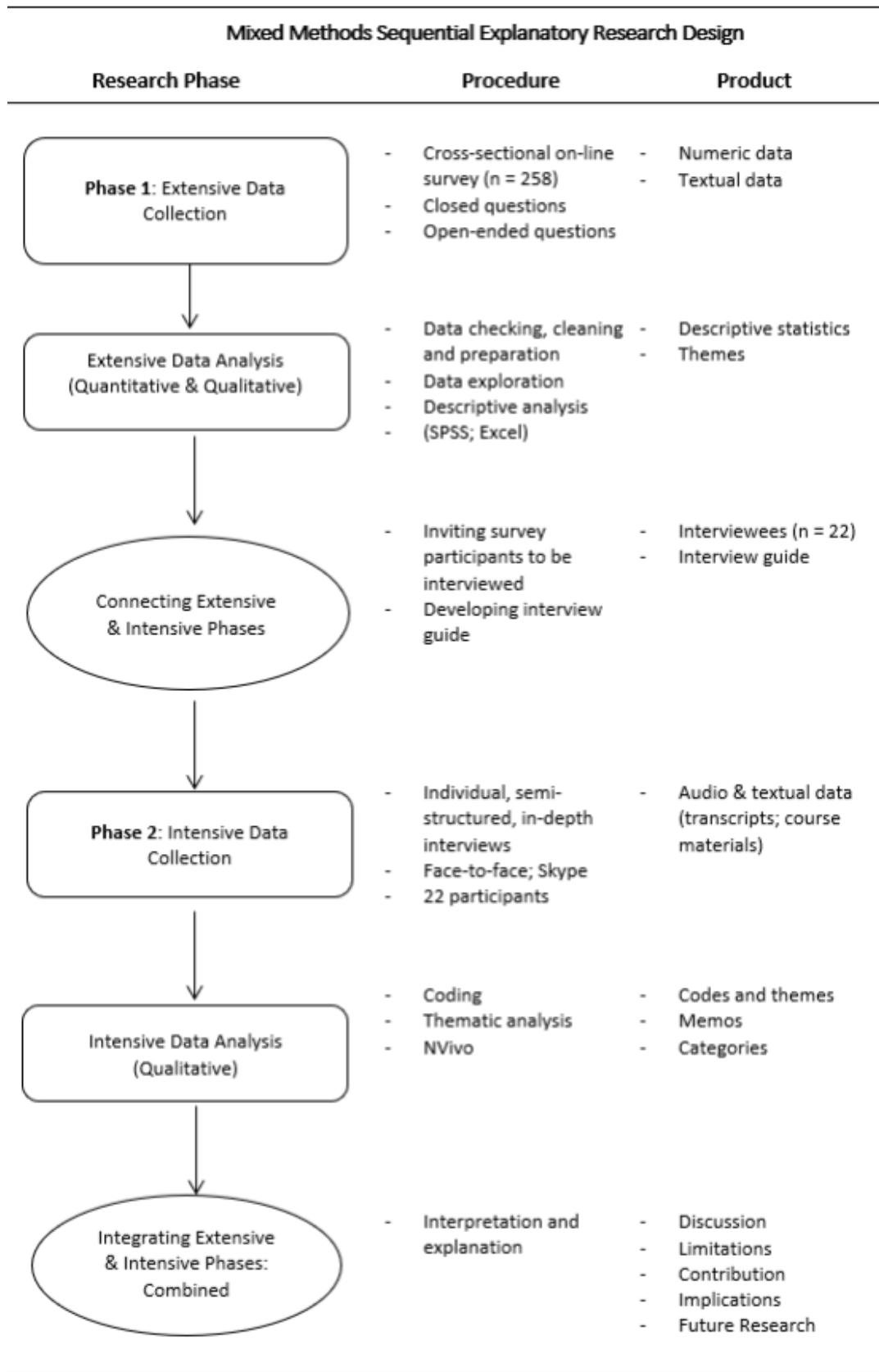


Figure 4.2: Mixed Methods Sequential Explanatory Design, adapted from Ivankova et al. (2006)

Conceptual Adaptations to Mixed Methods Design

Literature searches showed that reconceptualisation of Mixed Methods Sequential Explanatory (MMSE) design within a Critical Realist (CR) framework was rarely discussed. Numerous guidelines and detailed taxonomies of Mixed Methods designs exist, but most assume a pragmatic approach (Creswell & Tashakkori, 2007; Tashakkori & Teddlie, 1998). (Although Zachariadis et al. (2013), discuss a Critical Realist adaptation of a Mixed Methods Sequential design, it is Exploratory rather than Explanatory). The implications of using MMSE here within Critical Realism, therefore had to be teased out, as follows:

- Critical Realism (CR) locates tendencies to causation in underlying mechanisms in its stratified ontology, rather than in statistical regularity or hermeneutic meanings. This meant that some means of inference to causation was required, and therefore, the six-stage abductive and retroductive explanatory framework was incorporated.
- Emergence and complexity, and the CR understanding that mechanisms are contingent, and might or might not exert their powers, required investigation of participants in different contexts.
- The idea that knowledge is provisional required a highly iterative approach and an openness to revision.
- CR's transformative impulse required a commitment to dissemination of findings, and to ongoing conversations with practitioners.
- CR's laminated ontology required methods to address different dimensions, including: an overall literature review; an extensive survey for the meso, micro, and individual dimensions; and interviews primarily for micro and individual dimensions.

4.3.2 Dialectical Augmentation of Explanatory Framework (DAARC)

During each phase of the research process, parallel analysis took place using the six-stage framework for Critical Realist (CR) explanatory research (Figure 4.1). Each

iteration of the six stages of Description (D), Analytic resolution (A), Abduction (A), Retroduction (R), Comparison (C), and Contextualisation (C) (DAARCC) was deepened through the dialectical thinking of Bhaskar's MELDARZ/A schema (Bhaskar, 2008, 2016) (Chapter 2.2.7), in particular utilising the categories of *non-identity, absence/ negation, totality, praxis, reflexivity, meaningfulness/spirituality, and unity/ non-duality*.

Explicitly considering *absence* and *negation* facilitated focus not only on what was present in the data, but what was absent or in contradiction. In practice, for *absence*, this meant searching for categories present in the literature but not in the data, or in some interviews but not others. For example, the absence of the term, 'contemplative education' led to searches for other framings of contemplative pedagogy. Regarding *negation*, lists of concepts in dialectical tension were derived from the data. For example, stress reduction interventions could be in tension with motivation to improve organisational conditions.

During abduction and theoretical re-description, considering *totality* led to more inclusive analysis, encompassing unresolved questions, emergence, and 'becoming.' For example, unresolved questions remain about the historical and emerging role of spirituality in contemplative teaching. A focus on *praxis* highlighted the transformative practice of participants through their teaching. The *reflexivity* of participants was considered as they made decisions and reflected on their *praxis*. *Meaningfulness* involved how participants affirmed meaning, *spirituality* and *enchantment*.

Explanatory DAARCC Sequences

The explanatory framework involved one over-arching Description/ Analytic Resolution/ Abduction/ Retroduction/ Comparison/ and Contextualisation (DAARCC) movement, and smaller recursive DAARCC cycles within the research stages: the literature study; each data collection and analysis phase; and the final interpretation phase.

The overall explanatory process began with a description of the entire research problem through the literature and through mixed data collection and analysis. Through this process, important aspects of the question were analytically resolved. The final analysis and interpretation involved abductive theoretical redescription, Retroduction to possible tendencies to causation, comparison of theoretical and abstracted explanations, and contextualisation to consider how well each explained the data.

The literature review provided an important opportunity for initial description (Danermark et al., 2002; Miles & Huberman, 1994). Contemplative education was described through secondary research; important aspects were identified, or 'resolved'; these were then redescriptioned abductively through disciplinary theoretical lenses, also found in the literature; next, in a retroductive process, questions were asked about possible underlying mechanisms; comparisons were made between possible theories and abstractions; and finally, there was a return to the secondary empirical studies to check their fit. This analysis guided survey development. The survey phase was the first concrete, contextualised attempt to test the theories and concepts derived from the secondary studies, as well as being part of the descriptive stage of the overall process.

The extensive survey phase involved another iterative sequence, this time made more complex by holding in mind the first, literature, sequence. The extent and character of respondents' contemplative teaching was described and their characteristics, teaching profiles, beliefs, experiences, motivations, and perceptions were identified, or resolved. These were then redescriptioned abductively through themes emergent from the data and through disciplinary theoretical lenses; there was retroduction to possible causal mechanisms; comparisons were made between possible theories and abstractions; and concretisation took place through the survey results. This process identified unresolved questions that helped shape the interview guide for the second phase of data collection.

The intensive interview phase allowed contextualisation and concretisation of the provisional theorisations and abstractions. The interview stage itself involved

many recursive cycles of DAARCC, with possible explanations being repeatedly reconsidered as new contexts and new participants were included. Participants were repeatedly added to include voices from different disciplinary areas. Finally, at the end of the study, all data, analyses, theorisations and abstractions were revisited, interpretations made, and provisional conclusions drawn.

4.4 Location, Population, and Sample

The study involved educators at seven of the eight universities in New Zealand. The universities' main centres are in Auckland, Hamilton, Palmerston North, Wellington, Christchurch and Dunedin, but most also have smaller campuses in other large or regional cities. The study was limited to universities to simplify access and comparisons. The research population was defined as all university educators in New Zealand who had a contemplative practice and/or were using contemplative methods. 'Educators' included both academics and those in tutoring, bridging, and support roles. The hope was that the survey would elicit responses from the target group involved in contemplative education, which was widely construed as the range of pedagogies and practices included in the CMind tree (see Figure 3.3), with the addition of mindfulness. The extent of the target population was unknown, so all educators at each participating university were invited to participate in Phase 1 of the study, and actual participants were self-selected. The survey sample and interview participants are detailed below.

4.4.1 Survey Sample

In total, 258 educators completed the survey. The original goal was to invite as many of New Zealand's 10,055 university educators (7,170 Full-Time Equivalent) as possible, across a wide range of disciplines (Ministry of Education, 2015). In practice, permission was obtained to email SurveyMonkey invitations to staff at three universities, and to invite participation through online staff newsletters at four more. The self-selecting sampling process allowed the largely 'hidden' contemplative education community to emerge and may have encouraged those

who considered themselves proficient to respond (Billieux et al., 2014). Self-selection produced a non-probability sample (Lavrakas, 2008), but generalisation to the total population was not intended.

4.4.2 Interview Participants

The twenty-two interview participants ($n = 22$) were made up of 15 who volunteered through an invitation at the end of the survey and 7 who were purposively chosen from the target population to fill disciplinary and theoretical gaps. The educators who contributed their insights to this study reflected the diversity of aims, framings, and experiences found in the first research phase. They are not discussed as individual cases and if necessary, to maintain confidentiality in this small country, their insights are occasionally merged.

4.5 Methods

Research methods included an extensive survey and in-depth semi-structured interviews. In Table 4.1, methods are mapped onto the research questions.

Table 4.1: Research questions and methods used to address each

Research Questions:	Extensive Phase	Intensive Phase
What is the character, extent, context, and purpose of contemplative education across the disciplines in Aotearoa New Zealand, and what factors have contributed to its emergence?	Online survey (n = 258) – closed and open questions	Semi-structured, in-depth interviews (n = 22)
Research Sub-Questions:		
1. Which university educators use contemplative pedagogies and practices?	Survey	
2. What aims do university educators have for adopting contemplative pedagogies and practices and what are the influences on their decisions?	Survey	Interviews
3. How do university educators use and conceptualise contemplative methods?	Survey	Interviews
4. How do university educators experience the implementation of contemplative education?	Survey	Interviews
5. How do contextual factors (institutional, social, economic, political, religious, cultural, and historical) influence the emergence and implementation of contemplative teaching?	Survey	Interviews
<p>Note: Mixed Methods protocols require that a separate question addresses how the first phase of the research informs the second, ensuring that actual mixing occurs (Creswell & Plano-Clark, 2011; Ivankova et al., 2006). This mixing was explicitly built into the present design (when the first survey phase informed the development of the second interview phase, and when data from both phases were interpreted together conceptually at the end) (Figure 4.2), but not listed as a separate question.</p>		

4.5.1 Phase 1: Extensive Survey

The extensive online survey administered to university educators throughout New Zealand was judged to be a flexible, cost-efficient, time-sensitive way to reach large populations, and useful to map an unknown field (Check & Schutt, 2012; Cohen, Manion, & Morrison, 2002, p. 78).

Survey Design

Survey design considerations included content validity, cultural inclusiveness, and piloting. Insights were provided by the small number of previous survey studies, including a report on the Contemplative Net Project (Duerr, 2004) about the work of 84 professionals who incorporated contemplative practices, three email evaluation study surveys of the Contemplative Practice Fellowship programme funded by the Association for Contemplative Mind in Higher Education (ACMHE) (Craig, 2011; Kilburg-Salter, D., 2003; Scribner, M., 2000), and a survey by Duerr, Zajonc & Dana, (2003) on spiritual and transformative dimensions of higher education.

Survey items drew on the literature evidence, incorporating reference to the potential benefits of mindfulness and contemplation, and canvassing aspects of implementation, perceived impact, and personal experience. The survey took a wide view of ‘contemplative,’ including both mindfulness and deep reflective or reflexive approaches, and both secular and spiritual interpretations. Being entitled, ‘Contemplative Education and Mindfulness in University Teaching,’ its aim was stated as attempting to establish the “extent and type of contemplative, reflective and mindful teaching methods being used at universities.” Most items included the opportunity for comment. Attempts were made to achieve clarity in composing questions despite some lack of shared understandings in this emerging field (Check & Schutt, 2012).

The survey aimed to be culturally inclusive of educators, including those who were Māori. For example, Question 12 used Māori terms for holistic teaching, and in several questions, Māori terms were included as options. However, there was no explicit focus on *kaupapa Māori* (a philosophical doctrine, incorporating the knowledge, skills, attitudes and values of Māori society) (R. Bishop, 1999; 2015; Kennedy & Jefferies, 2009; G. H. Smith, 1997). Concerns about the implications of using an impersonal, online survey methodology were discussed with university Māori and Pasifika advisers. In practice, a representative proportion of responses

from Māori and Pasifika educators was elicited, and they were also represented among interview volunteers.

Pilot Studies

Supervisors commented on survey versions. The survey was piloted three times:

- Pilot One: Non-contemplative colleagues ($n = 6$)
- Pilot Two: Contemplative educators at a tertiary provider outside the survey population ($n = 3$)
- Pilot Three: Contemplative educators outside of New Zealand ($n = 10$) on email list of the Association for Contemplative Mind in Higher Education (ACMHE)

Survey Instrument

The survey instrument is provided in Chapter 4 Appendix 4.4. The survey questions are mapped onto the research questions in Table A4.6.1, to show how these were addressed. The survey structure included a demographic section and two teaching sections (Table A4.6.2). The invitation email (Appendix 4.1.2 or 4.2.2) or advertisement (Appendix 4.3) contained study information, and participation constituted consent. The welcome page gave details about purpose, contact information and ethical approval. There were 38 items, of which 25 were available to all participants, and 13 only to respondents reporting regular personal contemplative practice. For all respondents, there was a thank you page with a link to the Association for Contemplative Mind in Higher Education (ACMHE) which provides many resources.

Survey question types included: Yes/no single item (1); Yes/no matrix (1); Likert-type single item (6); Likert-type matrix (10); Choose one (3); Select-all-that-apply (12); Fill-in the blank (2); and Open-ended (3). Likert-type items were numbered from 1 (*Very*) to 5 (*Not at all*). In the analysis, the values were necessarily flipped so that 1 was weakest and 5 was strongest. Some items and sub-items allowed the

choice of 'Other' (16); and several (16) included the option of writing a comment, allowing collection of more in-depth open-ended data.

Survey Design Limitations

The survey design had some limitations. The decision to open the final survey section only to respondents who reported having a regular contemplative practice rested on the assumptions that this practice would influence their teaching, and that other respondents would not be using meditative methods in class. The latter assumption may have been inaccurate in some cases. The assurance of anonymity provided by non-tracking of IP addresses had the disadvantage that there was no way of following up on interesting responses. Another design decision was not to tire participants by forcing a long list of 'Not Applicable' (NA) responses in multi-item questions. Rather, they were instructed to answer, 'as many as applied.' While encouraging survey completion, this left doubt about the meaning of nonresponse. Therefore, in the interests of transparency, in the results chapter, the number of respondents who replied to each question (n) is reported, along with the number of missing responses. A further limitation is that surveys rely upon the honesty, openness, self-knowledge, and motivation of participants - it is difficult to estimate the accuracy of responses.

Survey Administration

Survey administration at each university differed in timing and distribution depending on the permissions granted by university ethics committees (See Table A4.6.3). University One allowed access to the staff database (with the opportunity to clean the email list), and the sending of an initial email and two reminders to staff. Universities Two and Three allowed one email to staff, which was sent by human resources personnel. Universities Four, Five, Six, and Seven allowed the placement of interview invitations in online staff newsletters.

Survey Response

For the three universities receiving emails, invitations were sent to a total of 2,951 educators, resulting in an overall response rate of 9.4% (277), including incomplete responses, and an overall completed response rate of 8.3% (247) (Table 4.2, below). For University One, where staff received an email invitation and two reminders, the response rate was 18.1% (203), including incomplete responses, and 15.9% (178) for complete responses. For Universities Two and Three, where permissions were granted to send one email invitation with no reminders, the response rates were 43 (3.6%) and 32 (4.9%) respectively. There were limited numbers of responses from the four universities allowing only the placement of ads in online newsletters. Some respondents (35) dropped out of the survey after completing the demographic questions.

Table 4.2: Survey invitations and responses received, by university

University	Survey Invitations	Responses Received	Incomplete Responses	Complete Responses
University One: Email and 2 reminders	1,120	203 (18.1%)	25	178 (15.9%)
University Two: One email	1,184	43 (3.6%)	1	42 (3.5%)
University Three: One email	647	32 (4.9%)	5	27 (4.2%)
Subtotal	2,951	277 (9.4%)	31	246 (8.3%)
<i>Other Universities:</i> Online advertisements	3,246	16 (0.5%)	4	11 (0.3%)
TOTAL	6,197	293 (100%)	35	258 (100%)

Note: University One figures include full & part-time staff. After cleaning the email list, and deleting undeliverable emails, this number approximated the Full Time Equivalent (FTE) number of staff there (1,109 FTE). Other university figures are FTEs.

Estimating non-response bias was difficult because the overall population of contemplative educators was unknown, so the survey was untargeted. Further, permissions were not given by universities to carry out the recommended methods

of reducing non-response: sending pre-survey warnings; repeating the survey; and follow-up of non-respondents (Field, 2009; Sapsford, 2007). While this resulted in a low response overall, the response rate at University One (18.1%) seemed surprisingly high, considering that this was an exploratory survey, aiming to find the target group, and that the survey was like a cold call, irrelevant to most recipients. The response rate for the actual target population of those interested in contemplative education at each university is not known.

Responses to survey invitations posted online are not high. For example, using repeated online advertisements on targeted sites, Duerr and Zajonc (2003), well-known in their field, managed to elicit only 152 respondents across North America for their survey of transformative educators. However, it seemed likely that respondents to this type of invitation would be interested and committed.

Another consideration is that most survey responses came from one university ($n = 178$, 68.9%), with substantial participation from two more universities ($n = 42$, 16.3% and $n = 27$, 10.5%), and with only small contributions from four other universities ($n = 11$, 4.3%). In view of this unevenness of response between universities, the data were explored to see whether university of origin significantly influenced responses. Analysis showed that responses did not vary to a statistically significant degree by university. (This is not to deny the possible importance of institutional culture, but to say that other factors appeared to be more influential). Factors that did produce significant differences included gender, academic specialty, and regular contemplative practice. Given these results, it was considered justifiable to pool the respondent data and treat it as one sample, rather than reporting separate analyses for each university.

With these considerations, the final pooled sample of 258 complete responses was considered adequate for an exploratory study (Fraenkel, Wallen, & Hyun, 2012).

Survey Analysis

The quantitative survey items were analysed statistically in SPSS, using the following procedures (Field, 2009; Fraenkel et al., 2012; Salkind, 2011):

- Data were cleaned and checked.
- ‘Other’ responses were re-coded or used to create new categories, as appropriate.
- Descriptive statistics were calculated for pooled data and for data separated by groups.
- Predictor Variables were identified (demographic characteristics; teaching characteristics; and presence or absence of a personal contemplative practice).
- Outcome Variables were identified (use of contemplative pedagogies and practices; factors involving the way contemplative teaching was experienced; and aspects of implementation).
- Non-parametric statistical tests were used to analyse the responses to the Likert-type questions because these data were ordinal, rather than continuous (Field, 2009). In other words, the order of responses from, for example, *Not at all* to *Very strongly* was clear, but the exact distance between responses was not – it was not possible to say that *Slightly* (2) was half as strong as *Quite strongly* (4), for example.
- Univariate analysis included: frequencies; percentages; measures of central tendency (median); and measures of dispersion (Inter-Quartile Range, the range of the middle fifty percent of responses).
- Tests for comparisons between groups, shown in Table 4.3, included:
 - For comparisons of two groups (for example, gender) by ordinal measures (Likert-type questions), Mann Whitney *U* tests were used. (Mann Whitney is a non-parametric alternative to the T-test and compares ranks rather than means).
 - For comparisons of three or more groups (e.g. academic discipline) on ordinal measures (Likert-type items), the Kruskal Wallis test was used. This test first determines whether there are significant differences between the groups overall. Following this, in SPSS 24, further pairwise comparisons are made between groups to see exactly where the differences lie, and Bonferroni corrections to significance are made. (Kruskal Wallis is a non-parametric alternative to ANOVA and

compares ranks rather than means. Bonferroni corrections raise the standard of significance by dividing the *p*-value by the number of cells in the matrix and are necessary when multiple comparisons are being made. Without them, there is a danger of false findings of significance, i.e. Type-1 errors).

- For comparisons of two or more groups (e.g. academic discipline) on nominal measures (e.g. type of pedagogy used), contingency tables with *Chi*-square test of independence were used. For groups of more than two, it is necessary to examine adjusted standardised residuals to see where the differences lie. An absolute value of more than 1.96 indicates statistically significant difference. *Post hoc* Bonferroni corrections of significance were again used to guard against Type-I errors (Sharpe, 2015, p. 3).

Table 4.3: Analyses used for each type of variable

PREDICTOR VARIABLES:	OUTCOME VARIABLES:	
	Nominal (e.g. 'Tick all that apply' question about types of pedagogies used)	Ordinal (e.g. Likert-type measures of opinion)
Nominal: 2 Groups (e.g. gender)	<i>Chi</i> -square test of independence	Independent Samples Mann Whitney <i>U</i>
Nominal: 3 or More Groups (e.g. academic discipline)	<i>Chi</i> -square test of independence with <i>post hoc</i> Bonferroni correction	Independent Samples Kruskal Wallis with <i>post hoc</i> test

- Statistical significance is reported and taken to indicate that a pattern has been identified and that further, in-depth investigation could be considered in this and other contexts. Reductionist use of significance is contested in Critical Realist research (Mingers, 2003).
- Effect sizes were also calculated for each significant result, as recommended by authorities (Ayiro, 2012; Field, 2009). SPSS 24 does not

calculate effect sizes, so this was done by hand. For Mann Whitney U , the effect size measure used was Pearson's r correlation ($r = z/\text{square root of } n$). The value of r ranges from -1 to 1 . To interpret the strength of the effect size, Cohen's (1988, 1992) effect size estimate was used (Chapter 4 Appendix Table A4.6.4).

- For Kruskal Wallis tests, the effect size measure adopted was epsilon squared (ϵ^2) (Tomczak & Tomczak, 2014, p. 24), as this measure is deemed to be more accurate than alternatives such as eta squared. Epsilon squared is calculated by the formula:
 - $\epsilon^2 = H/n-1/\text{square root of } n+1$
 - $H = \text{Kruskal Wallis statistic}; n = \text{number of responses}$
- These effect sizes may be interpreted as shown in Chapter 4 Appendix Table A4.6.5 (Rea & Parker, 1992).
 - As another alternative, it is possible to calculate r effect size values for the pairwise comparisons (Field, 2009).
- Significant differences in group responses are summarised in Chapter 5 Appendix A5.3.
- Visualisation during analysis included box plots, bar charts, and pie charts. Joint displays were prepared for some survey results.

The demographic data for this group of respondents were compared to those of other New Zealand university educators to see if and how they differed. Characteristics of respondents (gender, position and academic discipline) from Universities One and Two were compared with those of their parent populations at each university using *Chi-square Analyses of Fit* tests with *post hoc* tests. In addition, comparisons of all respondents were made with all New Zealand university educators on variables for which data were available (gender, age group, ethnicity, and position). In the results, these comparisons are noted in each section, as relevant. Not too much import is claimed for this analysis given the non-probability sample and the exploratory nature of the study, but areas for follow-up investigation are indicated.

Qualitative survey items clarified and expanded upon the answers to closed questions. Comments are reported along with statistical results for each question.

4.5.2 Integration: Linking Phase 1 and Phase 2

The two research phases were linked both through the identification of Phase 2 participants and through the shaping of Phase 2 content. The survey elicited offers from educators willing to participate in semi-structured, in-depth interviews. Also, it raised further questions that were used in developing the interview guide for the intensive phase.

4.5.3 Phase 2: Intensive, One-to-One, Semi-Structured Interviews

One-to-one, semi-structured interviewing was chosen for the intensive phase because it is flexible, responsive, and allows follow-up questioning. Further, participants often are willing to give full, candid responses (Guest, Namey, & Mitchell, 2013). Interviews provide valuable opportunities to consult with experts and explore their interpretations and explanations. A disadvantage of cross-sectional interviewing is that it provides only a snapshot of one slice of life on one day. This snapshot, however, provides a window into the research topic.

Critical Realist (CR) conceptions of interviewing fall between positivist understandings in which participant views are received and reported as unproblematic representations of truth, and postmodernist views in which they are seen entirely as discursive co-constructions, according to Smith and Elger (2014). CR recognises that the interplay of interviewer and interviewee co-creates understandings. Further, interviewees may consciously or unconsciously exaggerate or minimise aspects of their experience. At the same time though, interviewees are held to have access not only to their perspectives, but to real information. Information and perspectives are shaped by the reflexive interplay of agency with societal structures and powers (Archer, 2000, 2007). Thus, interviews provide opportunities for the researcher to sense the shape of these structures and

powers and the ways they influence interview subjects. Interview data reflect context and must be interpreted through a theoretical lens.

The approach to interviewing adopted in this study of contemplatives required reflectivity and reflexivity, being present, and reflecting-in-action. The approach was informed by the concept of 'mindful' interviewing, for example in a phenomenological study of Buddhist meditators (P. F. Morgan, 2013). However, that approach was not entirely appropriate in this study because participants had widely varying experiences and conceptualisations of 'contemplative.' Nevertheless, there was the possibility that any interview could become a liminal space (Anderson & Braud, 2011).

The many different theoretical framings of contemplative education were welcomed within the interviews and openness was shown to varying perspectives and experiences. For example, participants with spiritual beliefs might have felt that their views were side-lined in academia, and those who framed contemplative practice as secular might have been suspicious of religiosity. Trust-building and the assurance of confidentiality were essential.

To apply mindfulness in the analysis, interviews were listened to repeatedly, each time with attentiveness to a different aspect, for example, a content theme, emotion, or metaphor (Anderson & Braud, 2011). Reflexivity was fostered through journaling and through critiquing the interviews by re-reading transcripts and listening to recordings.

Interview Guide and Procedures

The interview guide (Appendix 4.5) contained questions like those in the survey but also provided the opportunity to explore topics more deeply. The order and wording of questions were not pre-determined but could be flexibly varied. Notes detailed the handling of interview recording, informed consent procedure, signing of consents, provision of transcripts, and signing of transcript release. The guide and procedures were trialled in a mock interview with a colleague.

Potential participants were provided with information (Chapter 4 Appendix 4.1.3 / 4.2.3) explaining the aim and procedures of the study and given the opportunity to ask clarification questions by phone or email. Appropriate times and places for the interviews were then negotiated. Some interviews were conducted online if it was not practical to travel.

Each interview included a brief review of the study's purpose and opportunity for questions. A consent form was signed (Chapter 4 Appendix 4.1.4 / 4.2.4), and the recording device switched on. After one hour, an opportunity was given to stop, however, most interviewees chose to continue for longer. The interviews were informal and conversational, and direct questions were asked only if the answers did not arise naturally. Provided that the core topics were covered, discussion followed the priorities of the participants. Follow-up questions explored topics more deeply, and participants sometimes referred to course materials to elucidate the points they were making.

Interviews were transcribed immediately by me as researcher, or by a transcription service, after transcribers had signed a confidentiality form (Appendix 4.1.5/4.2.5). In either event, I listened to the interviews and re-checked the transcripts multiple times. The transcripts did not include linguistic details as these were not required for the analysis. Repeated listening nevertheless made me aware of tone and pace. Repeated listening, often involving transcription by the researcher, is a means of immersion in the data and facilitates analysis, according to Bird (2005). Transcripts were sent to participants, who were offered the opportunity to revise them, or to change identifying details (Appendix 4.1.6).

Interview Analysis

Semi-structured in-depth interviews involve “both model-building and model-testing, both theory-construction and theory verification,” according to Wengraf (2001, p. 4). In the present study, the analysis both proceeded from the bottom up, and the top down, trying out existing and potential theoretical explanations. Interview data were analytically resolved into important aspects through Thematic

Analysis (Braun & Clarke, 2006, 2013, 2014). Codes and themes were first allowed to emerge from the data (Charmaz, 2013; Johnson, McGowan, & Turner, 2010; Kempster & Parry, 2011; Oliver, 2012), and second, were derived from theoretical categories found in the contemplative education literature (Danermark et al., 2002). NVivo software aided analysis.

The initial inductive process generated over 300 themes, which were then combined into larger categories. This grounded analysis was perhaps not strictly necessary, as Critical Realist abduction requires theoretical analysis. However, because the literature was sparse at the time the study began, growing in parallel with it, I wanted to be sure that I did not miss key ideas that had not yet appeared in articles. Next, the theory-driven abductive analysis of the data was carried out using the key themes derived from the literature (Chapter 3). The larger categories were compared with the inductive analysis and the two sets of themes merged.

Interview Limitations

The interview study was limited, first by its small size. (To include interviewees across disciplines represented in the survey data, the initially proposed number of 12 interviews was increased to 22). Geographical distance created challenges in meeting some participants face-to-face. A further limitation was that coding and application of theories to data were necessarily subjective processes. This was partly addressed by inclusion of both inductive and theoretical approaches to analysis, and by transparency in reporting thinking processes. My own role as both a contemplative practitioner and educator could be seen as both a limitation and a strength. My familiarity with the topic may have encouraged interviewees to respond more freely, but perhaps sometimes also to unconsciously tailor responses to meet perceived expectations. As with any interview study there was the potential for the interview process itself to influence the answers of the participants. Further limitations resulted from pooling the data rather than describing interviewees in detail as individual cases. In protecting their confidentiality, some richness was lost in reporting.

4.5.4 Integration: Interpreting Both Phases Together

At the end of the study, both extensive and intensive phases were interpreted together, with the data and interpretations of the second (qualitative) phase being used to ‘explain’ the results of the first (quantitative) phase (Creswell, 2012, 2015; Creswell & Plano-Clark, 2011). To enable this, the steps of the study were integrated throughout in these ways (Yin, 2006, cited in Bazeley, 2009, p. 204): the whole Mixed Methods Sequential Explanatory (MMSE) process was embedded within Critical Realist (CR) meta-theory; the survey questions and interviews addressed the same issues; and the participants came from the same population. At the same time, there was openness and adaptability, as advocated by Plano-Clark and Badiie (2010), in that surprising results from the first phase led to the inclusion of new questions in the second. For example, the survey responses did not fall neatly into the framings of contemplative education suggested by the literature, which led to a focus on disciplinary framings and the uncovering of some which had eluded comprehensive data-base searches. Further, the need to explain issues not answered by the initial interview volunteers led to the recruitment of others from the target population.

4.5.5 Validity

Validity in mixed research is already a complex issue, involving quantitative and qualitative demands, and is further complexified in this study by Critical Realist (CR) understandings (Zachariadis et al., 2013). Aspects of design and measurement have been described to facilitate evaluation of their validity.

Qualitative validity is described in the literature as including, “authenticity, goodness, verisimilitude, adequacy, trustworthiness, plausibility, validation, and credibility,” according to Creswell and Miller (2000, p. 124). The authors organise these ideas in a comprehensive matrix of measures (Table 4.4, below). On one axis, they place the paradigmatic positions of post-positivism, constructivism, and critical approaches. On the other axis, they place three lenses, that of the

researcher, the participant, and the external observer. They recommend that researchers use methods from several cells of the matrix, as appropriate for their stance. Arguably, all lenses and positions in the matrix are relevant for Critical Realist Mixed Methods research. (The measures employed are shaded).

Table 4.4: Validity procedures within qualitative lens and paradigm assumptions (Creswell & Miller, 2000, p. 126), used with permission

PARADIGM ASSUMPTION/ LENS	Post-positivist or Systematic	Constructivist	Critical
Lens of the Researcher	'Triangulation'*/ Perspective-taking	Disconfirming evidence	Researcher reflexivity
Lens of Study Participants	Member checking	Prolonged engagement in the field	Collaboration
Lens of People External to the Study (Reviewers, Readers)	The audit trail	Thick, rich description	Peer debriefing

*Note: In Mixed Methods terminology, the term 'triangulation' is not used in sequential studies because data are integrated through the feeding of one phase into another, rather than by mixing or transformation, as in convergent studies. However, in considering the contribution of methods to findings overall, the procedure in some sense, stands – perhaps it could be re-named “perspective-taking.”

First, considering the researcher lens, although Mixed Methods Sequential designs do not use the term, 'triangulation,' because, strictly speaking, integration of data takes place when one sequence feeds into the next, rather than by mixing in the manner of convergent designs, triangulation did in a sense, take place. This occurred both methodologically (survey, interviews) and analytically (inductive, deductive, abductive, retroductive, and dialectical analysis). Also through the researcher lens, disconfirming evidence was sought in the literature, survey, and interview data. Informants with views not yet represented by the interviewees were added to the group of participants, and there was an attempt to interview participants across a wide range of disciplines, continuing to obtain data until

there appeared to be good overall coverage, and increasing the number of interviewees. Researcher reflexivity was facilitated through reflexive journaling. I tried to hold in mind my own bias as a researcher who is also a contemplative practitioner and aspiring contemplative educator.

Second, through the lens of participants, there was member checking of transcripts. Although this was not an ethnographic study, there was prolonged engagement with contemplative education at universities, and I participated in numerous courses, workshops, conferences, and seminars on aspects of contemplative teaching.

Third, to facilitate observation through the lens of people outside the study, I documented my decisions and analyses. Descriptions were rich to the degree allowed by the promises of anonymity and confidentiality of participants and word limit restrictions. Finally, peer debriefing in the form of supervision, was ongoing in this doctoral study. Further, I submitted my developing ideas to peer scrutiny through twelve international and national conference presentations and four invited regional workshops and presentations (Chapter 4 Appendix 4.7).

Validity concerns also included those specific to Critical Realist (CR) studies, where validity hinges upon how well a study identifies generative mechanisms underlying events in the research context (Zachariadis et al., 2013). Internal validity in CR involves whether the hypothesised explanations of events are indeed observed in concrete study, rather than in correlations between variables. External validity in CR pertains to the generalisability of the derived explanations involving mechanisms. Construct validity in CR relates to how well research measurements give information about Actual events resulting from Real mechanisms. These mechanisms may indeed have different impacts in different situations, and CR's stratified and laminated ontology demands consideration of research questions in context. Study of multiple cases and contexts can help to test their explanatory power of proposed explanations.

4.6 Conclusion

This chapter has outlined ethical considerations and approvals, and then described the development of an integrated Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED), which includes extensive survey and intensive interview phases. The chapter has explained the re-conceptualisation of the original Mixed Methods Sequential Explanatory (MMSE) design using Critical Realist (CR) theoretical assumptions and explained augmentation of the six-stage explanatory framework by the dialectic. Details have been provided regarding the specific methods used, the data produced by the quantitative study, and both the quantitative and qualitative analyses. Finally, validity considerations have been discussed. The following chapters report the survey results and reflections linking it to the next phase of research (Chapter 5), the interview findings and discussion (Chapter 6), interpretation of research phases together (Chapter 7), and conclusion (Chapter 8).

5

SURVEY RESULTS AND DISCUSSION

... the reflective/ emotional side of human nature is an essential element – when it is ignored then something will rise to compensate. (Education Respondent)

5.1 Introduction

The first purpose of the survey (Chapter 4 Appendix 4.4) was to begin answering the research questions by finding New Zealand (NZ) university educators who were using contemplative pedagogies and practices. The survey formed the first, extensive, phase of the Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED) and provided the context for the in-depth interview study in

the second, intensive, phase. This survey also formed the first part of the Description and Analytic Resolution stages of the six-stage explanatory framework. In keeping with Critical Realist (CR) guidelines for Mixed Methods Sequential Explanatory (MMSE) design, the ‘demi-regularities’ found in the survey data served to sensitise awareness of aspects of the research topic, to provoke questions for further exploration, and to aid the abductive and retroductive analysis.

Each section of the chapter begins by describing key results of one part of the survey and highlights notable features of the data and differences between groups. Only those differences appearing to have both practical and statistical significance are reported. Brief reflections on possible implications of the data are made.

The initial section reports on questions open to all 258 respondents and compares respondent demographic and teaching characteristics with those of all New Zealand university educators. Chapter Section 5.6 reports on the second part of the survey, in which the 128 respondents who indicated having a personal contemplative practice answered questions about their experience and practice of contemplative teaching. The chapter conclusion explains how the survey results informed the next intensive interview research phase. Tables in the Chapter 5 Appendix provide more detailed results and analyses, as indicated in Table 5.1, below.

Table 5.1: Table of Chapter 5 Appendix tables reporting survey results and analyses

Appendix:	Content:
Appendix 5.1	Tables reporting demographic and teaching characteristics of respondents (frequencies, percentages) Tables comparing respondent demographic and teaching characteristics with those of all NZ university educators (<i>Chi-square</i> analysis of fit tests)
Appendix 5.2	Tables reporting results of each survey question (frequencies, percentages, medians, inter-quartile ranges)
Appendix 5.3	Tables reporting statistically significant differences between groups, with their effect sizes (Mann-Whitney <i>U</i> Tests; Kruskal Wallis Tests; <i>Chi-square</i> Tests)

5.2 Finding and Characterising Contemplative Educators

The survey phase accomplished its first objective of answering the first research question by finding contemplative educators and identifying their demographic and teaching characteristics.

5.2.1 Demographic Characteristics of Respondents (Questions 6 to 9)

The first striking finding was that respondents were found in all demographic groupings within gender¹, age group, ethnicity, and religion (Figure 5.1, below, and Appendix Table A5.1.1). However, females ($n = 152$, 60.3%) outnumbered males ($n = 100$, 39.7%). Over half of respondents ($n = 138$, 55.2%), were 50 years of age or older. The most frequent ethnic identification was European ($n = 230$, 84.2%). Well over half ($n = 135$, 57.4%) of the 235 respondents answering the question identified with spirituality of some kind, but 100 (42.6%) chose the option of 'No Religion.' The study of Duerr et al. (2003), which elicited responses from website invitations, does not report demographic results. In Craig's (2010) evaluation study of the Contemplative Practice Fellowship programme, somewhat more Fellowships were granted to women (54.4%, $n = 86$) than men (45.6%, $n = 72$).

Overall data masks diversity. For ethnicity, 11 (4.7%) people identifying as European also identified with another ethnicity, in most cases, Māori. Most Māori and Pasifika respondents also identified with another ethnicity. 'European' as a category covered great diversity, as shown in open-ended comments. The data on religious identification also show complexity. The biggest religious group was Christian ($n = 98$, 36.8%), followed by Buddhist ($n = 21$, 7.9%), reflecting Buddhism's importance in the mindfulness literature. Most Buddhist respondents reported European ethnicity and over half of these (13) also identified with another

¹ The survey gave gender options, *Female*, *Male*, and *Gender Diverse*. One respondent chose *Gender Diverse*, but as with all categories with low numbers, responses are not reported separately because this would threaten confidentiality.

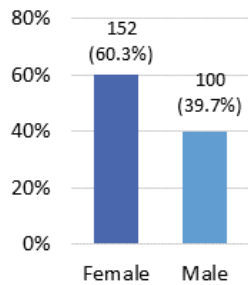
religion. This perhaps reflects the growth of Western Buddhism among educated groups (McMahan & Braun, 2017). Overall, 36 (13.9%) of respondents chose two or more religions. Religious identifications most often combined with others included Buddhism (13), Christian (non-Catholic) (13), and Spiritual but not Religious (7). Some respondents reported difficulty in answering this question. This complexity in both ethnic and spiritual identification accords with Archer's theory of reflexive imperative in late modernity (Archer, 2012), and the need to consciously decide on big questions rather than automatically following cultural norms (Gorski, 2016) (Chapter 1).

Demographic Characteristics of Respondents

Survey respondents came from a wide range of demographic groupings in New Zealand universities.

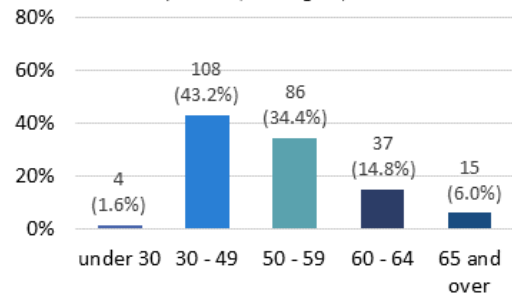
Gender

(N = 252, missing = 6)



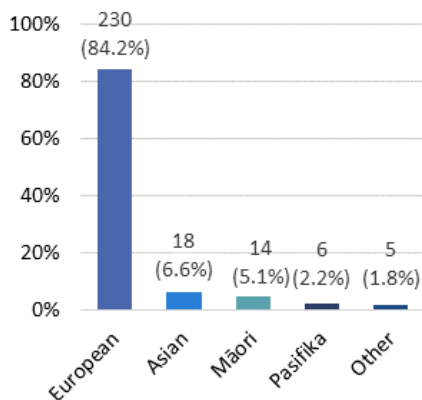
Age Group

(N = 250, missing = 8)



Ethnic Identifications

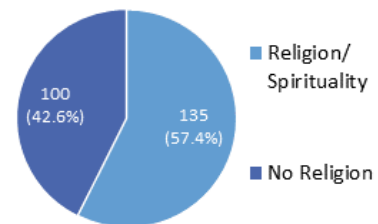
(N = 256, missing = 2)



Note: The chart reports the number of ethnic identifications, which exceed the number of respondents because more than one ethnicity could be chosen.

Religion (Respondents)

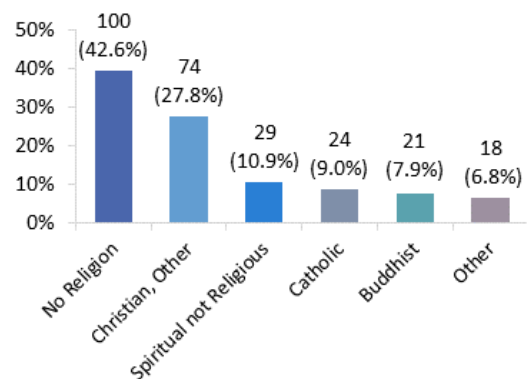
(N = 235, missing = 23)



Note: The pie chart shows the reporting or non-reporting of any religion or spirituality by respondents.

Religion (Identifications)

(N = 235, missing = 23)



Note: The chart reports the number of religious identifications, which exceed the number of respondents.

There were more female respondents than male, more of European ethnicity than other ethnicities, and more identifying with a religion or spirituality than identifying with no religion. Over half of respondents were over 50 years of age.

Figure 5.1: Demographic characteristics of respondents (Questions 6-9)

Demographic Characteristics of Contemplative Practitioners

In the group of respondents reporting regular contemplative practice ($n = 128$, 49.0%) the preponderance of females was even more pronounced. Some respondents did not report their gender, but of those who did, female contemplatives ($n = 85$, 68%), formed a larger proportion than females in the non-practice group ($n = 66$, 52.0%) (Table A5.1.2). Contemplative respondents on average, were a little older, with 75 (61.0%) aged 50 and over, compared to 63 (51.0%) for non-practitioners. The greater incidence of contemplative practice among older groups may indicate greater likelihood of religious upbringing, or possibly the influence of Eastern religions in the 1960s and 70s (Wilson, 2014).

Almost a third of respondents reporting a contemplative practice ($n = 41$, 32.0%) had no spiritual or religious affiliation, in accord with the increasing popularity of secularised mindfulness for health and wellbeing. However, this also leaves open the possibility of mindfulness as the secular spirituality proposed by Harris (2014). This might fill a void left by the decline of religions and the dis-enchantment of society (Landy & Saler, 2009).

Demographic Comparisons with All University Educators

To explore the possibility that educators using contemplative methodologies might differ from educators overall, their demographic and teaching characteristics were compared, using New Zealand Government statistics (Statistics New Zealand, 2015) and university annual reports (Table A5.1.3). This analysis was intended to spark reflection, and it was borne in mind that the respondents form a non-probability sample of the unknown total population of educators using contemplative methods.

GENDER. The proportion of female survey respondents overall ($n = 152$, 60.3%), was significantly higher than that of all university educators ($n = 4,750$, 47.2%). The difference by gender was shown in a *Chi-square* goodness of fit test, which compares an expected and actual distribution, $\chi^2(1, n = 252) = 17.291$, ($p < .001$).

This disparity in gender could partially reflect the high numbers of respondents from academic disciplines such as Education, which have high numbers of women. Additionally, it may indicate that women are more likely to use contemplative practices than men, as indicated in some studies (McMahan, 2008). However, studies have also shown women to be generally more likely to respond to surveys than men (for example, Curtin et al., 2000; Moore & Tarnai, 2001; Singer, et al., 2000).

AGE GROUP. The make-up of the age groups of respondents also differed from that of New Zealand educators overall, as shown by *Chi-square* goodness of fit tests, $\chi^2(4, n = 250) = 41.245$, ($p < .001$), significant with Bonferroni correction ($p = .005$). The size of the group of respondents aged 30-to-49 years ($n = 108$, 43.2%), was consistent with its size among NZ academics overall ($n = 4,315$, 43.2%). However, other groups differed. The under-30-years age group ($n = 4$, 1.6%) was significantly smaller here than among all NZ university educators ($n = 1,305$, 13.1%). Older age groups of respondents, 50-59 years of age ($n = 86$, 34.4%), and 66-64 years of age ($n = 37$, 14.8%) were present here in larger proportions than among all university educators, where they numbered 2,480 (24.8%) and 1,030 (10.3%), respectively. This age difference provokes reflections on the impact of career stage and security of position on adoption of alternative teaching methods.

ETHNICITY. The ethnic identification of respondents also differed from that of all New Zealand university educators (Table A5.1.3). Performing this analysis highlighted tensions in statistical re-allocations of characteristics. To perform a *Chi-square* analysis of fit test, respondents had to be allocated to only one ethnicity, and the counts therefore differ from those in the demographic tables where more than one ethnic identification could be reported. Philippa Butler (2018), in her dissertation exploring ethnic identity, expresses discomfort with the "... Statistics New Zealand protocol" that over-rides people's indications of identity and reallocates those who tick multiple ethnicities. (I allocated respondent ethnicity as follows, first: Asian, then Pasifika, then Māori, then Other, and finally European. As I later discovered, this differed from the Statistics New Zealand protocol, which gives priority to Māori ethnic identifications). The *Chi-square*

analysis of fit test clearly shows significance, $\chi^2 (4, n = 256) = 48.799, p < .001$, significant with Bonferroni correction ($p = .005$). However, because of the difficulties in classifying responses, this result may be regarded as indicative only.

Even with the reallocations of ethnicity, there were significantly more Europeans in this study ($n = 227, 88.7\%$) than in the group of all NZ University Educators ($n = 6,385, 69.2\%$). This was at the expense of Asian ($n = 14, 5.5\%$) and Other ($n = 3, 1.2\%$) ethnicities, whose incidence in the total university population was 1,240 (13.4%) and 900 (9.8%), respectively. (If I had not prioritised Asian ethnicity in reallocations, the disparity would have been even greater). One possibility is that the lower incidence of Asian and Other groups occurred because these groups may tend to work in academic disciplines such as Business, that were not highly represented. However, a need for alertness to any differences in their survey responses was highlighted (for example on factors affecting decisions to adopt contemplative methods).

The proportion of Māori educators ($n = 14, 5.1\%$) after allocations from European and to Asian and Pasifika ($n = 10, 3.9\%$) was not statistically significantly different from that for all universities ($n = 500, 5.4\%$) (Table A5.1.3). Although about 15% of New Zealanders identified as Māori at the time of the survey, half were under 24 years of age, and unlikely to be university educators. (This compared to half under 40 years of age for the non-Māori population (*New Zealand Workforce Statistics, 2015*)).

5.2.2 Teaching Characteristics of Respondents Overall (Questions 1 to 5)

Respondents were found across the spectrum of academic disciplines, positions, years of teaching experience, and levels of courses taught, as shown below, in Figure 5.2, and in Chapter 5 Appendix Table A5.1.4. Sciences ($n = 74, 28.8\%$) and Humanities ($n = 72, 28.0\%$) had almost equal numbers of respondents, with Education ($n = 41, 16.0\%$), Social Sciences ($n = 38, 14.8\%$), and Business ($n = 32, 12.5\%$), following. A contrast could also be made between Sciences ($n = 74, 28.8\%$)

and the combined group of Humanities, Social Sciences, and Education ($n = 151$, 58.8%)².

While respondents occupied all categories of academic positions, the two largest groups were Senior Lecturers ($n = 96$, 38.1%) and Other Academic Staff ($n = 70$, 27.8%). The largest group of respondents ($n = 74$, 28.9%) reported having 16-25 years of university teaching experience. Almost all respondents taught undergraduate courses ($n = 229$, 97.4% of responses), and three-quarters also taught at postgraduate level ($n = 176$, 74.9%). Smaller but substantial numbers taught professional ($n = 35$, 14.9%) or English language, bridging and support courses ($n = 15$, 6.4%). Most taught more than one type of course, and many indicated they used both face-to-face and blended or distance instructional modes.

In this study, participants were more widely and evenly distributed across disciplines than in the previous studies available for comparison. In Duerr et al. (2003), Arts and Humanities (32.5%) contributed most respondents, followed by Transformative Learning (29.9%), which is not a disciplinary category in New Zealand. Education (23.9%) and Social Sciences (17.1%) produced substantial numbers, with only 10.3% from Professional schools and 3% from Sciences. Craig's (2010) respondents came from a pre-existing pool, but it is interesting that Humanities accounted for almost half ($n = 64$, 48.1%) of the Fellows in her study, Social Sciences ($n = 28$, 21.3%), Visual and Performing Arts ($n = 17$, 12.8%), Professional disciplines ($n = 17$, 12.8%), and STEM ($n = 7$, 5.3%). The difference in positioning of survey studies may account for differences in the disciplinary balance: Duerr et al. (2003) as 'transformational/ spiritual'; Craig (2010) as 'contemplative'; and the current study as 'contemplative, reflective, or mindful'.

² Because each university has different subject divisions, NZ Statistics categories were used rather than university ones for these comparisons. Some disciplinary specialties cross disciplines and some, such as Engineering and Communication, seem to be placed in different schools by different universities. Also, rather than creating a separate non-degree category, English Language Teaching and support teaching ($n = 15$, 6.4%) has been included with Humanities because many/most teachers have Applied Linguistics training.

Teaching Characteristics of Contemplative Practitioners

There were slight differences in the teaching profiles of respondents who reported a contemplative practice. The practice group had somewhat more educators in Education ($n = 23, 18.1\%$) than the non-practice group ($n = 17, 13.8\%$), and more in Humanities ($n = 40, 31.5\%$) than the non-practice group ($n = 31, 25.2\%$).

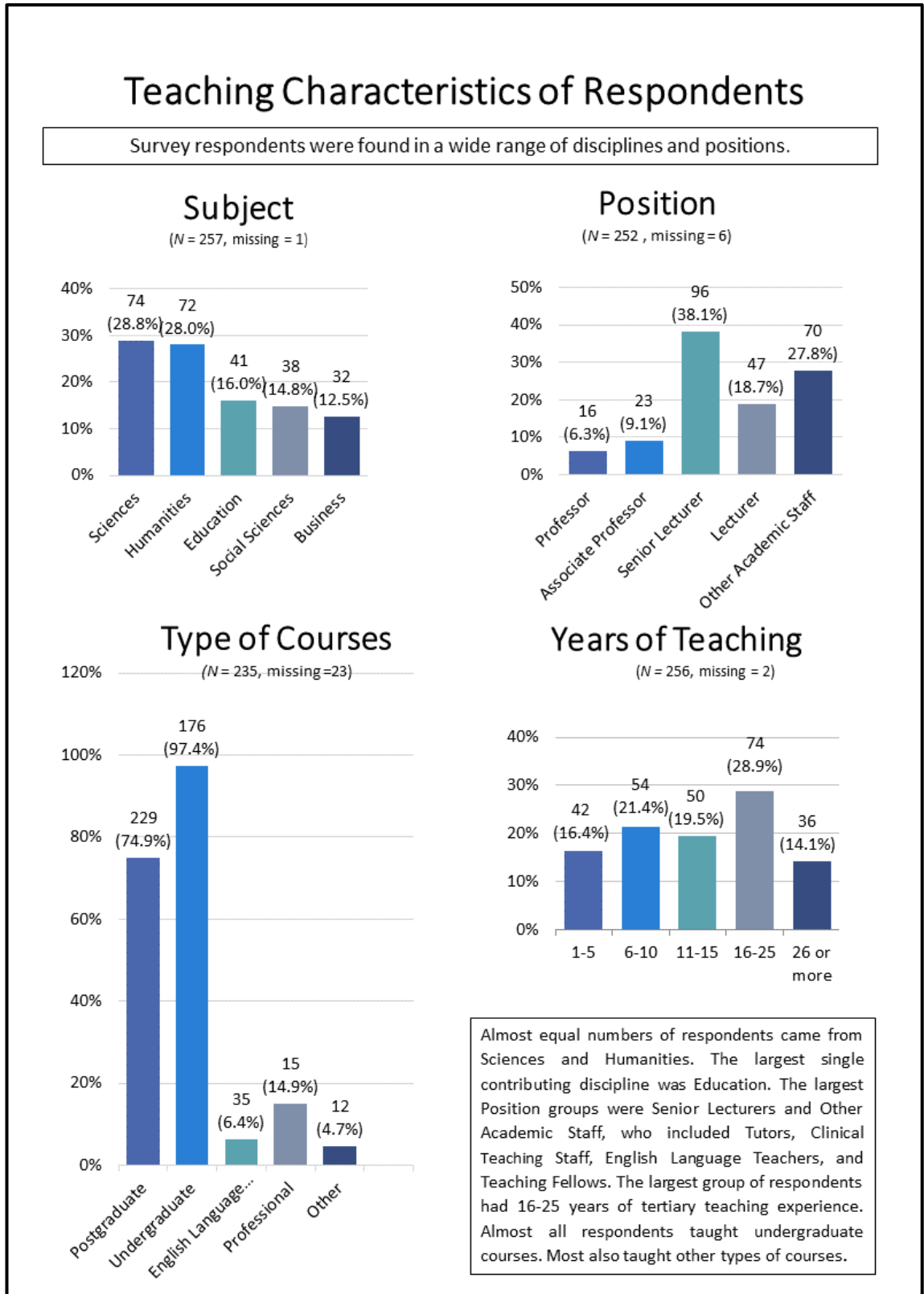


Figure 5.2: Teaching characteristics of respondents (Questions 1-5)

PROFESSIONAL, CLINICAL, AND CREATIVE DISCIPLINES. Closer examination of specific specialties reveals clusters of respondents in professional, clinical, and creative fields (Table A5.1.5). The most frequent subject clusters are as follows: Education ($n = 41$, 15.9%); Medicine ($n = 17$, 6.6%); English Language Teaching and Bridging ($n = 15$, 5.8%); Psychology ($n = 15$, 5.8%); Creative and Fine Arts ($n = 11$, 4.3%); Design ($n = 10$, 3.9%); Management ($n = 10$, 3.9%); Veterinary Studies ($n = 10$, 3.9%); Engineering ($n = 8$, 3.1%); Communication ($n = 8$, 3.1%); and Social Work ($n = 7$, 2.7%). Specialties including only one or two respondents ($n = 53$, 20.5%) are not identified as such, to preserve respondent anonymity. (Presentation of data from other available studies does not allow for comparison).

Because of the nature of professional and applied disciplines, many respondents were in the Other Academic Staff category ($n = 70$, 27.8%). Some (50) had roles primarily educational, rather than research-oriented, including Tutors (17), Senior Tutors (18), English Language Teachers (12), and Teaching Consultants (3). Some supervised student practice in Medicine, Nursing, Social Work, Psychology, and Veterinary Studies (17), including Senior Professional Clinicians (3), Clinicians (3), and Professional Practice Fellows (4). The intensive, inter-personal, and reflective nature of supervision may elicit contemplative approaches.

Disciplinary Differences between Respondents and all Educators at each University

To explore whether educators from some academic disciplines might be more likely than others to use contemplative methods, their proportions at each university were compared with the proportions of all educators in each discipline at each respective university. (Because of differences in demarcations between disciplines at each university, this comparison is indicative only). The academic focus of each university is highlighted by this comparison. (See Table A5.1.6).

At University One, respondent numbers in each college were significantly different than numbers for all educators at University One. Over half the respondents ($n = 96$, 54.9%) came from the combined group of Humanities, Social Sciences and

Education, compared to less than a third ($n = 299, 27.0\%$) of all educators including non-respondents at University One. Only about one fifth ($n = 33, 18.9\%$) came from the Sciences, contrasting with a third ($n = 368, 33.2\%$) of all educators at that university. The proportion of Business respondents ($n = 23, 13.1\%$) was also significantly lower than the overall proportion ($n = 202, 18.2\%$) at University One. *Chi-square* goodness of fit tests showed that these differences were significant, $\chi^2(4, N = 175) = 74.118, p < .001$, with Bonferroni correction ($p = .005$).

In contrast, for University Two, Science respondents, who included those teaching on medical programmes, accounted for well over half of respondents ($n = 26, 63.4\%$), compared to about a fifth ($n = 260, 21.9\%$) of all educators at University Two. Other faculties were present in lower proportions. These differences were significant, $\chi^2(3, N = 41) = 43.645, p < .001$, with a Bonferroni correction ($p = .005$).

5.2.3 Summary of Survey Respondent Characteristics

Strikingly, the demographic characteristics of respondents ranged across genders, age groups, ethnicities, and religions. At the same time, some groups were disproportionately represented: females; older age groups; those of European ethnicity; and those who identified with a religion or spirituality. The diversity in teaching characteristics also stands out. Respondents represented different disciplines, academic positions, and length and type of teaching experience. There was substantial representation of professional, applied, and creative studies. Respondents were more likely to be established in their careers, and Senior Lecturers and Other Academic Staff were well-represented. Respondent characteristics differed somewhat from those of all university educators in New Zealand in that there were more women, older educators and Europeans. There were more Humanities, Social Sciences, and Education educators from University One than among all educators at that university, and a higher proportion of Sciences educators (including medical educators) at University Two. Compared to respondents in previous survey studies available, the characteristics of this group

are much more diverse, and distributed across more disciplines, with Sciences and professions present in higher numbers.

5.3 Influences on Choice to use Contemplative Methods

The second research question asked what aims educators had in using contemplative pedagogies and practices and what factors might have influenced them.

5.3.1 Respondent Beliefs (Questions 10-14)

The survey partly addressed the question of influences by asking about beliefs regarding the importance of teaching approach, holistic aspects of teaching, the importance of reflectivity, and possible reasons for the increased use of mindfulness at universities.

Importance of Teaching Approach (Questions 10 and 11)

All respondents thought teaching approach to be important to student learning ($Mdn = 5$; $IQR = 1$) (Question 10), but optimism varied about its potential impact on a list of possible outcomes (Table A5.2.1) (Question 11). Optimism was higher for 'Critical Thinking' ($Mdn = 5$; $IQR = 1$) than for all other measures ($Mdn = 4$). There was considerable variation in response strength for 'Creativity' and 'Acceptance of Diversity' ($ICR = 2$).

DIFFERENCES. Respondents differed by discipline on the difficulty of influencing student acceptance of diversity, with Science respondents less optimistic than others about this.

Statistics showed differences between disciplines on influencing student acceptance of diversity, $H(4) = 30.377$, ($p \leq .0001$), with a moderate effect size ($\epsilon^2 = .12$). The differences were between Sciences ($Mdn = 3.5$) and all other disciplines, all with small effect sizes: for Business ($Mdn = 4$), ($p = .045$), ($r = 0.18$); for Education ($Mdn = 5$), ($p \leq .001$), ($r = 0.29$); for Humanities ($Mdn = 4$), ($p = .002$), ($r = 0.24$); and for Social Sciences ($Mdn = 4$), ($p < .001$), ($r = -0.25$) (Table A5.3.5).

COMMENTS. Some open-ended comments set the potential impact of educators alongside the many complex factors in student lives. Others were about the importance of teaching approach in creating safe spaces for learning, for example, “If you do not create an environment of trust there will be little risk-taking in the design studio.” The importance of the teacher as a role model was also highlighted, for example, “It wasn’t until I met former students and they commented, ‘I only did this because of you ...’ that I began to realise my impact.”

Importance of Holistic Teaching (Question 12)

Most respondents agreed that teaching should incorporate holistic aspects, but not to a consistently strong degree (Table A5.2.2). ‘Mental/Emotional’ aspects received the strongest support ($Mdn = 4$), and all other aspects (‘Physical’ ‘Family and Social,’ and ‘Spiritual’) received moderate support ($Mdn = 3$). Further, some answered, *Not at All* for ‘Spiritual’ ($n = 45, 20\%$) and ‘Physical’ ($n = 33, 14\%$). Duerr et al. (2003) report that more than 90% of their respondents strongly agreed or agreed that “Learning should involve the physical, emotional, and spiritual dimensions of human existence” (p. 184).

DIFFERENCES. Groups reporting higher values for ‘family and social’ aspects included women, older age groups, respondents reporting regular personal contemplative practice, Education respondents, and those in Other Academic positions. Women valued ‘spiritual’ aspects more highly than men and Māori respondents reported valuing ‘physical’ aspects more highly than Europeans. Respondents with a personal contemplative practice valued all holistic aspects more highly than other respondents.

Statistics showing differences were as follows. For women’s ($Mdn = 4$) higher valuing than men’s ($Mdn = 3$) of ‘family and social’ aspects, the Mann Whitney U statistic, ($U = 4,596.000, p < .001$), had a small effect size, ($r = 0.25$). Women’s ($Mdn = 3$) stronger belief than men’s ($Mdn = 2$), that teaching should include ‘spiritual’ aspects, similarly had a small effect size, ($U = 4,523.000, p < .001, r = 0.24$) (Table A5.3.1).

Age groups reported differences in valuing of ‘spiritual aspects,’ as shown in Kruskal Wallis tests with *post hoc* comparisons, $H(4) = 14.243, (p = .007)$, with a moderate effect size ($\epsilon^2 = 0.06$). Specific differences were between the groups aged 30-49 ($Mdn = 2$), and

60-64 ($Mdn = 4$), ($p = .033$), with a small effect size ($r = -0.19$); and between the groups aged 50-59 ($Mdn = 2.5$), and 60-64 ($Mdn = 4$), ($p = .047$), also with a small effect size ($r = -0.19$) (Table A5.3.3).

Significant differences by ethnicity were shown by the statistic, $H(4) = 9.913$, ($p = .042$), with a moderate effect size ($\epsilon^2 = 0.04$). Māori respondents ($Mdn = 4$) reported valuing 'physical' aspects more highly than Europeans ($Mdn = 3$), ($p = .041$), with a small effect size, ($r = -0.19$) (Table A5.3.4).

Respondents with a contemplative practice valued most holistic aspects more highly than those without, as shown by Mann-Whitney U tests: 'mental/emotional' ($U = 5,231.500$, $p = .001$), had a small effect size, ($r = -0.21$); 'family and social' ($U = 5,305.500$, $p = .001$), had a small effect size, ($r = -0.19$); and 'spiritual' ($U = 4,278.500$, $p < .001$), had a medium effect size, ($r = -0.30$) (Table A5.3.2).

Most differences involving academic discipline were between Education and Sciences respondents. For differences on 'family and social' aspects, $H(4) = 15.774$, ($p = .003$). Education respondents ($Mdn = 4$) reported higher values than Sciences ($Mdn = 3$), with adjusted significance ($p = .005$), and a small effect size, ($r = .23$). 'Spiritual' aspects, $H(4) = 16.835$, ($p = .002$), were also valued more highly by Education ($Mdn = 3$) than Sciences ($Mdn = 2$), with adjusted significance ($p = .006$), and a small effect size, ($r = .22$) (Table A5.3.5).

Occupational groups differed on reported valuing of 'family and social' elements, $H(4) = 14.437$, ($p = .006$). Respondents in Other Academic positions ($Mdn = 4$) valued these aspects more highly than Professors ($Mdn = 2.5$), ($p = .017$), and a small effect size, ($r = -.20$); and also more highly than Senior Lecturers ($Mdn = 3$), ($p = .028$), with a small effect size, ($r = -.19$) (Table A5.3.6).

COMMENTS. Several respondents wrote about the lack of agreed meanings for 'spiritual,' and numerous others commented on how spirituality was interwoven with culture. Some questioned why Māori spirituality was welcome in the university, while other spiritualities were not. Others argued for an entirely secular approach. In Duerr et al. (2003), participants commented that funding pressures, time pressures, and goals of public institutions to "prepare students for the marketplace" worked against the inclusion of transformative or spiritual aspects (p. 203). Many respondents in the current study highlighted the need for a balanced, holistic approach to foster wellness as a foundation for learning, for example, in Veterinary Studies, "The ... profession has a high level of burnout and depression ... we should also assist [students] in understanding how to keep themselves well." Several medical respondents also advocated holism in promoting

the wellness essential to learning. One contrasted the lack of attention given to the lives of students with the care taken with professional athletes.

Importance of Reflective Practice (Question 13)

Most respondents thought reflective practice to be very important in their academic discipline ($Mdn = 5$; $IQR = 1$) (Table A5.2.3).

DIFFERENCES. Groups that judged reflective practice more important than others included women, respondents with a contemplative practice, and Education and Social Sciences respondents. The importance of personal factors as well as the possible influence of disciplinary approaches to reflectivity are thus highlighted.

The greater importance attributed to reflective practice by women ($Mdn = 5$) than men ($Mdn = 4$) was shown in an Independent Samples Mann-Whitney U test, with a small effect size ($U = 5,650.500$, $p = .003$, $r = 0.19$) (Table A5.3.1). The higher value placed on reflective practice by respondents with a contemplative practice ($Mdn = 5$) than those without ($Mdn = 4$), was shown by the following statistic with a small effect size, ($U = 6,080.500$, $p = .021$, $r = -0.16$) (Table A5.3.2).

The differences in disciplinary beliefs about reflective practice were shown in an Independent Samples Kruskal Wallis test, $H(4) = 32.463$, ($p < .001$), with a moderate effect size, ($\epsilon^2 = 0.131$). Pairwise comparisons showed that reflective practice was more important in Education and Social Sciences ($Mdn = 5$), than in other disciplines ($Mdn = 4$): for Sciences and Social Sciences, ($p = .019$), with a small effect size, ($r = -0.20$); for Sciences and Education, ($p < .001$), with a medium effect size, ($r = 0.34$); for Business and Education, ($p = .003$), with a small effect size, ($r = -0.23$); and for Humanities and Education ($p = .004$), also with a small effect size, ($r = 0.23$) (Table A5.3.5).

COMMENTS. Many commentators said reflective practice was crucial - to teaching, learning, clinical practice, supervision, design, professionalism, management - and all aspects of academic work. A few respondents noted the different disciplinary understandings of reflectivity. Many examples came from teacher educators, for example, "Reflection on practice, reflection in practice and reflexive practice are critical for developing teacher presence and capability."

In Clinical Psychology, Nursing, and Social Work, student reflections were said to help foster safe, sensitive, and effective interactions with those in care. Reflectivity was necessary for professional certification. In Design, students discovered that reflection was an integral part of the design process; in History, students learned “reflective awareness of the lenses through which events are interpreted;” and in diverse fields, student reflection developed the awareness essential to critical inquiry, interpretive scholarship, and cross-cultural understanding.

Beliefs about Contemplative Education and Mindfulness (Question 14)

When asked about the extent of their agreement with various explanations for the growing presence of contemplative education and mindfulness at universities, respondents expressed strong agreement ($Mdn = 4$; $IQR = 1$) with the reasons, ‘stress,’ and ‘attempts to reclaim control over personal attention,’ and moderate agreement ($Mdn = 3$; $IQR = 2$) with the reasons, ‘digital distraction,’ and the ‘success of mindfulness-based approaches in medicine and psychology’ (Table A5.2.4). There was less agreement ($Mdn = 2$; $IQR = 2$) with popularity as ‘a fad driven by media coverage’ or as ‘a response to the decline in participation in organised religion.’ There was complete disagreement with this last possibility from 92 (43.0%), in contrast with some authors who attribute a rise in popularity of mindfulness partly to a post-secular search for meaning (McMahan, 2012). Neither of the surveys available for comparison focused on mindfulness, although ‘mindful’ was sometimes used as an adjective.

DIFFERENCES. Differences involved gender, presence of a contemplative practice, and academic position. Women thought ‘stress’ and ‘digital distraction’ more important than men; respondents with a contemplative practice rated all reasons more highly; and Professors thought reasons related to attention less important than Senior Lecturers, Lecturers, and Other staff. These differences raise interesting possibilities – such as that women may be more aware of student stress or perhaps more stressed themselves, and that Professors may be less concerned about attention because they are less likely to be teaching large, distracted undergraduate classes than Lecturers.

The statistical results were as follows. Women ($Mdn = 4$) thought that 'stress' and 'digital distraction' were more important reasons for the popularity of mindfulness than men ($Mdn = 3$), as shown in independent samples Mann-Whitney U tests with small effect sizes: for stress, $U = 4,591.000$, $p = .021$, $r = 0.16$; and for digital distraction, $U = 4,490.500$, $p = .030$, $r = 0.15$ (Table A5.3.1).

Contemplative practitioners ($Mdn = 4$) rated the reasons, 'for stress reduction,' 'to reclaim attention,' and 'response to digital distraction' significantly higher than other respondents ($Mdn = 3$) (Table A5.3.2). The results of independent samples Mann-Whitney U tests, all with small effect sizes, were: for 'stress reduction,' $U = 3,920.500$, $p < .001$, $r = -0.29$; for 'reclaiming of attention,' $U = 3,891.500$, $p < .001$, $r = -0.29$, and for 'response to digital distraction,' $U = 4,208.500$, $p = .002$, $r = -0.22$. Contemplatives ($Mdn = 3.5$) also rated the reason, 'success of mindfulness research,' somewhat higher than non-contemplatives ($Mdn = 3$), $U = 4,184.000$, $p = .002$, $r = -0.24$. No respondents rated the reason, 'decline in religion' highly, but contemplatives ($Mdn = 2$) did rate this higher than others ($Mdn = 1$), $U = 4,129.500$, $p = .001$, $r = -0.24$ (Table A5.3.2).

Differences in responses by academic position, $H(4) = 20.323$, ($p < .001$), ($\epsilon^2 = 0.09$) indicated that Professors ($Mdn = 2$) rated the reason, 'to reclaim attention,' lower than other groups, all with small effect sizes: Senior Lecturers ($Mdn = 4$), ($p = .024$), ($r = -0.21$); Lecturers ($Mdn = 4$), ($p = .003$), ($r = -0.25$); and Other Staff ($Mdn = 4$), ($p < .001$), ($r = -.28$). Professors ($Mdn = 2$), also rated the reason, 'response to digital distraction,' lower than Other Academic Staff ($Mdn = 4$), $H(4) = 11.718$, ($p = .020$), with Bonferroni-adjusted significance, ($p = .035$), and a small effect size, ($r = -0.20$) (Table A5.3.6).

COMMENTS. Some respondents thought mindfulness helped to compensate for the challenges of modern life. An additional explanation was increased awareness of other cultural groups, an explanation also found in the literature (Wilson, 2014). Some respondents objected to the implication that mindful teaching was new, suggesting Freirean approaches as examples of earlier manifestations (Freire, 1993). Other commentators said that although mindfulness was in the public eye, people did not necessarily understand it, for example, "The current problem is that 'everyone' knows about mindfulness, but few engage in sustained practice committed to presence."

5.3.2 Respondent Experience and Training (Questions 15-17)

In the next set of survey questions, respondents reported on their experiences and training in reflective, contemplative, or mindful methods in their professional and personal lives.

Professional or Personal Experience or Training (Question 15)

Professional or personal experience or training in contemplative practices was reported by 239 respondents. Methods reported by about a third of respondents involved visualisation for goal setting ($n = 91, 38.1\%$) and disciplinary reading ($n = 75, 31.4\%$). Sports training ($n = 59, 24.7\%$) and reading Greek philosophy ($n = 58, 24.3\%$) were reported by about a quarter. About a fifth had training in MBSR or similar ($n = 51, 21.3\%$), in neuroscience, ($n = 46, 19.2\%$) or professional practice ($n = 43, 18.0\%$) (Table 5.2, below).

Table 5.2: Professional or personal contemplative training or experience (Question 15)

PERSONAL OR PROFESSIONAL TRAINING METHODS	Count	Percent of those who replied to question	Percent of total respondents
Visualisation	91	38.1%	35.3%
Literature (disciplinary)	75	31.4%	29.1%
Sports training	59	24.7%	22.9%
Greek philosophy	58	24.3%	22.5%
MBSR or similar	51	21.3%	19.8%
Neuro-science training	46	19.2%	17.8%
Professional practice	43	18.0%	16.7%
Brain entrainment	39	16.3%	15.1%
Management training	11	4.6%	4.3%
School programmes	10	4.2%	3.9%
Total (answering)	239	100.0%	92.6%
Missing	19		7.4%
TOTAL	258		100.0%

Note: This was a choose-all-that-apply item and to avoid the appearance of inflation of numbers, the percent of respondents answering this item and the percent of total survey respondents are included for comparison.

Neither Duerr et al., (2003) nor Craig (2010) reports on training or practice. Although Pizzuto (2019) did not report on questions about training in the manner above, she did ask her 19 interviewees about their level of expertise in contemplative practice. In her study of contemplative educators in the Humanities and Social Science, she adapted Woodward's 2010 framework on teacher life cycles (as cited in Pizzuto, 2019) and used it to classify participants as Novice, Experienced, or Seasoned (p. 150). In contrast, the present study did not ask about level of expertise.

COMMENTS. Respondents reported taking part in contemplative activities as part of Accelerated Learning, corporate mentoring, counselling, psychotherapy, Acceptance and Commitment Therapy (ACT), Cognitive Behaviour Therapy (CBT), Neuro-Linguistic Programming (NLP), Psychodrama, weight management, mediation training, gratefulness courses, Landmark Education, relaxation training, and mindful leadership training. These responses highlighted the wide range of theoretical framings of contemplative teaching.

Flow (Question 16)

Most respondents reported experiencing flow moderately often ($Mdn = 3$) (Table A5.2.5). Some studies have linked flow states with mindfulness (Fatemi, Ward, & Langer, 2016; Jackson, 2016).

DIFFERENCES. Women ($Mdn = 4$) reported experiencing flow more often than men ($Mdn = 3$), ($U = 5,000.500$, $p = .001$, $r = -0.24$) (Table A5.3.1).

COMMENTS. Respondents reported experiencing flow in a variety of situations, for example, musical performance, viewing art, writing, theatre exercises, conversation, gardening, working, and in many sports including running, martial arts, karate, yoga, swimming, basketball, rugby, soccer, hockey, mountain bike riding, Pilates, and equestrian sports. Flow was also reported to take place in management coaching, and at work.

Meditation Experience or Training (Question 17)

Two-thirds of respondents reported experience or training in meditative practices ($n = 162, 62.8\%$), with over half of those answering having experienced Yoga ($n = 84, 51.9\%$). Meditation in Buddhist ($n = 55, 34.0\%$) and Christian ($n = 44, 27.2\%$) forms was also frequent. Again, some respondents had experience in more than one practice (Table 5.3, below).

Table 5.3: Meditation training or experience reported by respondents (Question 17)

MEDITATION TRAINING & EXPERIENCE	Count	Percent of those who replied to question	Percent of total respondents
Yoga	84	51.9%	32.6%
Buddhist meditation	55	34.0%	21.3%
Christian meditation	44	27.2%	17.1%
Taichi	37	22.8%	14.3%
Centering	34	21.0%	13.2%
Transcendental meditation	29	17.9%	11.2%
Qigong	16	9.9%	6.2%
Maori spirituality	15	9.3%	5.8%
Quaker silence	14	8.6%	5.4%
Hindu meditation	9	5.6%	3.5%
Shamanic meditation	5	3.1%	1.9%
Other	37	22.8%	14.3%
Total (answering)	162	100.0%	62.8%
Missing	96		37.2%
TOTAL	258		100.0%

Note: This was a choose-all-that-apply item and to avoid the appearance of inflation of numbers, the percent of respondents answering this item and the percent of total survey respondents are included for comparison.

DIFFERENCES. The only type of training with significant differences was ‘Yoga,’ with women ($n = 61, 41.8\%$) more likely than men ($n = 18, 18.9\%$) to have taken part, as indicated by a *Chi-square* test of independence, with a small effect size, $\chi^2(1, N = 241) = 13,617, (p < .001), (V = .24)$ (Table A5.3.7).

COMMENTS. Many participants added prayer as their most frequent practice, with some objecting to its absence as a choice. Others added Bahai, and more specific

practices such as Vipassana. Two respondents rightly objected to the instrumental-sounding wording in the question, saying they did not ‘use’ mindfulness.

5.3.3 Summary: Influences on Respondent use of Contemplative Methods

Beliefs and experiences reported above were possible influences on respondent choices about using contemplative methods. Most strongly believed that teaching approach was important, and that it could affect various aspects of student learning. Many were moderately to quite strongly convinced that teaching should be holistic, while cautious about conflating cultural or spiritual approaches. Reflective practice was important in most subject areas, especially in the professions. Beliefs about reasons for the growing presence of mindful teaching approaches included the desire to reduce stress and to increase focus. Most respondents reported familiarity with some types of contemplative and meditative practices. Significantly different answers to most questions were given by gender, age, and academic discipline.

5.4 How Educators use Pedagogies and Teaching Practices

The next set of survey items addressed how educators conceptually framed and implemented contemplative pedagogies and practices. Responses to these survey items ranged from 147 to 217, depending on the question, with all but one of the respondents reporting use of one or more pedagogy or practice. Some commented that while they used contemplative pedagogies infrequently, their personal contemplative practice affected them as educators. Respondents reported using techniques in face-to-face, blended, and distance courses.

5.4.1 Respondents Reporting each Category of Pedagogy (Questions 18-23)

Survey questions grouped pedagogies into categories by aims. Contemplative pedagogies used to enhance Critical Thinking ($n = 217$, 84.1%) were reported most often, followed by those enhancing Focus ($n = 210$, 81.4%), then Physical and

Sensory awareness ($n = 195, 75.2\%$), Reading and Writing ($n = 192, 74.4\%$), Diversity acceptance ($n = 148, 57.4\%$), and Listening and Dialogue ($n = 147, 57.0\%$) (Figure 5.3).

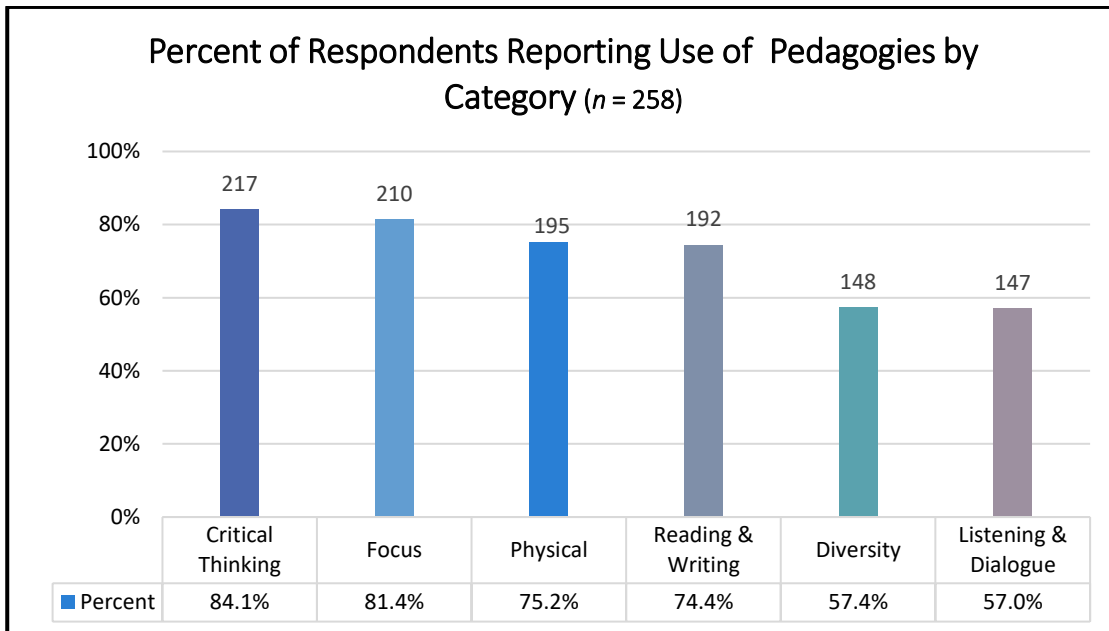


Figure 5.3: Percent of respondents reporting use of pedagogies, by category (Question 18-23)

In Duerr et al. (2003) the most common methods were collaborative and experiential learning (90.0%), and contemplative methods (meditation, silence, reflection (86.7%). Journaling and service learning were frequently mentioned.

DIFFERENCES. The number of respondents reporting using each teaching method was different in each discipline (Figure 5.4). Critical thinking methods were frequently reported in all areas, but most frequent in Humanities ($n = 67, 93.1\%$), Education ($n = 38, 92.7\%$), Business ($n = 28, 87.5\%$), and Social Sciences ($n = 31, 81.6\%$). Focus teaching methods were often reported in Education ($n = 38, 92.7\%$), Social Sciences ($n = 34, 89.5\%$), and Humanities ($n = 62, 86.1\%$), and somewhat less often in Sciences ($n = 51, 68.9\%$). Diversity teaching was reported most often in Education ($n = 33, 80.5\%$), and least often in Business ($n = 12, 46.9\%$) and Sciences ($n = 26, 37.8\%$). Reading and Writing teaching methods were reported most often in Education ($n = 38, 92.7\%$), Humanities ($n = 60, 83.3\%$), and Social Sciences ($n =$

33, 86.8%), and least often in Sciences ($n = 39$, 52.7%). Listening and Dialogue methods featured more in Education ($n = 31$, 75.6%), Social Sciences ($n = 25$, 65.8%), and Humanities ($n = 44$, 61.1%) than in Sciences ($n = 35$, 47.3%) and Business ($n = 12$, 37.5%).

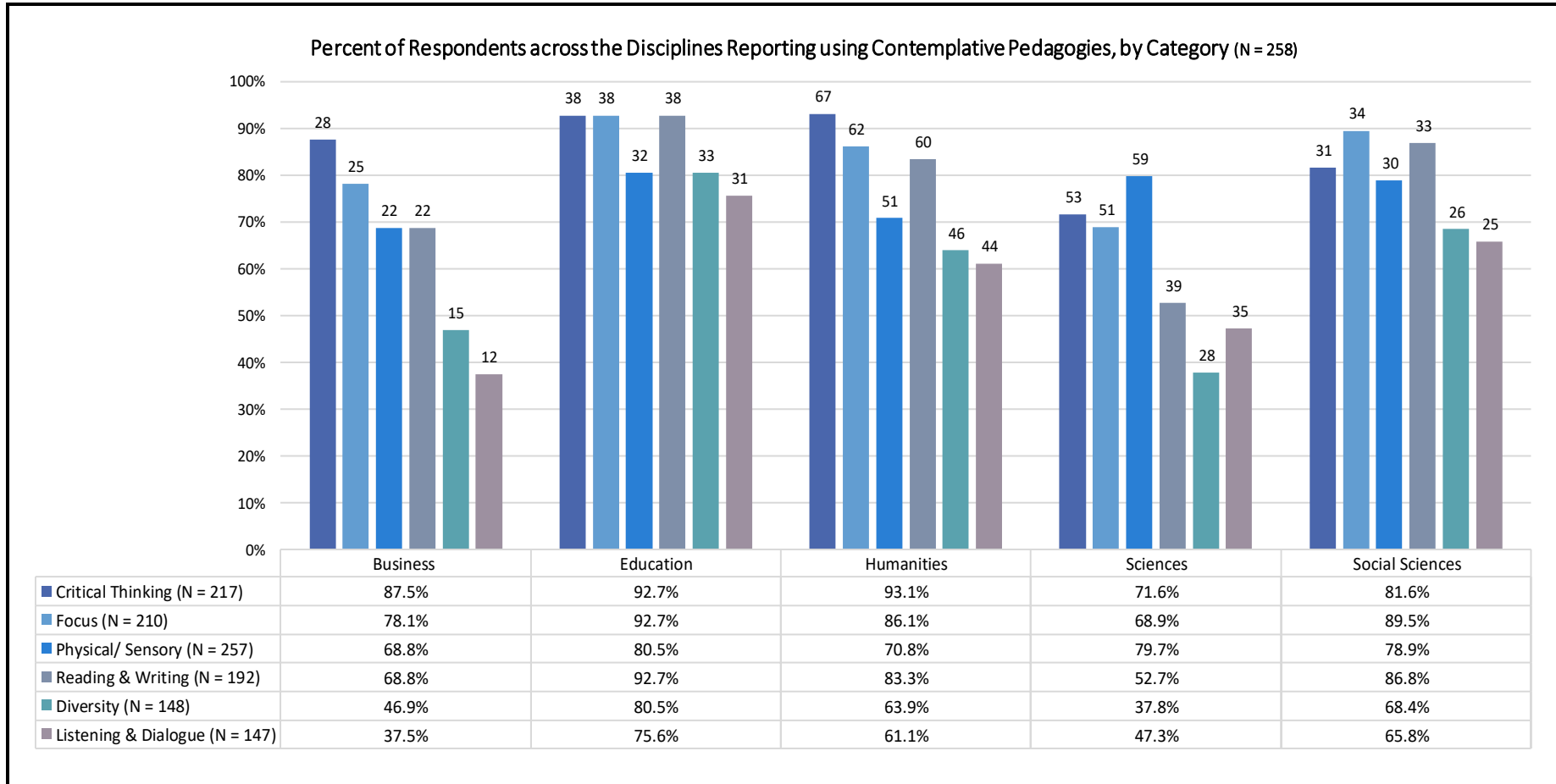


Figure 5.4: Percent of respondents across the disciplines reporting using contemplative pedagogies, by category (Questions 18-23)

5.4.2 Teaching Methods within each Category of Pedagogy (Questions 18-23, Cont'd)

Within each broad category of pedagogy, specific teaching methods were reported. (See Table 5.4, below). (The survey items below are reported in order of response frequency rather than in the order they appeared in the survey).

Critical Thinking Pedagogies (Question 22)

Overall, 217 (84.1%) respondents indicated that they used contemplative methods to enhance critical thinking. The specific items in the critical thinking question were derived from the list of affective dispositions of critical thinking defined by the Delphi Consensus Group (N. C. Facione, Facione, & Sanchez, 1994; P. A. Facione, 1990) and shown in some studies to be enhanced by contemplative practice (Sable, 2012, 2014). All of these dispositions were reported to be targeted by respondents, with 'perspective-taking' reported by almost 80% ($n = 170$, 78.3%). Over half of respondents reported methods fostering 'being open to novelty,' 'mulling over a question,' recognizing contradictions,' and 'identifying assumptions.'

Focus Pedagogies (Question 19)

Again, many of the 210 (81.4%) of respondents using contemplative focusing methods, reported using more than one method. Almost three-quarters reported 'leaving wait-time after asking a question' ($n = 157$, 74.8%), and over half 'building in silence for reflection' ($n = 109$, 51.9%).

Physical or Sensory Pedagogies (Question 18)

For the 194 (75.2%) respondents using physical and sensory pedagogies, popular choices were 'demonstrations' ($n = 130$, 67.0%), and 'music or song' ($n = 94$, 48.5%).

Reading and Writing Pedagogies (Question 20)

The three quarters of respondents ($n = 192$, 74.4%) using reflective or contemplative reading and writing activities, chose various methods. 'Reflective writing (e.g. in response to an inquiry or problem)' was used by three quarters of respondents ($n = 147$, 76.6%), and 'reflective journals' were popular ($n = 118$, 61.5%). Techniques such as 'freewriting' were also quite common ($n = 79$, 41.1%).

Diversity Pedagogies (Question 23)

'Dialogue' ($n = 110$, 74.3%) and 'active listening' ($n = 94$, 63.5%) were in most common use by 148 (57.4%) respondents for whom diversity was a target.

Listening and Dialogue Pedagogies (Question 21)

For listening and dialogue, just over half responded ($n = 147$, 57.0%), perhaps reflecting the realities of class size or distance modes of teaching. Of these, 120 (81.6%) used 'active listening (stages of: listening, reflecting back to check understanding, asking questions to explore further)'; and 97 (66.0%) used 'dialogue activities set up so that parties listened to one another without interruption.'

Table 5.4 Methods reported within each category of pedagogy (Questions 18-23)

Specific Methods Reported	Count	Percent of those who replied to question	Percent of total respondents
CRITICAL THINKING METHODS			
Perspective taking	170	78.3%	65.9%
Being open to novelty	132	60.8%	51.2%
Mulling over a question	128	59.0%	49.6%
Recognising contradictions	126	58.1%	48.8%
Identifying assumptions	119	54.8%	46.1%
Other	22	10.1%	8.5%
Total (answering)	217	100.0%	84.1%
Missing	41		15.9%
TOTAL	258		100.0%
FOCUS ENHANCING METHODS			
Leaving wait-time	157	74.8%	60.9%
Building in silence	109	51.9%	42.2%
Pausing for a moment	97	46.2%	37.6%
Pondering before analysis	65	31.0%	25.2%
Beginning with a karakia	37	17.6%	14.3%
Other	34	16.2%	13.2%
Total (answering)	210	100.0%	81.4%
Missing	42		16.3%
TOTAL	258		100.0%
PHYSICAL & SENSORY METHODS			
Demonstrations	130	67.0%	50.4%
Music or song	94	48.5%	36.4%
Labs	77	39.7%	29.8%
Volunteering	46	23.7%	17.8%
Other	39	20.1%	15.1%
Waiata	33	17.0%	12.8%
Dance	28	14.4%	10.9%
Haka	6	3.1%	2.3%
Total (answering)	194	100.0%	75.2%
Missing	64		24.8%
TOTAL	258		100.0%

Note: This was a choose-all-that-apply item and to avoid the appearance of inflation of numbers, the percent of respondents answering this item and the percent of total survey respondents are included for comparison.

Table 5.4: Continued

Specific Methods Reported, CONTINUED	Count	Percent of those who replied to question	Percent of total respondents
READING & WRITING METHODS			
Reflective writing	147	76.6%	57.0%
Writing journals	118	61.5%	45.7%
Reflective reading	96	50.0%	37.2%
Freewriting	79	41.1%	30.6%
Other	26	13.5%	10.1%
Total (answering)	192	100.0%	74.4%
Missing	66		25.6%
TOTAL	258		100.0%
DIVERSITY METHODS			
Dialogue	110	74.3%	42.6%
Active listening	94	63.5%	36.4%
Unlearning attitudes	58	39.2%	22.5%
Cultural visits	56	37.8%	21.7%
Other	23	15.5%	8.9%
Total (answering)	148	100.0%	57.4%
Missing	41		15.9%
TOTAL	258		100.0%
LISTENING & DIALOGUE METHODS			
Active listening	120	81.6%	46.5%
Dialogue activities	97	66.0%	37.6%
Other	10	6.8%	3.9%
Total (answering)	147	100.0%	57.0%
Missing	113		43.8%
TOTAL	258		100.0%

Note: This was a choose-all-that-apply item and to avoid the appearance of inflated numbers, the percent of respondents answering this item and the percent of total survey respondents are included for comparison.

Duerr et al. (2003) and Craig (2010) did not report use of pedagogy by survey respondents in detail, but generally reported the importance of pausing, silence, physical activities, service learning, and reflective learning, especially through journaling.

5.4.3 Gender Differences and Enactment of Pedagogy

Women reported more frequent use of contemplative and reflective pedagogies than men in all categories. For critical thinking, women reported more use of ‘perspective taking,’ and in the focusing category, reported using all methods more often. For diversity teaching, women reported significantly more ‘unlearning attitudes.’ They were significantly more likely than men to report using most reading and writing methods and reported more frequent use than men of listening and dialogue methods.

The statistically significant gender differences were shown by *Chi-square* tests of independence, all with small effect sizes. For critical thinking, women ($n = 108, 67.9\%$) reported more use of ‘perspective taking’ than men ($n = 51, 53.7\%$), $\chi^2 (1, N = 241) = 10.553, (p = .001), (V = .21)$ (Table A5.3.7).

The statistics showing that women reported using focusing methods more often than men were as follows. Women ($n = 100, 68.5\%$) reported more use of ‘leaving wait-time’ than men ($n = 44, 59.8\%$), $\chi^2 (1, N = 241) = 11.721, (p = .001), (V = .22)$. Women ($n = 73, 50.0\%$) also reported more ‘building in silence for reflection’ than men ($n = 26, 27.4\%$), $\chi^2 (1, N = 241) = 12.179, (p < .001), (V = .23)$. And finally, women ($n = 27, 18.5\%$) reported more ‘beginning with a *karakia*’ than men ($n = 6, 13.8\%$), $\chi^2 (1, N = 241) = 7.221, (p = .007), (V = .17)$.

Women were also more likely than men to report using most reading and writing methods. Women ($n = 64, 43.8\%$) reported more ‘reading contemplatively’ than men ($n = 25, 26.3\%$), $\chi^2 (1, N = 241) = 7.584, (p = .006), (V = .18)$. Women ($n = 55, 37.7\%$) also reported more ‘freewriting’ than men ($n = 18, 18.9\%$), $\chi^2 (1, N = 241) = 9.555, (p = .002), (V = .20)$. Further, women ($n = 73, 50.0\%$) reported more ‘writing journals’ than men ($n = 34, 35.8\%$), $\chi^2 (1, N = 241) = 4.708, (p = .030), (V = .14)$.

For diversity teaching, women ($n = 39, 26.7\%$) reported more ‘unlearning attitudes’ than men ($n = 13, 13.7\%$), $\chi^2 (1, N = 241) = 5.773, (p = .016), (V = .16)$.

Women also reported more frequent use than men of listening and dialogue methods. For ‘dialogue with deep listening,’ women ($n = 69, 47.3\%$) reported more use than men ($n = 21, 22.1\%$), $\chi^2 (1, N = 241) = 15.564, (p < .001), (V = .25)$. For ‘active listening’ women ($n = 83, 56.8\%$) also reported more use than men ($n = 30, 31.6\%$), $\chi^2 (1, N = 241) = 14.758, (p < .001), (V = .25)$.

5.4.4 Academic Discipline and Enactment of Pedagogy

The other major area of differences in uptake of pedagogies was academic discipline. Each category is summarised, below, and then statistical differences are discussed. Most differences were between Sciences and other disciplines, as shown by *Chi-Square* tests of independence. In the case of disciplinary differences, the effect sizes were all large or medium.

Critical Thinking

DIFFERENCES. For critical thinking, the overall uptake of methods was highest in Humanities and Education and lowest in Sciences (Figure 5.5, below). (While the survey addressed criticality, it may be that it did not address forms of critical thinking stressed in the Sciences).

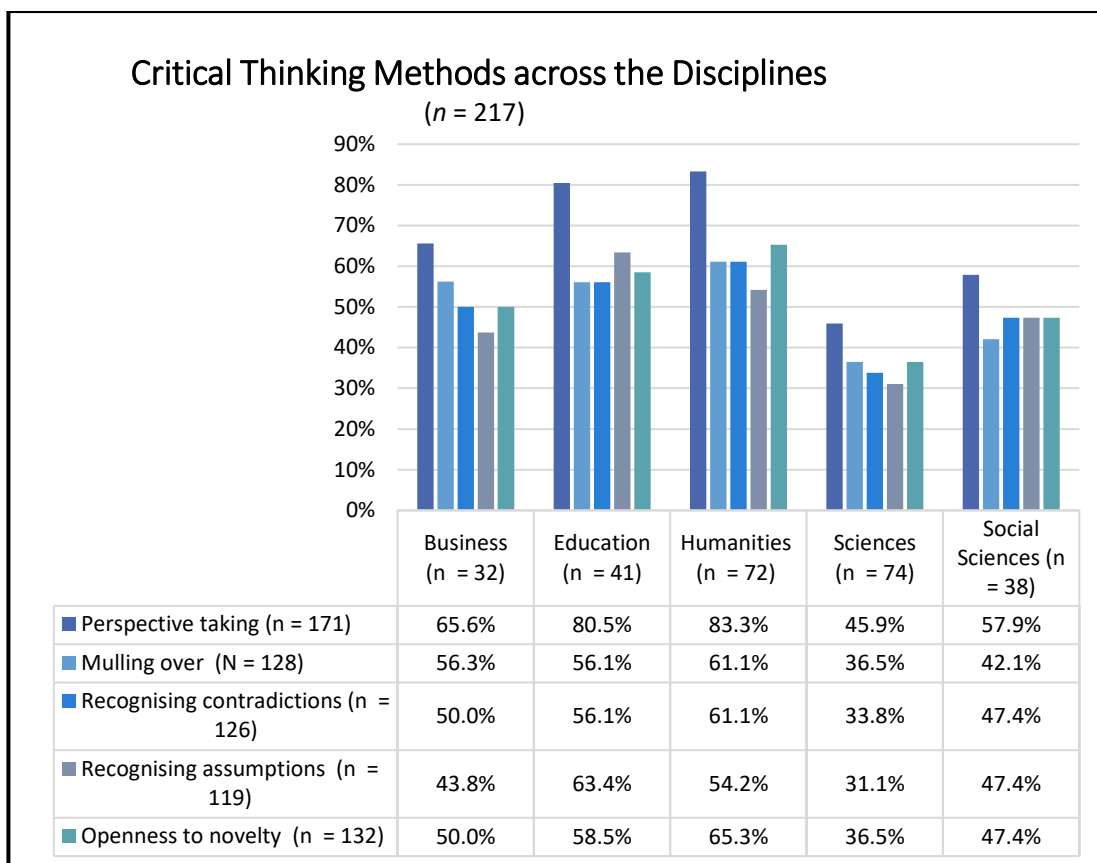


Figure 5.5: Critical thinking teaching methods across the disciplines

The effect size for each difference was large. Humanities (n = 58, 86.6%) reported more use of ‘perspective-taking’ than Sciences (n = 32, 44.4%), $\chi^2(4, N = 246) = 31.194$, ($p < .001$), ($V = .36$). Humanities (n = 44, 65.7%) also reported more use of ‘recognizing contradictions that cannot be ironed out’ than Sciences (n = 23, 31.9%), $\chi^2(4, N = 246) = 16.575$, $p = .002$, $V = .26$). Humanities (n = 39, 58.2%) and Education (n = 23, 60.5%) reported more use of ‘identifying and letting go of assumptions’ than Sciences (n = 21, 29.2%), $\chi^2(4, N = 246) = 15.542$, $p = .004$, $V = .25$) (Table A5.3.9).

COMMENTS. These critical dimensions could be embedded in teaching in many ways, including: the case method in Business; academic and creative writing modules in Creative Arts; all ‘ideas-based’ teaching in Second Language Teaching; understanding literary forms such as the novel and drama in Literature; coming to terms with viewpoints in the history of religion in Religious Studies; and “teaching cultural safety as shaped by a cultural lens” in Social Work. A Medical and Health Science Respondent reported setting up situations of

”...immersion in the unfamiliar and reflection on that experience.” Some respondents said students had become less critically reflective since the advent of the National Certificate of Educational Achievement (NCEA), New Zealand’s national standards for high school education, for example,

One of the noticeable changes post-NCEA is how students are NOT open to anything reflective or contemplative, to discussion ... they only want ... marks. (Survey Respondent)

Focusing

DIFFERENCES. For focusing pedagogies, overall use was highest in the discipline of Education, followed by Humanities, Social Sciences, Business, and then Sciences (Figure 5.6). The importance in Education may simply be the common-sense reason that Education lecturers are trained to deal with attention problems.

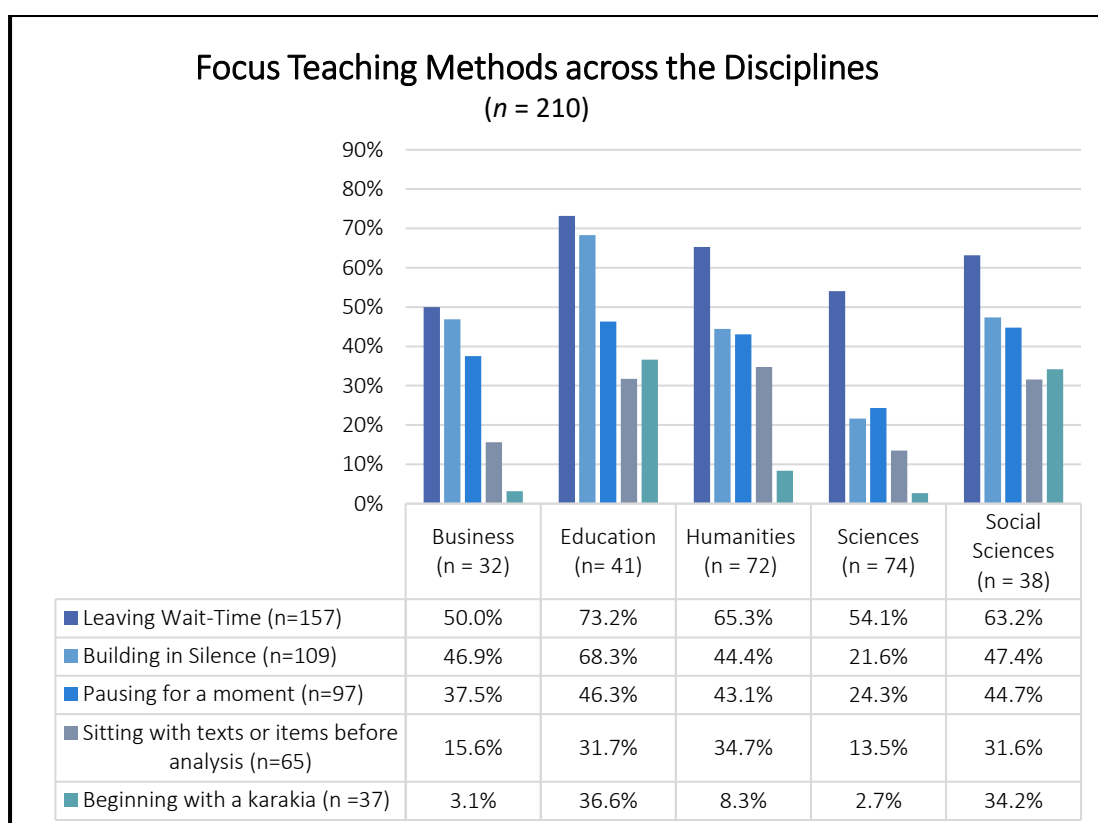


Figure 5.6: Focus teaching methods across the disciplines

Significant differences were between Sciences and other disciplines. Differences were shown in *Chi-Square* tests of independence, with either large or medium effect sizes. For 'building in silence for reflection,' Education ($n = 25, 65.8\%$) and Sciences ($n = 15, 20.8\%$) differed, $\chi^2(4, N = 246) = 23.284, (p < .001)$, with a large effect size ($V = .31$). For 'encouraging students to sit with texts or items before analysing them,' Humanities ($n = 25, 37.3\%$) and Sciences ($n = 10, 13.9\%$) differed, $\chi^2(4, N = 246) = 12.810, p = .012$, with a medium effect size, ($V = .23$). For 'beginning with a karakia,' Education ($n = 14, 36.8\%$) and Social Sciences ($n = 13, 35.1\%$) reported far more use than Business ($n = 1, 3.1\%$), Humanities ($n = 5, 7.5\%$), and Sciences ($n = 2, 2.8\%$), $\chi^2(4, N = 246) = 42.658, p < .001$, with a large effect size, ($V = .42$) (Table A5.3.9).

COMMENTS. Focusing techniques for starting teaching sessions in Creative Arts and Humanities included: "stretching with the students before drawing"; "providing time for casual, unrushed, slightly directed chatter"; "beginning with a reading/excerpt/selected text or poem"; "using a series of images on PowerPoint that are timed 20 seconds per slide for 3 minutes to provide a focus ... [and] time to reflect"; "using vignettes to help set the scene to focus"; and "guided openness through moving warmups."

Focusing activities while learning included: "viewing art-work before critique"; "building in time to write reflectively"; "getting students to rethink and reread material which is being drafted"; "rethinking discussion material"; and, "glancing at a text before analysing it or properly reading it, allowing the 'white hot lines' to come forth." Medical, Nursing, and Social Work respondents reported reflection practices involving patient or client management. Science respondents reported "doing a check-in at the beginning of labs and lectures," and "letting students look at ... text or diagrams ... and asking them what they see or conclude and then ... teaching them how to analyse." Wait-time was said to be "an integral component of Second Language Teaching methodology."

General suggestions involved taking breaks, and doing something different, physical, or interactive to renew energy, for example, "using Simon Says to break lethargy" in a Law class. "Snowballing - reflection by yourself, in pairs, in groups, then larger groups"; "pair share, recalling a time when ..." could be useful.

Physical and Sensory

DIFFERENCES. Respondents from different disciplines also varied in how they incorporated physical and sensory methods (Figure 5.7, below). Over half of those in Education and over forty percent of those in Humanities and Social Sciences used ‘music and song.’ ‘Volunteering’ was most common in Social Sciences and Education. Science teaching had a unique profile for physical and sensory teaching methods because of the high importance of ‘labs’ and ‘demonstrations.’

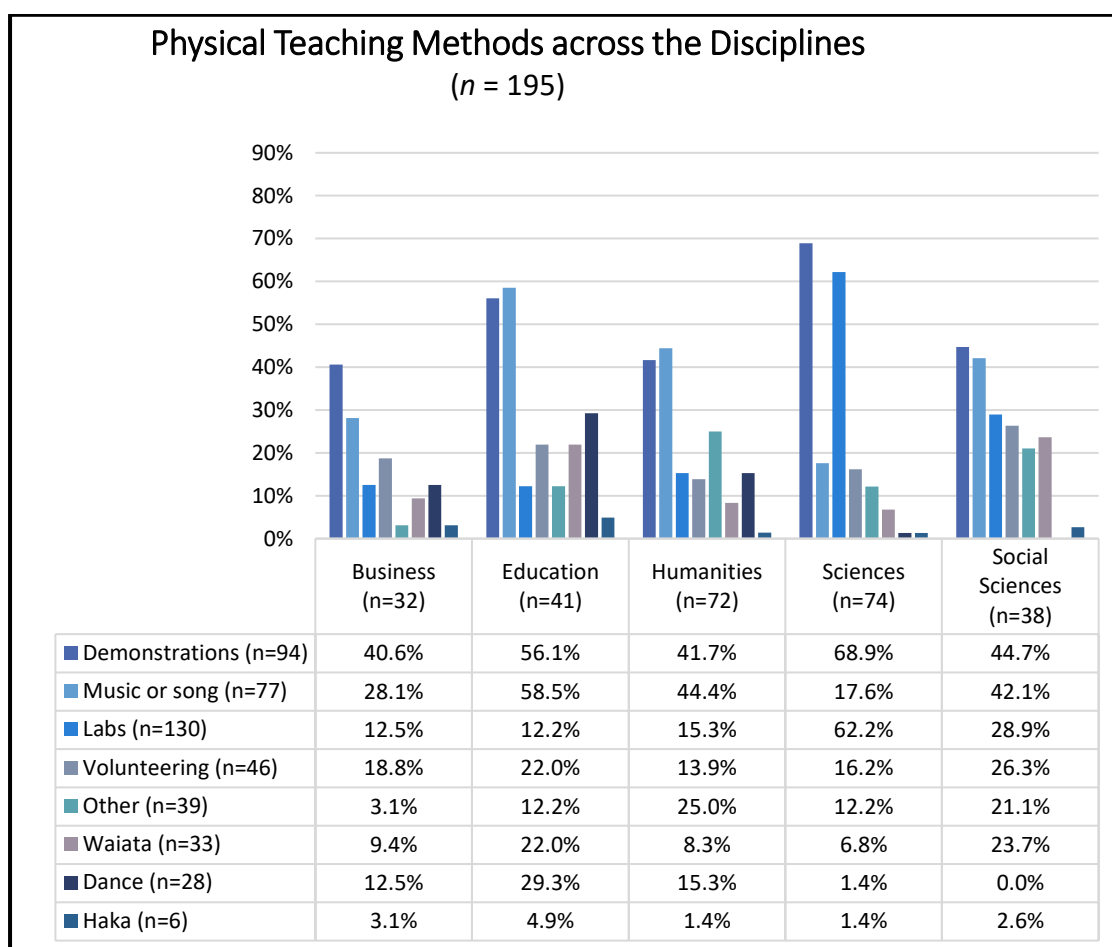


Figure 5.7: Physical teaching methods across the disciplines

The greater use of ‘labs’ by Science (n = 46, 62.2%), compared to Education (n = 5, 12.2%), Humanities (n = 11, 15.3%), and Business (n = 4, 12.5%), was shown by a Chi-square test with a large effect size, $\chi^2(4, N = 257) = 54.798, p < .001, V = .46$ (Table A5.3.9).

COMMENTS. Many other physical and sensory methods were reported, ranging from simple stretching in the middle of a long day, to dramatically moving light sabres in time to music in a speech writing class. Several respondents mentioned using real objects, for example, “technical demonstration objects to pass around, touch and look at.” Role plays helped practice of clinical and communication skills. Art and poetry found a place, not only in creative courses, but in History, Education, and Social Sciences, to give the flavour of a time-period or of an idea. Showing 'slow cinema' clips could “demonstrate the possibility of changing the mode of interaction.” Physical movement included having students make human sculptures to express social realities in Social Work classes, and a host of warm-ups and cool-downs in Theatre. Even virtual physical methods were mentioned, such as “distance learning in an online virtual reality world where students have a 'physical' body that turns up to class and moves around ... in Second Life.”

The environment or place of learning was also an important aspect. Bringing students into a new place or exposing them to sensory experiences could also be powerful, for example, “actually observing stars seems to take students beyond the everyday - many find this extraordinary.”

Reading and Writing

DIFFERENCES. Regarding reading and writing pedagogies (Figure 5.8), Education and Humanities reported more use of all methods than Sciences.

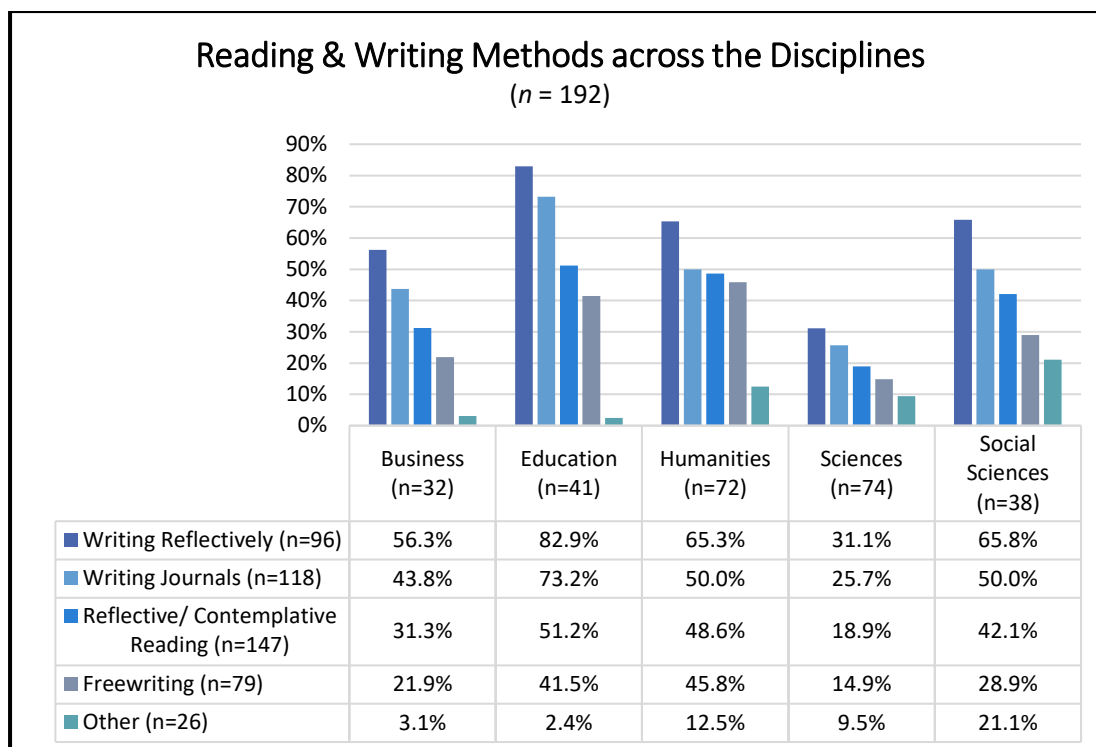


Figure 5.8: Reading and writing teaching methods across the disciplines

The differences were shown in *Chi-Square* tests of independence, all with large effect sizes. Education ($n = 19, 50.0\%$), and Humanities ($n = 34, 50.7\%$), respondents reported more ‘reading contemplatively’ than Sciences ($n = 13, 18.1\%$), $\chi^2(4, N = 246) = 20.239$, ($p < .001$), ($V = .29$). Humanities ($n = 33, 49.3\%$) respondents also reported more ‘freewriting’ than Sciences ($n = 11, 15.3\%$), $\chi^2(4, N = 246) = 20.675$, ($p < .001$), ($V = .29$). For ‘writing reflectively in response to an inquiry or problem,’ the difference was between Education ($n = 31, 81.6\%$) and Humanities ($n = 44, 65.7\%$) on the one hand, and Sciences ($n = 22, 30.6\%$) on the other, $\chi^2(4, N = 246) = 32.791$, ($p < .001$), ($V = .37$). Education ($n = 28, 73.7\%$) used significantly more ‘writing journals’ than Sciences ($n = 18, 25.0\%$), $\chi^2(4, N = 246) = 25.303$, ($p < .001$), ($V = .32$) (Table A5.3.9).

COMMENTS. ‘Other’ writing methods in Education, Humanities, and Second Language Teaching included brainstorming, collective mind-mapping, writing haiku, course blogging, and reflectively responding to a critical incident. Reading slowly aloud was suggested as a means of appreciating literature. One respondent asked, “How can you NOT read poetry contemplatively?”

Reflective journaling was advocated by respondents from several disciplines (Social Work, Nutrition, Humanities, Education, and Psychology), who said this

formed part of course assessment or fed into assessed reflective essays. In contrast, others stressed the importance of unassessed freewriting or similar techniques to “encourage the suspension of self-criticism,” essential for the creative process.

Diversity

DIFFERENCES. Diversity teaching methods were used more in Education, followed by Humanities and Social Sciences, with Sciences reporting least use (Figure 5.9). Differences were most pronounced between Education and Sciences, and for ‘dialogue,’ ‘unlearning attitudes,’ and ‘visits to culturally significant places.’

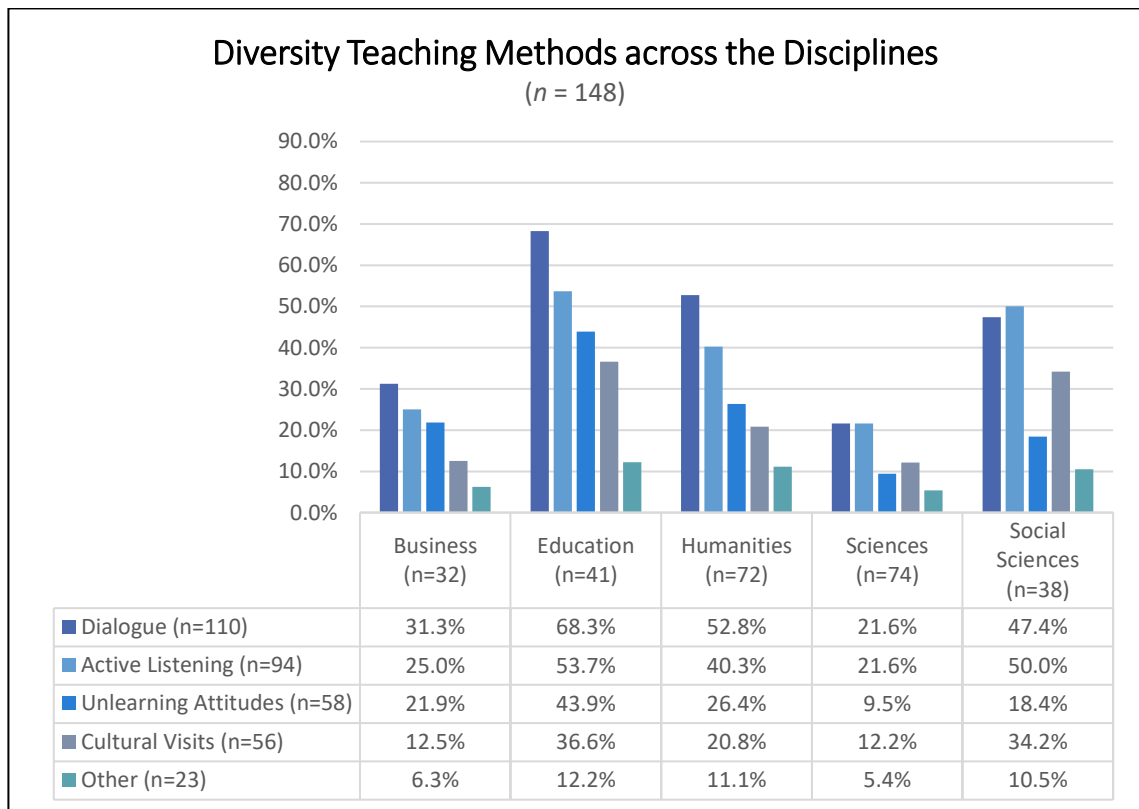


Figure 5.9: Diversity teaching methods across the disciplines

The statistical differences in diversity methods were shown in *Chi-Square* tests of independence, all with large or medium effect sizes. For ‘dialogue,’ Education ($n = 26$, 68.4%) respondents differed from Sciences ($n = 15$, 20.8%), $\chi^2(4, N = 246) = 30.518$, ($p < .001$), with a large effect size ($V = .35$). For ‘unlearning attitudes,’ Education ($n = 16$, 42.1%) and Humanities ($n = 19$, 28.4%) respondents differed from Sciences ($n = 7$, 9.7%), $\chi^2(4, N = 246) = 16.568$, ($p = .002$), with a large effect size ($V = .26$). For ‘visits to culturally

significant places,' Education ($n = 14, 36.8\%$) also differed from Sciences ($n = 8, 11.1\%$), $\chi^2(4, N = 246) = 14.530$ ($p = .006$), with a medium effect size, ($V = .24$) (Table A5.3.9).

COMMENTS. Many respondents reported using 'Other' methods, including: teaching the financial benefits of diverse workforces as an "eye-opener" in Human Resources; "visits to unknown industries with ... exploration of diversity and contradictions" in Design; "students creating, showing, and commenting on their own and others' dance work" in Theatre; "visits to see the culture of other people's space," and "literature reviews of the needs of different cultural groups" in Medical and Health Sciences; and "video clips showing various types of diversity" in Education. Techniques often aimed to get students out of their comfort zones, for example, "For the twenty-four hours before class, I have students go about their day conscious of how they might do things differently if they were a different gender or religion."

Listening and Dialogue

DIFFERENCES. For Listening and Dialogue (Figure 5.10), Education, Social Sciences, and Humanities respondents reported more use than Sciences and Business.

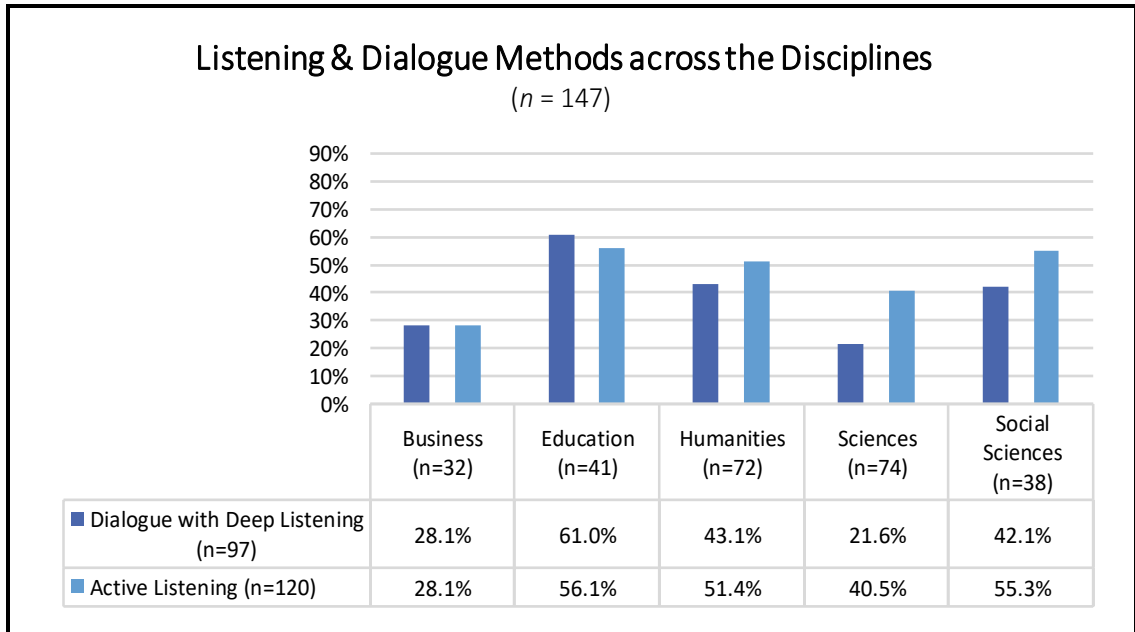


Figure 5.10: Listening and dialogue teaching methods across the disciplines

Chi-Square tests of independence with large effect sizes showed the differences. For ‘dialogue with deep listening,’ respondents from Education (n = 24, 63.2%) differed from Sciences (n = 15, 20.8%), $\chi^2(4, N = 246) = 22.224, (p < .001), (V = .30)$. For ‘active listening,’ Education (n = 20, 52.6%) differed from Sciences (n = 15, 20.8%), $\chi^2(4, N = 246) = 19.029, (p = .001), (V = .27)$ (Table A5.3.9).

COMMENTS. Structured role-play was noted several times in teaching professional skills for working with clients. Clinical supervisors noted that reflective listening is a major aim of skills development. In Business, respondents reported using improvisation, dialogue, and role-play as part of teaching leadership.

5.4.5 Summary: Reported Pedagogy

All but one respondent indicated using some sort of pedagogy in a contemplative or reflective manner. This included most of the 123 respondents who reported (in the later navigation question) that they did not have a regular mindfulness or contemplative personal practice. Women and respondents reporting a contemplative practice reported more use of contemplative and reflective

pedagogies than others. Each academic discipline had a distinct profile, with the biggest differences being between Sciences on the one hand, and Education, Humanities, and Social Sciences on the other. Some pedagogies were used across all disciplines, for example reflective journals. Others, such as labs, were more specific to one discipline, in this case, Science. The responses began to show differences in the ways that contemplative methods can be employed, given different teaching purposes, and perhaps given the teaching approaches of the disciplines.

5.5 Navigation Question: Contemplative Practice (Question 24)

Question 24 asked respondents if they had a personal mindfulness or contemplative practice and was the end of the survey for 123 respondents (49.0%) who answered in the negative, and 7 (2.7%) who skipped the question. Almost half of the initial group of respondents ($n = 128$, 49.6%) answered in the affirmative and continued to the final part of the survey about their experience of contemplative teaching. The characteristics of this group were discussed in section 5.2.1.

The decision to open the second survey section only to respondents reporting a contemplative practice was undertaken to capture the unique experiences and insights of this group. However, the decision also had a downside in that it may have excluded respondents who had a humble assessment of their practice, as well as those whose practice was new, sporadic, or aspirational. The decision may also have unintentionally excluded respondents whose experience of contemplation was through prayer, and who did not view this as “practice.”

COMMENTS. One respondent regretfully commented on lack of a regular practice, “I wish I did. It’s something I think I need to do. I’m mindful that I haven’t made the time for mindfulness!”

5.6 Part Two: Contemplative Practice Survey Section

The earlier part of the survey encompassed all forms of reflective, contemplative, and meditative approaches employed by educators who both did and did not report having a personal contemplative practice. The final part of the survey focused on respondents who reported having such a practice. The purpose was to explore the effects of this practice on teaching.

5.6.1 Implementing and Experiencing Contemplative Teaching (Questions 25-37)

The final section addressed the research question about how respondents implemented and experienced contemplative teaching, addressing the influence of their contemplative practice, their aims in incorporating contemplative elements, the student learning outcomes they perceived, the support they needed and received, and their views on the monetisation of mindfulness.

Influence of Contemplative Practice on Teaching (Questions 25 and 26)

Respondents first identified their practice (Questions 25) and then reported on its influence (Question 26). Contemplative practice was said to strongly influence the teaching of respondents, whether they were explicitly using contemplative pedagogies or not (*Mdn* = 4; *IQR* = 2). Reportedly, it increased their ability ‘to leave outside stresses behind and focus on teaching,’ ‘to be present to teaching and students,’ ‘to create an accepting space for learning,’ and ‘to communicate with students’ (Table A5.2.7). This raises the possibility that teacher presence may be more impactful than any pedagogy, no matter how devised, a theme found in the literature (O’Reilly, 1998). There were no significant differences.

COMMENTS. Some respondents thought their personal contemplative practice affected their classroom behaviour, helping them to be more open to new ideas, more centred, more present, more able to act in a caring manner, and better able to deal with difficult students, for example, “I see teaching as a contemplative

practice - bringing presence to each moment ... ” and “It has built my capacity to listen and hold multiple viewpoints in the room.”

Some were unsure, but others said that their improved student evaluations reflected the impact of contemplative practice. Some said their practice was new or irregular, and therefore possibly less influential, for example, “If I did it more often, it probably would!”

Meditative Methods used in Teaching (Question 27)

Half of this group ($n = 64, 50.0\%$) reported using explicitly meditative practices in teaching, with the most popular being: ‘sensory input focus’ ($n = 35, 54.7\%$); ‘guided visualisation’ ($n = 25, 39.1\%$), ‘centring’ ($n = 19, 29.7\%$), ‘mindfulness meditation,’ ($n = 12, 18.8\%$), and ‘mindful drawing’ ($n = 12, 18.8\%$) (Table 5.5 below). Women used all methods more than men.

DIFFERENCES. Group differences all involved gender. Women were more likely than men to use ‘mindfulness meditation,’ ‘sensory input focus,’ and ‘guided visualization.’

Women ($n = 10, 6.8\%$) reported more classroom use of ‘mindfulness meditation’ than men ($n = 1, 1.1\%$), as shown in a *Chi-Square* test of independence, $\chi^2(1, N = 64) = 4.439$ ($p = .035$), ($V = .14$). Women ($n = 27, 18.5\%$) used more ‘sensory input focus’ than men ($n = 7, 7.4\%$), $\chi^2(1, N = 64) = 5.878$ ($p = .015$), ($V = .16$). Women ($n = 19, 13.0\%$) also reported more ‘guided visualization’ than men ($n = 4, 4.2\%$), $\chi^2(1, N = 64) = 5.166$ ($p = .023$), ($V = .15$). All effect sizes were small (Table A5.3.7).

Table 5.5: Meditative teaching methods reported in use (Question 27)

MEDITATIVE METHODS	Count	Percent of Respondents Replying to Question (n = 64)	Percent of Respondents with Personal Practice (n = 128)
Sensory input focus	35	54.7%	27.3%
Guided visualisation	25	39.1%	19.5%
Other	20	31.3%	15.6%
Centring or stilling	19	29.7%	14.8%
Mindfulness	12	18.8%	9.4%
Mindful drawing	12	18.8%	9.4%
Mindful walking	8	12.5%	6.3%
Yoga	8	12.5%	6.3%
Mindful eating	6	9.4%	4.7%
Meditation apps	5	7.8%	3.9%
Compassion med.	3	4.7%	2.3%
Labyrinth walking	1	1.6%	0.8%
Qigong	1	1.6%	0.8%
Total	64	100.0%	50.0%
Missing	64		50.0%
TOTAL	128		100.0%

Note: This was a choose-all-that-apply question. Percentages of all respondents with a contemplative practice are provided for comparison to avoid inflation of numbers.

COMMENTS. Other activities respondents added to those listed in the survey question included savouring positive experiences, as one said, “I often encourage students to ‘take in the good’ – Rick Hansen’s concept that we tend to notice what has not gone well and yet only give fleeting attention to what has gone well.”

Care was needed when incorporating meditative practices, for example, “I am very careful about not imposing on my culturally diverse student group. Therefore, any activities are very brief and framed in an entirely secular, and often physiological way.”

Description of Teaching Method (Question 28)

Respondents described a rich variety of mindful, reflective, or contemplative teaching methods and practices that they had used in teaching and would like to use again. Methods involved visualisation, embodiment, releasing negativity and strengthening positive associations, listening to music, focusing on the breath, and relaxation.

Some methods fostered creativity, for example: stories as prompts for creative activities; “leading students on a guided memory exercise where they write to suggestion”; “blind drawing, a traditional art method of looking hard at your subject while drawing without looking at the page”; and “alternat[ing] between writing sections of a speech and focusing on a piece of music that captures the emotion they want to convey.”

Other methods used objects to spark reflection, for example in a Medical respondent’s class, “[Having] a student bring an object or describes an event/object that caused them to reflect on some aspect of the doctor-patient relationship.” An embodied practice including appreciative inquiry was reported in Creative Arts,

Every class ends with a variation on what I call ‘Greatest Hits Tape’ ... students lie on the floor in a relaxed position ... and then are guided slowly through a visualisation focusing on the out-breath ... letting go of any moments ... that were challenging or uncomfortable ... and let that sit for a while in a state of emptiness. [Then] they start to focus on the inhale instead and take into the body the moments that ... worked ... no matter how small... They create a ‘tape’ in their head of ‘greatest hits’ ... and replay it at the end and between workshops ... (Creative Arts Respondent)

Motivations for using Contemplative Teaching Methods (Question 29)

The contemplative practice group was asked about their motivations for contemplative teaching. Those with the strongest support ($Mdn = 4$), were: ‘to foster creativity’; ‘to be transformative’; and ‘to help students to focus.’

Motivations receiving moderate support ($Mdn = 3$) were: 'to inspire activism'; 'to help students deal with stress'; and 'to raise environmental awareness or connection.' Response strength varied for all answers ($IQR = 2$; $IQR = 3$) (Table A5.2.8).

Craig (2010) did not explicitly ask about motivations, but these perhaps may be inferred from items reporting pleasing effects on classroom atmosphere, improved communication, the creation of a space, and student transformation. A further important effect was to integrate personal and professional lives of the educators, and to legitimise their contemplative practice (p. 12).

DIFFERENCES. Differences involved gender and discipline. 'Focus' and 'stress' were more important motivators for women. Humanities rated 'creativity' more highly than Sciences, and Social Sciences rated 'activism' more highly than Sciences.

Women ($Mdn = 4$) reported being more strongly motivated to 'help students to focus' than men ($Mdn = 3$), as shown in a Mann-Whitney U test with a medium effect size ($U = 338.000$, $p = .007$, $r = 0.31$). Women ($Mdn = 4$) also reported being more motivated to 'manage stress' than men ($Mdn = 2.5$), also with a medium effect size ($U = 317.000$, $p = .012$, $r = 0.30$) (Table A5.3.1).

Humanities respondents ($Mdn = 4$) were more likely than those in Sciences ($Mdn = 3$) to aim to 'foster creativity,' $H(4) = 13.823$, ($p = .008$) with correction to significance, ($p = .004$), and a medium effect size ($r = 0.39$). Further, 'activism' was much more likely to be encouraged in Social Sciences ($Mdn = 4$) than Sciences ($Mdn = 1$), $H(4) = 10.931$, ($p = .027$), with correction to significance, ($p = .040$), and a medium effect size ($r = -0.33$) (Table A5.3.5).

COMMENTS. Numerous commentators reported having transformational hopes for students, for example, "to build critical thinking skills outside the narrow confines of undergrad education"; "to be transformative in their practice with clients"; "to build a habit, a philosophy, a way of being as a practicing professional serving clients"; to "facilitate deep learning and teaching around attitudes and values"; and "to foster transformation in professional life." The value of introspection and inner exploration was expressed, for example, "Given the opportunity to explore their own ideas, students ... often find deeper

understanding of their own lives and society.” Further, the transformative potential for students who had previously not been succeeding was highlighted, “I see students whom other teachers had 'written off' blossom and become incredible performers, team members and creators of art.”

Some respondents objected to the term, ‘activism,’ but others wrote of fostering it, for example,

I facilitate a number of creative activism learning modules which would not be possible without these techniques to hold the learning together around central goals and deal with challenges that arise. (Social Work Respondent)

Contemplative practices were considered essential in healthcare by some, for example, “Given the current neo-liberal health environment, disillusionment and burn-out are rife ... nurses need supportive practices in order to feel connection with the good they contribute.”

Perceived Effects of Contemplative Teaching on Students (Questions 30, 31, 33)

Respondents consistently reported perceptions of ‘increased presence or engagement’ on students arising from contemplative teaching (*Mdn* = 4; *IQR* = 1). Scores (*Mdn* = 4; *IQR* = 4) for ‘group-work effectiveness’ had a wide range. ‘Acceptance of diversity’ and ‘transformational insight’ came next (*Mdn* = 3; *IQR* = 4), followed by ‘reduced stress’ (*Mdn* = 2; *IQR* = 3) (Question 31). Respondents consistently reported only slight perceived student ‘discomfort,’ ‘amusement,’ and ‘hostility or resistance’ (*Mdn* = 2, *IQR* = 1). Most answered, *Not at all* to the item on ‘psychological distress’ (*Mdn* = 1, *IQR* = 1) (Table A5.2.9) (Question 30).

DIFFERENCES. Women (*Mdn* = 4) were more likely than men to report being better able to ‘create an accepting space’ (*Mdn* = 3).

Differences between men and women on ‘creating an accepting space’ were shown in an independent samples Mann-Whitney U test with a small effect size, ($U = 1,052.000$, $p < .025$, $r = 0.21$) (Table A5.3.1).

COMMENTS. Many respondents expanded on the difficulty of fully understanding effects on students, and on their extreme variation. Others reported using contemplative methods only as “tasters” in class, making it difficult to meaningfully judge responses. Respondents highlighted the differences between cohorts, saying that what worked well in one class might not do so in another. Smaller groups were better, and the presence of one or two very positive or negative students could impact the whole group. Regarding reflective journals, several respondents commented that students initially found them very difficult, but those who persevered, found them extremely valuable. Some student feedback reportedly positively addressed contemplative methods. Students with their own contemplative practices were able to “cope well with high levels of adversity.”

On a scale from -2 to +2, respondents reported a perceived moderate positive overall effect on achievement ($Mdn = 1$; $IQR = 2$) (Table A5.2.10) (Question 33).

Difficulties Developing Lessons (Question 32)

When asked about difficulties in developing lessons, respondents thought ‘finding class time’ ($Mdn = 3$, $IQR = 3$) most challenging. ‘Finding materials’ and ‘assessment’ ($Mdn = 2$, $IQR = 3$) were less often difficulties, and ‘drawing a line between secular practice and religious origins’ ($Mdn = 1$, $IQR = 2$) rarely caused concern (Table A5.2.11). There were no significant group differences. Craig (2010) reports that most respondents found these aspects only occasionally problematic or no more problematic than for any other course (p. 23).

Decisions on whether to use Contemplative Methods (Question 34)

In deciding whether to use contemplative methods, respondents reported being moderately influenced by potential student resistance ($Mdn = 3, IQR = 3$). Other choices, which received only slight support ($Mdn = 2, IQR = 3$), included: 'religious origins of some methods'; perceived 'lack of qualifications'; and concerns about 'institutional response.' Concern about 'secularisation of mindfulness approaches' was also small ($Mdn = 2, IQR = 2$), and concern about colleague disapproval, smaller ($Mdn = 1, IQR = 2$). Almost half of respondents reported not being influenced at all by colleague or institutional response, religious origins, or secularisation of practices (Table A5.2.12).

Craig's (2010) survey of CMind Contemplative Fellows asked about barriers to adopting contemplative methods. The most frequently reported ($n = 28, 44\%$) was that 'colleagues have been interested but were hesitant to teach using Contemplative Practices (CP) because they had no personal practice themselves' (p. 47). Next, in Craig's study, 22% (14) said they did not know how to talk about CP to others in ways they would understand, while 16% (10) had experienced active resistance. A further question in Craig's study asked if these Fellows had experienced 'inner resistance' to using and discussing CP, and 20% (8) said they had. Sometimes caution came from perceived hostility and sometimes from lack of qualifications. For others, CP was spiritual and part of their personal faith, so they did not feel comfortable bringing it into the academic context (p. 62-63).

DIFFERENCES. On the items related to religion and spirituality, respondents differed greatly by ethnicity (Table A5.3.4). Asian respondents reported strong influences ($Mdn = 5$) of 'secular /religious confusion,' and 'secularisation of practices,' compared to very weak influences reported by Europeans ($Mdn = 1$) and Māori ($Mdn = 1$). Further, Asians reported strong influence of 'religious origins of some practices' ($Mdn = 5$), compared to Europeans ($Mdn = 2$) and Māori ($Mdn = 1$). This response from Asian participants is interesting, both considering the borrowing of contemplative practices from Buddhism for incorporation in secularised mindfulness interventions, and the under-representation of Asian

ethnicity respondents in this survey. Possibly it may suggest disquiet about the extraction of mindfulness practices from wisdom traditions.

Regarding disciplinary groups, 'institutional disapproval' was reported to be a much stronger influence on Business respondents ($Mdn = 4$), than on those from other disciplines ($Mdn = 1$) (Table A5.3.5). This suggests differences in academic sub-cultures that may impact the acceptance of contemplative teaching.

The significance of differences by ethnicity on 'secular/ religious confusion,' $H(4, n = 63) = 14.629$, ($p = .006$), ($\epsilon^2 = 0.236$), were shown to have medium effect sizes, and be between Māori and Asians, ($p = .014$), ($r = -0.40$), and Europeans and Asians ($p = .003$), ($r = -0.38$). The differences on 'religious origins of some practices,' $H(4, n = 86) = 11.936$, ($p = .018$), ($\epsilon^2 = 0.140$), were between Māori and Asians, with a medium effect size, ($p = .029$), ($r = -0.32$), and between Europeans and Asians, with a medium effect size, ($p = .043$), ($r = -0.31$). The differences on 'secularisation of some practices,' $H(4, n = 86) = 11.744$, ($p = .019$), ($\epsilon^2 = 0.138$), were between Europeans and Asians, with a medium effect size ($p = .026$), ($r = -0.32$) (Table A5.3.8).

The differences between disciplinary groups on the influence of institutional disapproval were shown in an independent samples Kruskal Wallis test, with a relatively strong effect size, $H(4, n = 89) = 16.263$, ($p = .003$), ($\epsilon^2 = 0.19$). Specific differences, all with medium effect sizes, were between: Business ($Mdn = 4$) and Education ($Mdn = 1$), ($p = .015$), ($r = 0.34$); Business ($Mdn = 4$) and Humanities ($Mdn = 1$), ($p = .013$), ($r = 0.34$); Business ($Mdn = 4$), and Social Sciences ($Mdn = 1$), ($p = .005$), ($r = 0.37$); and Business ($Mdn = 4$), and Sciences ($Mdn = 1$), ($p = .009$), ($r = 0.35$) (Table A5.3.5).

COMMENTS. Several respondents commented that the way they used contemplative teaching was an extension and deepening of the reflective practices already common in academia. Also, some stressed that they avoided anything polarising, and only incorporated secular practices. Regarding practices such as mindfulness or visualisation, respondents advocated that activities should be optional and alternatives provided, for example, "I think it is very important to be invitational, to contextualise in terms of research, and to provide a very low 'dose' in a non-threatening, optional way."

Further, according to another respondent, these "approaches [should] be modelled within a 'believe nothing - test everything' framework." The research

behind practices such as mindfulness should be explained, and students encouraged to investigate for themselves. According to one respondent, “some students are very resistant to add-on, inauthentic approaches for the sake of it, but when integrated meaningfully with a purpose, resistance decreases.” As others said, often students start by being somewhat resistant, but end by being engaged and finding it useful. And, regarding humour as a response, “laughter is good.”

Concern or Support for the Marketing of Mindfulness (Question 35)

Respondents reported a moderate concern about the current increase in marketing products and services related to mindfulness. On a scale from -2 to +2, the Median was 1. One consideration is that this survey was administered just before a flood of mindfulness products hit the New Zealand market, so respondent answers might be different now. There were no significant differences. This question was not addressed by Duerr et al. (2003) or Craig (2010), probably because it had not yet become an issue.

COMMENTS. Some respondents thought the benefits of mindfulness outweighed the risks of innovation, for example, “We need it - today's information overload needs a counterbalance more than ever.” And, “Anything to counter the voices of ignorance and consumerism!” Others thought that it depended on the approach. Some expressed more concern, worrying that “that [mindfulness] will only be a passing phase if not taught with respect and tradition.” If taught with “integrity,” and “not superficially,” it was a “tremendously valuable tool for all of life.”

Support Received and Needed by Respondents (Questions 36 and 37)

Respondents reported having received only a little support for their teaching from colleagues and other practitioners (*Mdn* = 2, *IQR* = 2) (Table A5.2.13). Helpful support would include support from like-minded educators and colleagues, training, and model curricula (*Mdn* = 4, *IQR* = 3) (Table A5.2.14). There were no significant differences. In both Duerr et al. (2003) and Craig (2010), the support of a network of likeminded practitioners was identified as vital.

COMMENTS. A few respondents took the opportunity to say they thought this research project was overly optimistic in imagining that contemplative teaching might find support in universities or disciplines. Others said they personally, were experienced and confident and therefore persisted in using contemplative methods but thought that new or younger staff would find it difficult in the university context. This reported feeling of lack of support or even marginalisation, or “staying below the radar,” points to conflicting perceptions of contemplative teaching in the university, where mindfulness research has found great favour in some circles, but mindful teaching may be regarded as unacceptable in others, according to respondents.

5.6.2 Summary: Respondents Reporting a Contemplative Practice

The composition of this group of educators with a personal contemplative practice was interesting in its high proportion of women. Differences in the perspectives of respondents according to their ethnicity are note-worthy. Higher value was placed on family by Māori respondents and far greater concern was reported by Asian respondents about both the secularisation of mindfulness and its religious origins. Business respondents reported lower perceptions of institutional approval, in comparison to other academic disciplines.

Perspectives that this group seemed to hold in common included: the influence of the educators’ contemplative practice on their teaching; the important role of contemplative practice in building reflective thinking, especially in professional practice; and the potential of contemplative practice for fostering personal transformation. In implementing contemplative teaching, themes included: the necessity for a secular, research-based approach; the importance of building on existing disciplinary approaches to enhance physical, reflective and critical teaching; the importance of invitation and offering alternatives; and willingness to be open to wide variation in experiences.

5.7 Overall Summary

The survey elicited responses from educators across the spectrum of demographic and teaching characteristics in New Zealand universities. In answer to the first research question, it confirmed the presence of active contemplative educators in many areas of the university and began to describe them and their experiences and training ('Description' stage of the explanatory framework). The survey also sketched broad answers to the other research questions, addressing motivations for using contemplative teaching practices, and how their implementation is experienced.

The key finding was that educators using contemplative methods were present across the disciplines, and especially in applied, professional, clinical, critical, and creative roles. Second, men and women had different profiles - women had greater participation in the survey, reported more contemplative teaching, and gave consistently more strongly positive replies to questions about the impacts of contemplative pedagogy and practice. Third, the academic disciplines enacted contemplative teaching in distinctive ways. The survey identified a large group of educators who saw contemplative teaching as a deepening of reflectivity framed within their existing theoretical perspectives, and other educators who framed contemplative education as mindfulness, flowing from research in medicine and psychology. Further, it identified educators with personal contemplative practices and pointed to the influence of this practice on teaching.

5.8 Conclusion

Analysis of the survey data (Analytic Resolution) provoked reflections about factors that might have influenced the emergence of contemplative teaching at universities and raised several issues that became sensitising concepts during the second, intensive, interview phase of the research. These factors seemed to highlight and reinforce observations made in the literature review and found at all Critical Realist lamination levels, including demographic, cultural, social, institutional, economic, and spiritual ones.

The differences in responses of age groups was in accord with the depiction in the literature of the influence of Eastern religions in the 1970s when older respondents were growing up, and of the growing secularisation of society. The differences in participation rate and responses of Asian ethnicity respondents may suggest concern over the borrowing of religious contemplative practices. Respondent concerns about attention and the management of digital distraction reflect those in the literature, as do concerns about the marketing of mindfulness and the commodification of education in general, seen as being at odds with transformative models. The role of Māori spirituality in academia is flagged as being of interest. Responses lend support to the literature depicting a changing and complex role of religion and spirituality in personal life, and they also point to an uneasy positioning of spirituality in universities. Other potential concerns are suggested, including a tension between holistic approaches deemed necessary for wellness, alongside expectations of teaching approaches that may tend to marginalise family and culture, and a question about support for contemplative education in the university.

While some contemplative teaching practices, such as pausing, were of relevance across the university, the survey highlighted the differences in contemplative teaching in different academic disciplines. The important role of disciplinary conceptual framings of contemplative teaching thus led to a re-thinking of theoretical frameworks for the analysis of data in this study (Abduction), and the inclusion of the Scholarship of Teaching and Learning (SoTL) concepts. (See Chapter 1). The need to include these diverse disciplinary perspectives led to increasing the originally proposed number of twelve interviewees, to twenty-two (Contextualisation/ Concretisation).

The survey fulfilled its most important function of finding contemplative educators throughout New Zealand universities, and did this in every demographic and teaching category. The survey also began to reveal the characteristics of these educators, to highlight unresolved issues, and to point towards powers and mechanisms influencing the arising of contemplative education, in answer to the final research question. The data reflected the

realities of contemplative education as a complex, emerging phenomenon. The following chapter reports on further exploration through the intensive interview phase of research.

6

INTERVIEW FINDINGS AND DISCUSSION

I hope that I will always be doing this, I think it ... brings everything together. (Vanessa, Mindfulness Teacher and Participant)

6.1 Introduction

This chapter reports the findings of the second, intensive, research phase involving 22 in-depth, semi-structured interviews with university educators. This phase allowed more in-depth exploration than the first survey phase, and aimed to answer the research questions more fully, further addressing educator characteristics, conceptual frameworks, pedagogies and practices, reasons for adoption of contemplative methods, and experiences of implementation. The

interview and survey phases were integrated in three main ways. First, following Mixed Methods Sequential Explanatory (MMSE) procedures, the survey results provided input that shaped the interview guide. Second, the survey identified participants for the interviews. Third, in terms of the Critical Realist Explanatory Framework, the interviews provided an opportunity to test the tentative explanations formed through the literature and survey analyses. In step six of this framework, explanations are contextualised in different situations, bearing in mind that not all mechanisms, powers and structures are manifest in any given situation.

The present chapter reports the findings of the Thematic analyses of the interviews, comparing and combining the initial inductive analysis that allowed themes to emerge, the theoretical abductive analysis that used categories derived from the literature and survey results and incorporated in the Interview Guide (Appendix 4.5), and the parallel dialectical analysis (Chapter 2). The unique views and characteristics of participants are reported, as well as cross-case comparisons. Findings from the small number of relevant interview studies of contemplative educators are incorporated throughout, as relevant.

Some findings of the initial inductive interview analysis were unexpected. For example, extant disciplinary theoretical frameworks and pedagogical approaches were even more important for positioning and implementing contemplative teaching than suggested by the survey. A new theme was the ‘invisibility’ of contemplative educators, discussed below.

This chapter is structured using the moments of Bhaskar’s dialectic: *being as such* (what is and is not); *becoming (absences, constraints)*; *new totality* (hoped-for futures); the expression of agency through *praxis; reflexivity; re-enchantment* (meaning, spirituality); and *unity, or non-duality* (Chapter 2.17). The chapter begins by describing the interview participants, providing further insights into the first research question and constituting the first moment of the dialectic.

6.2 Participants (*Being*)

The characteristics of interview participants are described in this section. To protect confidentiality, participants are not discussed as individual cases. Rather, their insights are pooled to answer the research questions, pseudonyms are used, and some details are merged. Their pseudonyms and academic disciplines are shown below in Table 6.1.

Table 6.1: Interview participant pseudonyms and academic disciplines

Interview Participants (Pseudonyms)	Academic Area	Academic Discipline
Anna	Medical & Health Sciences	Occupational Therapy
Ben	Education	Teacher Education
Carol	Arts & Humanities	Design
Diane	Social Sciences	Psychology
Dennis	Education	Teacher Education
Don	Arts & Humanities	Religious Studies
Emily	Social Sciences	Psychology
Ethan	Business	Management
Heidi	Arts & Humanities	Applied Linguistics
Jon	Education	Teacher Education
Jeanne	Business	Communications
Kiri	Social Sciences	Psychology
Linda	Sciences	Nutrition
Peter	Business	Management
Phillip	Medical & Health Sciences	Psychiatry
Rachael	Social Sciences	Social Work
Richard	Psychology	Psychotherapy
Sophie	Social Sciences	Social Work
Stephanie	Medical & Health Sciences	Nursing
Steven	Sciences	Plant Science
Vanessa	Teaching and Learning	Teaching and Learning
Zain	Arts & Humanities	Applied Theatre

Bearing in mind requirements for validity (see Chapter 4), the interviewees came from the same population as the survey respondents. Demographic and teaching characteristics of survey respondents and interview participants, as expected,

turned out to be very roughly similar for most categories (Table 6.2, below). There were slightly more males, older age groups, and Māori and Pasifika among interviewees than among survey respondents. The major difference was that most interviewees considered themselves to be spiritual, with only 2 (8.0%) saying they had no religion. This compares with 100 (39.7%) for survey respondents. Like those of the survey respondents, the spiritualities of most interviewees were not easily categorised. A few interviewees could simply say, “I am Christian,” or “I am Buddhist,” but most added, “but I also ...” or “I used to ...” Others, such as Don, now described their religion as non-sectarian or non-dogmatic. Ethan commented that his practices might appear eclectic, but he “had assembled them with careful intention,” a comment perhaps illustrating the demands for religious decisions required by late modernity’s reflexive imperative (Gorski, 2016).

Interviewees had a range of academic roles like those of the survey respondents, including Associate Professor, Senior Lecturer, Lecturer, Therapist, Tutor, and Teaching Consultant. Their academic areas included Business, Creative Arts and Humanities, Education, Sciences, and Social Sciences, as did those of the survey respondents. They had a wide range of academic specialties, detailed above, in Table 6.1. Most taught both undergraduate and post-graduate students. Fully half of the participants were educators of professionals (doctors, nurses, occupational therapists, clinical psychologists, social workers, teachers, managers, or designers) (Table 6.2).

The interviewees represent a wider range of disciplines than those in Duerr (2003), whose 14 interviewees come from Humanities and Social Sciences, with case studies presented on Transformative Education, Integrative Education, Art History, Jazz, and Creative Arts. Craig’s (2010) study conducted 20-minute follow-up interviews with 10 survey respondents, 9 of whom are from Humanities and Social Sciences and one from Earth Science. Beer et al. (2015) include transformative educators and administrators in their group of 17 interviewees, and Pizzuto (2019) includes 19 interviewees from Humanities and Social Sciences.

Like the survey respondents, interview participants had experienced a range of personal and professional trainings and experiences related to contemplative education. Prayer, meditation, or secular mindfulness had brought some to this kind of teaching. Five were teachers of Mindfulness-Based-Stress-Reduction (MBSR) interventions or adaptations, and several others had taken part in these. Cognitive neuroscience informed the teaching approaches of some. Reported contemplative practices were both spiritual (for example, Buddhist meditation of various kinds, Christian prayer and meditation), and secular(ised), (for example, meditation, walking, yoga, and mindfulness in daily life).

Table 6.2: Demographic and teaching characteristics of interview participants

Demographic or Teaching Characteristic	Count	Percent	Survey Count	*Percent (Item response)
GENDER				
Female	12	54.5%	152	60.3%
Male	10	45.5%	100	39.7%
TOTAL	22	100.0%	252	100.0%
AGE GROUP				
Under 30	0	0	4	1.6%
30-49	8	36.4%	108	43.2%
50-59	10	45.5%	86	34.4%
60 and over	4	18.2%	52	20.8%
TOTAL	22	100.00%	250	100.0%
ETHNICITY				
Asian, Middle Eastern & Other	4	14.8%	23	8.4%
European	19	70.4%	230	84.2%
Māori	2	7.4%	14	5.1%
Pasifika	2	7.4%	6	2.2%
TOTAL*	27	100.0%	273	100.0%
*Some interviewees and respondents reported more than one ethnicity.				
SPIRITUAL AND RELIGIOUS INFLUENCES				
Buddhist	8	32.0%	21	7.9%
Christian	7	28.0%	98	36.8%
Other (Judaism, Islam, Spiritual not Religious, Kashmiri Saivism, Krishnamurti, Nature Mysticism, New Age, New Pagan, Spiritual Enquiry)	8	32.0%	47	17.7%
No Religion	2	8.0%	100	37.6%
TOTAL*	25	100.0%	266	100.0%
*Some interviewees and respondents had more than one spiritual or religious influence.				
ACADEMIC DISCIPLINE				
Arts & Humanities	5	23.0%	72	28.0%
Business	3	14.0%	32	12.5%
Education	3	14.0%	41	16.0%
Health Science & Science	5	23.0%	74	28.8%
Social Sciences	6	27.0%	38	14.8%
TOTAL	22	100.00%	257	100.0%

Although they are from the same population as the survey respondents and share similar characteristics, the interviewees are viewed as unique in their enactments of contemplative teaching. Although similar structures and mechanisms potentially may have been active in their situations, these were not necessarily triggered, according to Critical Realist understandings (Zachariadis et al., 2013).

6.2.1 The Invisibility of Participants

The interviews confirmed comments made by some survey respondents – contemplative teaching was taking place throughout the university, but rarely labelled as such. Rather, it was implicit in framings such as ‘Holistic,’ ‘Māori,’ ‘Critical Social Justice,’ or ‘Practical Wisdom’ (Chapter 3). Although interviewees such as Emily, who had been a CMind fellow, and Ethan, who had wide experience, were aware of the movement and philosophy of ‘Contemplative Education,’ others such as Steven and Jon, were not. However, upon reading the research invitation, they thought it applied to them. During the recruitment process, emails arrived from prospective interviewees asking if I thought they “were doing it [contemplative teaching], or not.” Jon expressed his surprise to learn of the emergence of this philosophical movement, “I didn’t really know that there was such a thing [as Contemplative Education], that had been labelled, corralled, organised...”

Interviewees were certainly aware of mindfulness, and of mindfulness interventions being offered through student health or support services. Participants including Stephanie, Ben, and Vanessa reported that mindfulness was influencing their teaching approaches. However, ‘Contemplative Education’ as a movement apparently had not yet made wide inroads. Because few participants identified as ‘contemplative educators,’ one of the first issues to address was how they did identify their teaching. One obvious way was to see it first, as an overflow of personal contemplative practice.

6.2.2 Practice

Participants such as Steven and Jon, mentioned above, illustrated the principle that presence flows from practice, teaching contemplatively primarily because they were themselves, contemplative. Core elements of contemplative teaching flowed naturally from practice regardless of conscious adoption of pedagogy, affecting personal presence, attunement to student needs, and a tendency to pause, teach more reflectively, and include less content but go more deeply into meaning and process. Dorrestein (2015), in her phenomenological study of seven tertiary educators who were mindfulness practitioners, unpacks the deeper aspects of present teaching as “noticing,” “being open,” and “being Caring,” responding to “what is needed” and increasing in “authenticity” (p. 1).

The strong feeling of presence sometimes affecting classroom experiences was described by Don as “focus,” or “rapport,” or the “flow state” identified by (Csikszentmihalyi, 1991). Sophie reported,

I notice that sometimes when I teach, the frequency of my voice changes ... and I feel that everything changes ... the whole class is really attentive ... there is almost a different frequency in the room ... there is that magic ... I cannot make it happen, but when it happens, I see it, and it's very visible and it would be great if I could capture it, but I can't because it's very flimsy. (Sophie, Social Work)

Jon described a class that “had a kind of spirit that was almost tangible. They cared for each other, there were no outsiders.” Deep presence could create what Anna described as a “living classroom,” with deep interconnection in the energetic field (Bache, 2008). This feeling led to a valuing of each person and their contribution, according to Jeanne.

Some participants reported setting intentions for their teaching. Before class, Kiri prepared the physical space for Psychology classes with “a call to the Universe” that the “message conveyed is the one that is going to be of most assistance to most people.” Jeanne set the intention of being open and aware and “that every person sitting in the room would get what they need.” Even online, she said, you

could “create teaching space where magic happened and ... [the] course was a sacred circle ... [with an] environment that was of maximum gain to people as individuals.” Sometimes students came to her later, saying that a class activity had affected them powerfully, helping them open to the creative process.

Attunement to student learning processes also came through being ‘present’, as in Steven’s teaching of lab skills, which was based on sensing the stage of student understanding and degree of confidence or anxiety. Through demonstrations and carefully scaffolded questions, he guided students to experience success and feel supported in their learning. Student feedback had been very positive. Creating a safe space led to a “general feeling of acceptance and kindness” that fostered dialogue and willingness to admit to not knowing all the answers.

Another side-effect of personal contemplative practice, according to Ethan and several others, was to provide students “time for processing.” Rather than trying to “cover” a large amount of content, the aim was to foster deeper learning of a smaller number of core concepts and of learning strategies. There was a natural willingness to pause and let things “sink in,” “percolate,” “incubate,” and “deepen,” in the phrasing of various participants. This kind of teaching “created a space” in the classroom, rather than trying to “fill” one, allowing the unexpected to emerge, and students to express their learning in unpredictable ways (O’Reilly, 1998). Sophie reported,

Sometimes when students do small group work ... I can see how focused they are, how engaged with materials they are, and then later on when they report from small groups, the jewels they bring ... show critical thinking, creation of new ideas, challenge as well ... if they have any prejudices, prejudices come to surface and ... and it doesn’t happen with my conscious effort. (Sophie, Social Work Participant)

Miller’s transformation of the Reflective Practitioner into the Contemplative Practitioner takes place through becoming present, “learning to attend with complete self-abandonment” (Krishnamurti, 1969, cited in Miller [1994] 2013, p. 4). In reflection, he says, we think about things, but in contemplation we in a sense become one with them.

6.3 -Absences, Tensions, and Constraints (*Becoming*)

This section discusses participant motivations for adopting contemplative methods, as asked by the second research question, reporting participant perceptions of absences and constraints in higher education and society. In the dialectic, this is the second moment, *becoming*. The issues identified by participants involved dimensions ranging from intra-subjective to global, and included: threats to student wellness; a need for deep and ethical engagement, both in reflective practice, and in critical social justice education; creative blocks; threats to attention from information overload and digital distraction; ‘disembodiment’ perhaps brought about by urban, sedentary lifestyles; student searches for purpose and meaning; the need for climate awareness and action; and the need for compassion in healthcare.

In the analysis that shaped the literature review in Chapter 3, issues were grouped into categories of disconnects - with nature, others, self, and the capacity for self-transcendence. In the discussion below, constraints, tensions, and absences identified by participants are grouped into corresponding categories of needs: connection with nature; connection with others; connection with self; and connection with meaning and purpose. Issues raised by interviewees were largely foreshadowed by the literature search and survey results, except for the urgency of addressing care and compassion in Medicine. Seemingly this problem, previously one among many, had boiled up to the point of crisis.

6.3.1 Connection with Nature

Some participants looked to contemplative methods to increase the feeling of connection with the natural world, thereby fostering climate action and sustainable behaviour. Echoing the urgency expressed in the literature (Uhl, 2003; Wapner, 2018), Ethan spoke of the need for Management students to experience themselves as part of nature, rather than seeing it only as a resource. To make sustainable investment decisions, they needed to “see beauty, to take

time and moments of reflection in nature. This is very, very basic and essential.” Sophie was equally passionate, asking, “So how to teach students ... to bring forth the world as opposed to destroying it?” Both Ethan and Sophie drew upon resources including Integral Theory (Esbjörn-Hargens, 2010b; Esbjorn-Hargens & Zimmerman, 2011) and *Theory U* (Scharmer, 2009), reviewed earlier (see Chapter 3). These participants used language like that of Scharmer and Kaufer (2013) in their analysis of our world’s disconnect from nature.

6.3.2 Connection with Others

Participants expressed views like those in the literature regarding critical social justice and diversity teaching, highlighting the need for ethical engagement. Contemplative methods were said to facilitate the intensive inner work required (Berila, 2015; Rendón, 2009). Rachael, for example, taught anti-racism to Social Work students, and found that identification of assumptions and biases was crucial. In Zain’s Applied Theatre classes, the aim was to give voice to stories that had been marginalised, through co-created performances with groups such as refugees, or the aged.

In Medicine, Phillip reported that compassionate healthcare was under serious threat as a direct result of practitioner stress and burnout. The literature also reports that the healthcare system was suffering shortages of doctors and nurses, rosters that left little time for sleep, and burnt-out medical practitioners (Dudding, 2013; Martin, 2019; Roy, 2018). Similar issues were said to exist overseas (Grinspoon, 2018). Phillip said,

There is a crisis of compassion in medicine. I don’t mean to exaggerate but looking at the data we can see a high incidence of fatigue, and along with that goes compassion fatigue. And burnout. (Phillip, Medical Educator)

Thus, physician wellness needed to be addressed, along with physician compassion and connection with patients. According to Phillip, compassion meditation could help young doctors to renew the “compassion muscle” that we

all have, he said. Mindfulness and compassion interventions were now being incorporated in many medical education programmes to address doctor resilience and thereby improve patient care.

6.3.3 Connection with Self

Participants also looked to contemplative methods to foster connection with the self by increasing wellness, attention, embodied knowing, and critical and creative thinking.

Wellness

Student unwellness and stress were mentioned by many participants as a concern. Wellness was foundational because without it, other educational aims were difficult to achieve. In Medicine, Phillip urged that medical educators model a concern for personal wellbeing. Most early medical mindfulness studies had been about interventions to improve patient outcomes, with only a few focusing on practitioners (Epstein, 1999, 2003a, 2003b). More recently, mindfulness literature with practitioners as its focus had been growing (Dobkin & Hassed, 2016b; Epstein, 2017; Fernando, Consedine, & Hill, 2014; Moir et al., 2015). In 2014, for the first time, a curriculum for New Zealand doctors had included personal wellbeing in its objectives (Medical Council of New Zealand, 2014, as cited in Moir, Yelder, Dixon, & Hawken, 2018).

In the related field of nursing, Stephanie shared the view found in research studies, that self-care was important (Dev et al., 2018; Hunter, 2016), but said it had not been brought into core curricula. She explained that pressures on nurses were growing as they took on more delegated medical responsibility, but self-care still received little attention. She summed up these observations with the remarkable comment that promoting wellness for nurses was “a subversive activity.”

Different study programmes engendered different kinds of stress. Diane pointed out that young high achievers, such as Medical and Clinical Psychology students, had correspondingly high expectations for themselves and “lacked skills in dealing with failure.” The biggest stressors for mature, professional students, such as those of Rachael and Sophie in Social Work, and Stephanie in Nursing, were likely to arise from juggling family responsibilities and financial pressures resulting from interrupting fulltime work. Rachael had Social Work students “... who hadn’t studied for 30 years ... and were anxious and [questioning] can they do this?” Similarly, Stephanie referred to stressfulness arising from “the gendered nature of nursing,” where almost 90% of her students were women, “... most of my students, my mature students, are midlife women and they’re often juggling children, parents, all sorts of responsibilities, health related issues.”

Stress and anxiety affected students in creative courses such as Carol’s Design classes, when ideas were incubating but outcomes were uncertain. According to Carol, “When you’re trying to create something from nothing ... it triggers that fight, flight or fear response ...” There was a myth that creative people found it easy, but in fact it was the opposite, “... I have to reveal that the creative process in itself means that we can’t be at ease and we can’t be totally comfortable.” Working outside of comfort zones was also stressful, as Heidi explained in relation to studying in a second language. Referring to Krashen’s work on the Affective Filter (Krashen, 1982) and its role in language learning, she said that teachers needed to take steps to lower anxiety. Dennis spoke about the anxieties of trainee teachers who found they would have to learn mathematics, and Emily found similar anxieties in BA students who had to study science courses such as those on memory and cognition.

In her qualitative interview study of 19 educators from the Humanities and Social Sciences, Pizzuto (2019), begins by reviewing literature about the high incidence of stress and suicidal ideation among students. Her participants perceived the benefits of mindful practice to include better management of stress and anxiety and improved social emotional learning. Participants also reported benefits to their own mental and physical wellbeing and teaching.

Attention

Emily, a Cognitive Psychologist, highlighted the threats to attention from information overload and digital media, which are both “the site of outsourced memory,” and a cause of distraction. Echoing Carr’s (2010) description of modern society as ‘The Shallows,’ several participants lamented the shorter concentration spans they noticed in the classroom, and a huge decline in reading. Ethan feared that “culture was being lost.” Learning from texts required more than one reading, but this seemed impossible for young Management students. Further, as Anna noted, because digital devices are now accepted in the classroom setting, it was difficult for her to know if she was communicating effectively and whether or not students were on task: “A student can be there typing away because that’s how they like to take their notes, or it can be because they’ve really got to respond to a cat message that’s been left on Facebook.”

Embodied Knowing

Physical knowing also needed strengthening, particularly when learning medical, laboratory, studio, or theatre skills, as pointed out by Phillip, Steven, Carol, and Zain, respectively. This kind of knowing was also important in general life. Zain noted that some Applied Theatre students seemed to be “disconnected” from their bodies when they started the course. Ethan also thought that in modern life, people had become almost “disembodied,” living in their heads rather than in their whole selves, and like Berila (2015), and Wenger (2015), he incorporated Yoga, martial arts, and other physical practices in his classes. Rachael highlighted the potential of bodily “ways of knowing,” saying that activities such as role plays could help students understand power relationships.

Critical Thinking

Deeper engagement in critical thinking was sought in a range of areas: as part of professional learning, social justice teaching, and evaluating creative products. Linda, for example, found that young undergraduate Nutrition students

sometimes assumed that people would adopt healthy eating habits if they were simply taught about nutrition. She incorporated volunteer placements in which students worked as consultants to people in the community. They wrote reflective journals, but these were sometimes viewed as a tick-the-box exercise. Linda was endeavouring to deepen their reflections and help them open to new perspectives.

Creativity

The need to enhance creativity and innovation was also raised by participants. Like other participants in creative fields, Jeanne wanted to help students to free up their creativity after this became blocked under the pressures of study. She looked for ways to shake her Communications students out of set patterns and regimented thinking. Heidi spoke of second language students “losing their voice” when grappling with the complexities of academic writing.

6.3.4 Connection with Meaning and Purpose

Some participants referred to an increasing instrumentalisation of education, with less focus on meaning and purpose. Upon returning to New Zealand after several years, Rachael, for example, observed that “students probably a bit more see themselves as customers having bought an education product, especially the internal students, the school leavers. They’re just ... kind of [thinking] ‘Okay, how do I get through this assignment?’” There was a fundamental disconnect between education as commodity and education as preparation for citizenship. Rachael urged that we confront the question, “Do we see students as customers, as consumers, or as citizens?”

6.4 Hoped-for Futures (*Totality*)

Participant use of contemplative teaching methods thus related to their personal contemplative practice and student learning needs. Their incorporation of contemplative methods was part of their imaginings of a more complete *totality*,

the third moment of the dialectic. The questions developed for the interview guide (derived from the earlier survey and literature review), appeared relevant to participants, whose aims appeared largely consistent with those expressed in the literature. Participants revealed instances and applications of these aims. Cross-case comparisons of the interviews also produced common themes regarding use of contemplative methods, including wellness, cognition, connection, ethics, action, and transformation. They align with the literature review categories, as follows: disconnect with nature (connection, ethics, action); disconnect with people (relationship, compassion); disconnect with self (wellness, cognition); and disconnect with the capacity for self-transcendence (transformation). However, all are inter-related, and each affects all the others. See Table 6.3, below.

Table 6.3: Transformational aims of participants for contemplative education in themes derived from interviews

Transformational Aims of Participants for Contemplative Education – Themes from Interviews		
Self-Transcendence	Transformation	<ul style="list-style-type: none"> • Creating meaning, transpersonal growth, spirituality, self-transcendence
Nature and People	Purpose and Action	<ul style="list-style-type: none"> • Engagement (being involved, having meaningful & purposeful roles)
	Ethics and Responsibility	<ul style="list-style-type: none"> • Ethical decisions & behaviour (social responsibility, care for environment, global citizenship)
	Connection and Compassion	<ul style="list-style-type: none"> • Relationships (with others and natural world, communication) • Compassion (identification with others, desire to alleviate suffering)
Self	Awareness and Cognition	<ul style="list-style-type: none"> • Attention & Focus • Criticality (meta-cognition, identification of assumptions, perspective-taking, evaluation of alternatives, recognising what is not known) • Creativity (openness to novelty, tolerance of ambiguity, acceptance of impermanence) • Embodied knowing; acceptance of not-knowing
	Wellness	<ul style="list-style-type: none"> • Physical and Mental Health (Resilience, self-compassion, sensory & physical awareness, reduced stress & anxiety)

Each of the overall aims shown in the table above includes sub-categories. Improving wellness involves both physical and mental health - increasing resilience, reducing stress, increasing body awareness - and developing the ability to achieve cognitive distance from stressors. For Phillip, it involved interventions that fostered mindfulness and self-compassion and reduced the potential for physician burn-out. For Stephanie, it involved self-care for nurses. For Richard, it involved helping his clients to focus on the good and gain detachment from problems.

Enhancing awareness and cognition involves improving attention, critical thinking, creativity, embodied knowing, self-awareness, and meta-cognitive processes of reflectivity, reflexivity, and introspection. In Emily's large Psychology classes, it sometimes meant focusing attention with a breathing exercise. In Don's Religious Studies classes, it involved critical reflections on religion and culture. In Jeanne's Communication classes it involved music and movement to stimulate creativity. In Steven's Science Lab classes, it involved helping students to be aware of their movements, and for Zain's Applied Theatre students, also becoming aware of the movements of others. For almost all participants it involved reflection and introspection.

Increasing connectedness with nature, for Ethan, included taking nature walks with his future managers to awaken a sense of being stewards rather than exploiters. Connecting with other people included developing compassion and relationships. For Phillip's Medical students, it meant improving patient care by becoming more caring. For teacher educators, Ben and Jon, it meant developing better relationships in classrooms.

Fostering ethical decision-making and behaviour involved reflection on professional placements in the context of professional ethics for Teachers (Jon and Ben), Social Workers (Rachael And Sophie), Medical professionals (Phillip), Nurses (Stephanie), and Occupational Therapists (Anna). Supporting students in finding personal meaning and purpose involved exploring avenues of constructive action, for example, doing volunteer work in food banks (Linda's Nutrition students), or participating with the community (Zain's Applied Theatre students). Personal transformation sometimes arose from these practices.

6.5 Conceptualising Contemplative Teaching (*Praxis 1*)

This section helps to answer the research question that asked how educators conceptually frame contemplative education. After considering their teaching aims, the needs of students, and the pressures of society, participants had made decisions to exercise personal agency in carrying out contemplative *praxis*, with

hopes of enhancing student learning. In dialectical Critical Realist terms, this is to 'absent ill,' or to 'absent absence.' As contemplative educators they did this as teachers of Mindfulness-Based Interventions and/ or through class teaching.

6.5.1 Mindfulness-Based Intervention (MBI) and Contemplative Inquiry (CI)

Contemplative education by participants encompassed the two categories previously discussed: Mindfulness-Based Interventions (MBIs), conducted largely outside of content classes by specialist mindfulness teachers on the one hand - and contemplative pedagogy, here termed, Contemplative Inquiry (CI), used within subject-based teaching on the other. MBIs largely target wellness while CI largely targets cognition. The mapping study mentioned in Chapter 3 (Ergas & Hadar, 2019) identified a similar division, which they named, 'mindfulness *in* education,' and 'mindfulness *as* education.'

Two participants were engaged in Mindfulness-Based Interventions (MBIs) only, thirteen in Contemplative Inquiry (CI) only, and seven in both. The MBI group included Vanessa, who ran extra-curricular mindfulness classes under the auspices of student support, and Richard, who facilitated mindfulness groups but whose primary approach would be more properly considered person centred contemplative psychotherapy. The CI group included Carol, who used contemplative methods to help students navigate the iterative double diamond Design Process (Design Council, 2020), which begins with the uncertainty and openness needed to create something new, and then moves to critical evaluation of the new creation. This group also included Diane, whose Clinical Psychology courses drew on Schön (1983) to make reflectivity their cornerstone, deepening student understandings of the practitioner-client relationship.

The seven participants in the combined category using both contemplative content course teaching and mindfulness interventions, included Ben, who incorporated reflective exercises and brief mindfulness practices in courses for student teachers, as well as teaching these teachers to teach mindfulness to their own primary school students. The combined category also included Stephanie,

who ran MBSR courses tailored for nurses and also invited the nursing students in her content classes to participate in brief mindfulness practices. Another participant in this category was Phillip, who was involved in medical education programmes involving mindfulness and compassion interventions run in tandem with in-class exercises to deepen critical thinking. Like the developers of the University of Auckland SAFE-DRS curricula (Moir et al., 2018), he believed there was a need to target a complex set of skills and capacities throughout the period of medical training.

6.5.2 Framing Mindfulness-Based Interventions (MBIs)

The participants reported using Mindfulness-Based Stress Reduction (MBSR) in its original form, as well as in forms adapted for the New Zealand context and for the needs of children and emerging adults. MBSR targets wellbeing, resilience, and compassion. Medicine, according to Phillip, required emphasis on compassion. Stephanie saw MBSR as “a heart-based meditation practice ... needed to sustain my life and ... needed in Nursing practice.” In Education, Ben used a New Zealand adaptation of mindfulness interventions in schools that had been aligned with the *Te Whare Tapa Wha* (four sides of a house) holistic Māori framework incorporated in mental health and in the school curriculum (Education Review Office, 2016). This intervention enhances connection to natural and spiritual worlds by including Māori concepts of holistic wellbeing (Rix & Bernay, 2014). Another intervention specifically catering for emerging adults, taught by Vanessa, was *Koru Mindfulness* (Rogers, 2013; Rogers & Maytan, 2012).

6.5.3 Framing Contemplative Inquiry

Participants drew on diverse conceptual frameworks for contemplative teaching, within overall approaches that could be viewed as cross-disciplinary. These included Holistic; Cultural (Māori and Pasifika); Professional; Critical Social Justice; Contemplative Creative; and Experiential/ Somatic.

Holistic

Holistic worldviews appeared to be implicit in the thinking of most participants, who expressed concern for their students' wellbeing and for experiential and relational learning as well as cognitive. Ethan and Peter, in Management, drew upon the explicitly articulated holistic framing of Integral Education Theory (Esbjörn-Hargens et al., 2010). Ethan also referenced *Theory U* (Scharmer, 2009) (Chapter 3).

Ethan further referred to Integral theorisations of Intersubjectivity that build on Buber and Scharmer (Gunnlaugson et al., 2014) (Chapter 3). John Heron's Whole-Person learning (Illeris, 2009) influenced Sophie's teaching. This phenomenological approach advocates affective, experiential learning-in-representation, and "empathic knowing" (Yorks & Kasl, 2002). According to Anna, Occupational Therapy (OT) has an explicitly holistic theory of 'body-mind-spirit,' with each aspect considered intrinsic to humanity and therefore to occupation. The Code of Conduct for New Zealand Occupational therapists, in Section 1.3.1, requires members to "acknowledge the holistic nature of each individual and practise with due care and respect for diverse culture, needs, values and beliefs" (Occupational Therapy Board of New Zealand, 2015). The framework includes spirituality as an important aspect of client care. The students in Anna's programme went on a retreat and reflected on their spirituality. However, they were sometimes surprised when they began to work as OTs to find less evidence of holism or spirituality in the workplace. The literature also points to confusions in this area (Morris et al., 2014).

Jon had been influenced by Accelerated Learning, or 'whole-brain learning' in the past and still drew on its holistic, experiential, affective, constructivist principles to engage multiple intelligences in Teacher Education. He said "we used meditation, we used baroque music, we used experiential learning. We even went to the stage of running camps." Accelerated Learning also influenced language teaching, as reported by Heidi, who had first learned of it through the work of Georgi Lozanov's Suggestopedia (Bancroft, 1978).

Duerr et al. (2003) identifies holistic participant framings of transformative/spiritual teaching including Developmental Action Inquiry, Heart-Centred Education, Integral Learning, Interdisciplinary Integration, Integrative Studies, Transformational Learning, Courage to Teach, and Holistic Learning (p. 186).

Māori and Pasifika

Māori and Pasifika cultural framings, also holistic, were important for Kiri in Psychology and Rachael in Social Work. Kiri tried to develop “mini cultures ... and a sense of community and sharing” in her classes. She devoted time to personal introductions, so that family, community, and place of origin were acknowledged and given prominence. She included group work and assignments and seated students in groups. Similarly, in Rachael’s Social Work classes, learning was experiential, food was shared, and music, song, rap, and poetry were included. Sophie, of Pākehā (non-Māori) ethnicity, felt that her Social Work teaching over the years had been informed by Māori and Pasifika cultures. She spoke enthusiastically about a course she had co-taught on a *marae*, which itself became like a “living” participant. She offered students the opportunity to co-create assignments that incorporated relevant and meaningful cultural elements within a framework of academic accountability. For example, Pasifika students had delivered a group presentation during which one group member sat weaving to symbolise how aspects of culture were woven together. These comments resonate with those made in the large longitudinal study of success factors for 625 Māori graduates, which stressed the importance of care and community (Theodore et al., 2017) (Chapter 1).

Māori and Pasifika cultural frameworks were said to embody spirituality. Kiri said it was “really important that a spiritual aspect is incorporated ... because it’s such a huge aspect of Māori culture.” Rachael, of Pasifika background, found that in her experience Social Work was open to spirituality as part of culture, and the field acknowledged the impossibility of separating people from their spirituality. In interesting contrast, Sophie, of Pākehā descent, did not experience similar acceptance.

Critical Social Justice and Diversity

Critical Social Justice teaching was a conceptual framing of contemplative methods reported by Rachael and Zain to influence Social Work and Applied Theatre teaching, respectively. Critical approaches were seen to have a natural fit with contemplative, reflective, introspective, embodied teaching methods, and they referred to seminal exemplars, including Freire (1993) and hooks (1994). In Nursing, Stephanie's feminist perspective sometimes helped students to question the status quo.

Creativity

Creativity focused framings of contemplative education included Design Thinking and Contemplative Creative Writing. Design Thinking was referred to not only by Carol in Design, but also by Ethan in Management and Jon in Education. Design Thinking involves starting with an open mind, setting aside assumptions, listening deeply, checking understandings, testing ideas, and being willing to change (Stanford Design School, 2019), and can be enhanced with a reflective and contemplative approach. Jeanne saw contemplative approaches as intrinsic to experiencing and producing creative endeavours in her Communications classes. This was not so much a theory, as the simple idea of savouring, listening, beholding, reading more than once, writing as "a practice that emphasizes process rather than outcome" in the words of Barbezat and Bush (2013, p. 124).

Experiential/ Somatic/ Sensory

Experiential and physical/somatic/sensory methods were included, for example, by Steven when teaching laboratory skills, by Phillip when teaching medical skills, by Anna when teaching therapy skills, by Carol, when teaching design skills, and by Zain when teaching performance skills. Contemplative approaches could deepen this teaching. According to Zain, Applied Theatre had been theorised in ways similar to martial arts, using Eastern ideas of 'no mind' (Zarrilli,

2011). The Japanese performance art, Noh, for example, involves emptying yourself to embody a character. He reported that in Theatre, phenomenological approaches had given academic validity “to the subject of experience,” to the body’s ways of knowing. He said, “sometimes it’s very difficult going from the subjective to the objective ... sometimes the objective language just doesn’t work. It just doesn’t do justice.”

Reflective Practice

Reflective practice was the pathway to contemplative teaching most often reported by participants, whose interpretations of reflective practice reflected those in the literature (Lyons, 2010), including professional practice, critical social justice teaching, and creative projects. Reflectivity was incorporated in the form of professional practice by Heidi (Applied Linguistics and TESOL), Diane (Clinical Psychology), Carol (Design), Jon and Ben (Education), Ethan and Peter (Management), Phillip (Medicine), Anna (Occupational Therapy), Rachael and Sophie (Social Work). These disparate occupational groups had to provide services to clients/patients/students in what could be highly stressful situations. They all had to meet professional ethical standards and critically reflect on their own practice. In Applied Theatre and Nutrition, although Zain and Linda’s undergraduate students were not undergoing professional training as such, they were working with the community and needed to adhere to professional standards.

Reflection in the context of critical social justice work was a doorway to contemplative teaching, particularly for Rachael and Sophie in Social Work and Zain in Applied Theatre. Reflection as part of the creative process was the pathway for Carol in Design and Jeanne in Communications.

6.6 Pedagogy (*Praxis 2*)

In this section, the specific pedagogies for targeting each set of aims identified above are described. Further addressing the research question that asked how

educators use contemplative methods, this is also part of the *praxis* moment of the dialectic. Pedagogies are presented in the same order as the aims in Table 6.3, above, from the bottom up: wellness, cognition, connection with nature and others, ethics, purpose, and transformation.

6.6.1 Wellness Pedagogy

Practices to ease student stress and enhance coping skills ranged from full-scale mindfulness interventions to brief pauses to catch breath, depending on the educator, the discipline, and factors such as class size and level. Phillip reported that in Medicine, mindfulness had become an accepted part of physical health, mental health, and professional wellness curricula. In the physician education programme with which he was involved, an integrated package included mindfulness, compassion, self-compassion, and resilience training, delivered through regular practice sessions, reflective journaling, and retreats. Mindfulness and compassion practices tended to be addressed outside of class in timetabled retreats and workshops. Supplementary resources were also provided online.

Ben's teacher Education programme incorporated resilience training through six one-hour sessions using MBSR activities and teaching the science of mindfulness. Mindfulness training had begun gradually and grown incrementally beginning with brief in-class mindfulness practice at the beginning of teaching sessions, then adding classes about how to use mindfulness in school. Eventually, the whole curriculum was adapted. These examples involved a major commitment to resilience-building for students in professions where stress and burnout had been flagged as issues. In another case, although Stephanie's Nursing students were offered optional mindfulness workshops outside of their regular programme, these were not part of their course. Interventions were not part of any other participants' courses.

Kiri reported that although mindful approaches are widely used in therapy and advocated by the NZ Mental Health Foundation, mindfulness was only briefly mentioned in Psychology courses. The lack of systematic mindfulness training of

therapists was perplexing to her. Graduates had to pursue further, privately provided training if they wished to include these approaches in their future practice as psychologists.

While full-scale mindfulness interventions were part of only a few programmes, brief in-class wellness activities such as pausing, mindful breathing, and check-ins were incorporated by several participants. Sophie described a simple check-in that helped her Social Work students at a challenging time. "... they shared their stress and exhaustion ... and... we kind of sagged into it ... And I said just ... come to yourself and follow your breathing ... and feel grounded... just a bit of being where they were ..." and then the class started, more refreshed and ready to learn. Ben did a breath focus before exams in Education classes of 200, reporting that "it was pretty amazing to feel the tension in the room prior to doing the pause, and after ... you could actually feel the calm in the room."

Simply being able to acknowledge that anxiety was normal could be powerful. For example, Carol provided opportunities in her Design classes "... to speak about ... anxieties and know that anxiety is part of creativity ... get all that out in the open." The flip side was to help students focus on what was going well rather than on what was going wrong. 'Taking in the good,' part of a cognitive science approach popularised by Rick Hansen (Hanson & Mendius, 2009), was referenced by Stephanie in Nursing and was also a cornerstone of therapies used in Richard's contemplative neuroscience approach to counselling. The idea is that the brain has a negativity bias, giving more importance to negative events than to positive ones. Therefore, it is important to continue "... keeping focussed on ... everyday ... goodness and expanding on it, noticing it and letting it reach into you," he said.

6.6.2 Cognition and Awareness Pedagogy

This set of pedagogies aimed to enhance cognitive skills including attention, criticality, creativity, and embodied knowing. Regular personal meditation was

thought to improve thinking skills. Dennis thought that contemplative thinking and mindfulness should “just be a normal part of anyone’s thinking repertoire.”

Attention

Attention could be focused at the start of class and outside concerns set aside through a brief breathing exercise even in large classes, such as Anna’s. Ben’s classes carried out a breath focus and *karakia*, “which was about the wind - the wind from the north, the wind from the south, the east, the west - the wind representing each of us coming in to focus together on what we were learning.” Similarly, Heidi spoke of a *Te Reo Māori* course whose methods she would like to emulate. The adult learners arrived stressed and harassed at the end of the day, so classes began with a visualisation or legend and a relaxation, with the option of doing this on a chair or a mattress, leaving students refreshed and ready to learn.

Stopping for a moment within the class was also helpful to refocus. Without using the language of mindfulness, Stephanie would simply invite her Nursing students to take a breath, stretch, notice themselves and re-focus on their work. In the context of nursing practice, this became a brief STOP meditation (Stop, Take a breath, Observe, Proceed). Ethan used the concept of ‘felt sense’ (Gendlin, 1997), periodically asking his Management students to stop and become aware. “The shift into felt sense is like perceiving atmospheric qualities. So sometimes I invite students to look around, “... What do you feel in this room, just being bodily aware of where you are? ... How are you attuned or not?”

Embodied Awareness Pedagogy

Methods to enhance physical and sensory awareness were reported by several participants. Steven described his scaffolded approach to learning Biology laboratory procedures, moving students through four quadrants of a learning matrix, from not knowing at all, to observing others, to acting with supervision, to acting independently. Through modelling and empathetic questions, he helped students to calmly focus.

In Applied Theatre, Zain reported using exercises that involved developing bodily awareness of one's own and other's bodies, crucial to performance. "The body screams on stage with a small movement," according to Zain. Working in silence, his students practised mirroring a partner's movements with great care, "... even though they're mirroring each other's movements, someone from the outside shouldn't be able to tell who's instigating the movement and who's following." Other somatic theatre exercises that developed body to body awareness included having everyone walk throughout a room trying to fill every space. In another example, one student adopted a pose and a partner had to try to fill the negative space around them, respectfully and without touching. In yet another, the group stood in a circle, and with no one leading or following, they sensed when the time was right to all simultaneously move forward and shout, "Hah!" It involved being extremely attentive to every nuance of sound or movement.

You stand in a circle and you focus softly on a spot in the middle and you have to stand neutrally and again, no-one leads this exercise. We're doing it as a group and the idea is that through some kind of attuned body to body awareness that we've been cultivating, we all respond with ... HAH like that ... Now, that's a really tricky one but when it works it's resounding. Like, you know, people are shocked. (Zain, Applied Theatre Interview Participant)

The importance of intention in fostering attention was stressed by Emily. She noted that popularisations of mindfulness sometimes failed to fully capture the role of intention and remembering to focus, and she highlighted the potential of meditation to strengthen their interaction.

Critical Thinking

Critical thinking dispositions targeted by participants in classrooms included increasing openness to perspectives, identifying previously unexamined assumptions, and acknowledging areas that were not known. Enhancing openness to other perspectives often involved dialogue or deep listening, and several versions were described. In one exercise, Anna used a simple paperclip meditation adapted from Palmer et al. (2010) to focus her first-year students'

minds on the diversity of their Occupational Therapy clients. They examined and explored the paperclip, considering its production, transport, the people involved in making and selling it. Then she asked them to think about their clients with as much interest and curiosity, “and if you think about how complex a paperclip is, just imagine how complex a patient or a client ... might be.”

Identification of unexamined assumptions was sometimes addressed by placing students in unfamiliar and uncomfortable situations (small disorienting dilemmas). Jon included “discrepant events” in his classes, such as unexpected raps or readings or interruptions. Rachael described moving the chairs out of the classroom and requiring Social Work students to sit on woven Island mats. Even this small change shook up their expectations and opened the door to consider other assumptions they might have. As she noted,

It provides a good catalyst for discussion and then that feeling of unease ... I think you can be too uncomfortable ... and people shut down, but you’ve just got to push it enough that it’s breaking new ground. It’s like if you want to grow something you need to turn the soil, so that it’s receptive, ready to grow something new ... You don’t want to totally uproot a plant, but you just want to refresh, prepare the way for ... fresher, new insight. (Rachael, Social Work)

In another Social Work example, Sophie put her students into groups and asked them to share one fact about themselves that they would not put on a CV. The facts they shared overturned preconceived ideas that the students had formed about one another and alerted them to the assumptions they were making about clients.

Critical Social Justice Pedagogy

One way of teaching critical social justice and anti-racism was an embodied method Rachael referred to as ‘People Sculpts.’ Social Work students analysed a case study in groups, and then positioned their classmates to make a living sculpture illustrating their insights. Deep reflection was required, and situations could be re-sculpted for better outcomes. In Kiri’s Psychology courses, culture

provided the context for reflection on identity. Often young *Pakeha* (non-Māori) students thought of culture as “being brown” and were not aware of themselves as ‘culture bearers.’

Zain’s Applied Theatre students studied plays from different perspectives, such as *The Investigation*, about the Frankfurt trials in Germany in the 1950s (Weiss & Gross, 1982), and *My Name is Rachel Corrie*, about a young American activist run over by an Israeli bulldozer while protecting Palestinian homes in Gaza (Corrie, Rickman, & Viner, 2014). With community groups such as refugees or the aged, they co-wrote and performed dramas dealing with pertinent issues, and reflected on the process. He reported that class plays sometimes used free-casting, in which students took on the roles of characters of different races, or genders, or backgrounds, and this opened their minds to other perspectives.

Ignorance

Being aware of and able to acknowledge areas of ignorance was vital for practitioners who could do harm. Diane offered “Ignorance workshops” for her Clinical Psychology students, based on training developed by Ann Kerwin for Medical students (Kerwin, 2016). She explained that a matrix was used to identify knowledge in four quadrants: things you know you know (declarative knowledge); things you don’t know you know (tacit knowledge); things you know you don’t know; and things you don’t know you don’t know. This last quadrant was difficult to penetrate, requiring the ability to reflect, listen, and ask good questions. At times she also included two further areas of ignorance – taboo knowledge that might be helpful, and painful knowledge that has been suppressed.

To prepare for the workshop, students had to write a list of things they did not know about their practice area, and many found this extremely difficult, according to Diane. As she explained, “They’re people who have got a strong record in knowing, and are very uncomfortable with not knowing, so it’s first of all making them aware ... that if you’re scared of not knowing, then you’re much

more likely to ... do harm.” In the Ignorance Workshops, expert guests talked about what they did not know about their specialty, awakening students to the importance of this realisation. An analogy was drawn - knowledge was like an island and ignorance like the surrounding ocean shoreline – as knowledge increased so too did the length of the shoreline and the area of ignorance. Goals of the ignorance workshops were to develop reflective powers and to release fear of not knowing.

Questions

Socratic questioning (Chesters, 2012) was used by Diane in Clinical Psychology to interrogate complex ideas and open them up for exploration, to expose assumptions and inconsistencies in thinking, to reveal areas of ignorance, and to question unwarranted conclusions. In Education, Ben and Jon used guided discovery techniques that seemed also to owe something to Socratic questioning (Chesters, 2012), and most participants incorporated questioning techniques in reflective exercises. In Applied Theatre, Zain guided his students’ performances through “a series of questions and provocations that help bring about a deeper engagement with the character.” Questioning was a powerful path to overturning false assumptions, and to new ways of thinking. As Peter said of his Management students, “I let them think outside of the box and their eyes light up and they say - really I can think like that?!”

Silence could provoke reflection, as in courses on culture where content could be polarising. Kiri left a period of silence after questions, allowing it to become uncomfortable, saying it was important to push people to provoke self-reflection, but not to push so hard that you lost them.

Creative Thinking

Contemplative practice was “linked to ... artful and creative dimensions” of learning, according to Ethan. Meditation enhanced openness to novelty and breaking out of set thinking patterns, which could foster creativity, he said. Jeanne’s Communications students asked “what-if” questions. She introduced the

practice by playing David Bowie’s music, after recounting that he attributed the secret of his success to asking these questions, “What if I put this sort of music with that sort of music?” That was how he had his creative inspiration... So ... I get them to brainstorm their own what-if questions in relation to [their work].”

Jeanne also used music, movement, and even Star Wars-style light sabres to spark creativity. In a darkened room, students moved the sabres in time to music or speeches or drama, and the effects were quite spectacular. Reportedly, even serious students became energised by this process, which got people into “intuitive, nonlinear frames of mind,” essential to creativity. Following the exercise, students brainstormed ideas for a creative project.

Creativity involved a time of openness, not knowing what would emerge, which could feel stressful, but there was another side. In Jon’s words, not knowing allows for possibility: “Possibility ... is a space with nothing in it, and when you’re in space with nothing in it, you can create anything that you want for yourself and for your life.” This also entailed an acceptance of the unknown. Jeanne’s discovery of a principle from Engineering Maths had transformed her way of thinking about the unknown. She had accompanied an Engineering student to class:

The lecturer had an engineering maths equation on the board and he got to a part where no one knew the answer, and he said, “Here's the thing, whenever you get to a part in the equation where you don't know the answer you put a symbol in and then move on to the rest of the equation.” And suddenly! It was quite an epiphany for me because I had these questions in my life. I suddenly thought ... I can just put in a symbol, a star, and then move on, whereas I had been thinking, I can't move on until I have solved this problem. (Jeanne, Communications)

Critical and creative thinking worked together. In Design, this could be described using the classic ‘double diamond’ process (Design Council, 2020), according to Carol. This began by considering a problem, opening-out through divergent thinking, “imagining, and doing lots of different iterations and experimentation, playfulness, opening out the diamond.” The process ended with convergent

thinking, evaluation and selection, “closing down of the diamond.” Creativity involved many iterations and designers needed to move back and forth between divergent and convergent thinking. “... reflecting on our thinking, [we ask] ... can I flip between these phases or do I get stuck in either one of them? ... What I’ve been doing with students is to try and help them map their thinking processes.” This meta-cognition deserved more attention and could be deepened with reflective practice, Carol said. Applied Theatre provided another example of the interplay of creativity and critical thinking. Zain’s students wrote scripts, created performances, and then evaluated and revised them.

Contemplative teaching encouraged not only individual creativity, but a collaborative, co-creative approach to teaching that students found immensely motivational. “Every class is different because students co-create it with me,” said Sophie. While meeting instructional objectives, her students created their own course objectives and assessments.

Introspective Thinking - Knowing Yourself

Introspection, reflection, and mindfulness could also help students to know themselves better. Jon illustrated the idea of the ‘hidden lives of learners’ (Nuthall, 2007) by having his Teacher Education students participate in a practical exercise that was also a bridge to greater self-awareness. Rather than just reading a textbook or hearing a lecture about how teachers do not know what is happening in the minds of their pupils, his students experienced this for themselves. He set his timer to sound every five minutes during a lecture. When the timer sounded, students tried to capture their thoughts and write them down. After an hour and a half, they reflected on their experience, “What they realised was how random it all was and how, honestly, so little of it was actually connected to the lecture and so they got access to their own, ‘oh see, this is my secret life!’” This practice is akin to that described by Ergas (2017) as “sampling by surprise.” Revelations experienced by students would be similar to those of beginning mindfulness meditators first observing their inner landscapes.

Reflection

Reflective tools facilitated opening to new perspectives and examining assumptions. One example used by Anna in Occupational Therapy was Gibbs' reflective cycle, which moves through stages of describing what happened, documenting feelings and thoughts, evaluation, analysis, considering what else might have been done, and planning future action (Gibbs, 1988). Reflective cycles also involved "openness to failure ... to the painful idea that we experiment with something and it has not worked out well," according to Stephanie, who saw reflective practice as "blurring into mindfulness."

Reflective journals were used by most participants who taught professional classes. Diane explained that reflective practice was a "cornerstone" of her teaching in Clinical Psychology (Schön, 1983, 1987). Students regularly wrote reflectively and reflexively about theory, their work with clients, their personal journeys, and about what they were learning. Their reflective journals were private spaces, but from them they chose topics to write up for course assessment. Not only did they reflect privately, they also worked in tight learning cells made up of three students from different specialities within Psychology, also exposing them to different perspectives.

In the context of Applied Theatre, Zain's students also wrote reflective journals about their co-created performances with community groups such as residents of aged care facilities. Intended as "maps of learning," they included all aspects of reading scripts, viewing plays, performing, and interacting with community members. They also chose one journal entry and wrote an extended critical reflection to be handed in for assessment. Similar processes took place in Design, where Carol's students included photos and samples in their journals.

6.6.3 Connection and Compassion Pedagogy

Some interview participants also aimed to enhance students' feelings of connection, compassion, and engagement with issues. Connection to the natural

world was highlighted by several participants who tried to take students outdoors when possible. To illustrate the importance of plants, Steven's students "contemplate[d] real-life connections ... talk[ed] about life on Earth, the place of plants in it, and their relevance to human life." They visualised their shopping trolley and considered how many items were plant based or depended upon plants for their existence. They did a short breathing relaxation, "Breathe in and out - in and out- are you feeling relaxed? Do you know that virtually all the oxygen you just breathed in is produced by plants?" This feeling of connection could also be the basis of research methods, such as that of Barbara McClintock, who deeply "became one with the organism" and won a Nobel Prize for work on transposons, or jumping genes, in maize (Keller, 1983).

Connection with other people in relationship began within the learning community of the class and spilled over into work with clients, patients, and school children. Anna's hope was that her Occupational Therapy students would understand "... that who they were as people in the therapeutic relationship was hugely important." She tried to model relationship, showing "that it is possible to be open and to be receptive and to hear what the person's saying and find out why they're saying it." In teacher education, Jon echoed these comments, "It's how we reply to students. It's how we address them. It's how we look at them. It's the tone of voice ... It's how understanding we are when they get themselves in a hole." In Education, he said, he adhered to Nel Noddings's ethic of care, the idea that ethical decisions are underpinned by care (Noddings, 2013). Similarly, Don tried "to be very gentle and kind to [his] students so as to foster a really positive relationship where they are not afraid to ask questions" in his Religious Studies classes. According to Heidi, Applied Linguistics and TESOL had a theory and methodology that hinged on creating accepting classrooms where students felt comfortable enough to take risks. Communicative methodologies from language teaching aimed to facilitate language acquisition by reducing stress and lowering the Affective Filter (Krashen, 1982). In teaching supervision skills, Stephanie helped students become present for other people by "decentering the self," first becoming present to themselves and "noticing what we need to set

aside to be present for others.” She said that activities involving deep listening or dialogue could increase connection. Further, according to Ben, when lecturers listened attentively to students, that experience validated them.

Some participants were intentional in preparing the space before classes, for example giving attention to seating arrangements, if possible. Anna arrived early and focused, slowing down, feeling her body in the space, interacting with students as they arrived, and seeing individual faces. Jeanne believed that a connected class atmosphere could also be generated at a distance through class forums where the lecturer was an interested and supportive participant. She included music in online forum discussions to draw students in. She described a “magical” evening when, unusually for New Zealand, huge fluffy flakes of snow were falling across most of the country, and her distance Communications students were posting beautiful music clips in their class forum, and others “... were responding in the most exhilarating way to the snow, to the [music] - it captured the essence of that magical moment.”

Getting into the community was another way of fostering connection in Education, Social Work, Medicine, Nursing, Occupational Therapy, and Clinical Psychology, where the students of Ben, Jon, Rachael, Phillip, Stephanie, Anna, and Diane all did practicums. Carol’s Design students also had to work with real clients. Zain’s Applied Theatre students co-created productions with members of the community, for example, residents of local aged care facilities. Linda’s Nutrition students undertook volunteer work, for example in Food Banks.

6.6.4 Ethics Pedagogy

Professional ethics were part of the teaching of most participants. Practical Wisdom, or *phronesis*, was for Ethan a doorway to including virtue, ethics and morality within Management education (Küpers & Pauleen, 2013; Ramsey, 2014). Aristotle’s *phronesis* has the aim of the good of all. Key aspects are openness and curiosity, the realisation that much is unknown, embodied awareness, aesthetics,

and reflexive interrogation of our actions. Ethan's class exercises included case studies, role plays, serious play, and reflective activities.

6.6.5 Purpose and Action Pedagogy

Participants aimed to help prepare students for life. Part of teacher education involved developing a personal teaching philosophy. Jon encouraged his student teachers to see their role "... as creating opportunities for their young learners to have amazing lives - to be self-expressed, to be powerful." This role was more about "who they were being, than what they were doing." According to Ben, mindfulness helped him to be more authentic, and his vision was for his Education students to create meaningful teaching philosophies flowing out of who they were as people.

Rachael's and Sophie's Social Work students were helped to prepare for their future work by reflecting on the processes bringing them to the present through the creative and embodied process of making life journey murals. Kiri worked with her Psychology students to increase their understanding of themselves as bearers of culture, using reflective exercises, group work and dialogue. Stephanie's Nurses needed to know what they could change and what they needed to accept. She saw mindfulness as a kind of serenity prayer, supporting nurses in "being with patients, families ... in lives that include suffering, bearing witness to suffering."

6.6.6 Transformation

The participants tentatively reported perceived student transformations. Some students referred to transformational experiences in course feedback or volunteered to come back and help with future cohorts, for example in Diane's classes. Others seemed to obviously blossom. Personal transformations of students were highlighted in Duerr et al. (2003). Sometimes the transformations could take a long time. Richard spoke of some frustrations in his therapeutic

work with students because he was mostly limited to short-term triage rather than long-term work. Nevertheless, he tried to teach skills such as savouring positive experiences that students could use throughout their lives. Vanessa, who ran mindfulness courses, stressed the long-term nature of practice. “There's a quote by Kabat-Zinn which talks about mindfulness being the long slow work of bucketing out a pond ... it's the work of a moment and the work of a lifetime.”

6.7 Integrating Contemplative Teaching in Courses (*Praxis 3*)

Participants varied in how they implemented contemplative methods, depending upon the course, content, class size, and level of teaching. Content-heavy undergraduate classes taught by Steven in Science and Emily in Psychology were less amenable to contemplative methods than applied or postgraduate classes involving internships and practicums, such as those taught by Diane in Clinical Psychology, for example. The degree of integration ranged from added-on activities (for example, a brief breathing focus to reduce exam stress in Emily's large undergraduate Psychology lectures), to embedded (for example, an ongoing reflective journal about placements in Diane's postgraduate clinical Psychology class), to intrinsic, where mindful approaches were foundational to teacher, teaching, and approach, (for example, inter-linked bodily awareness activities, creative script-writing, reflective journals, and co-created Applied Theatre with aged care communities in Zain's Applied Theatre classes) (Figure 6.1, below).

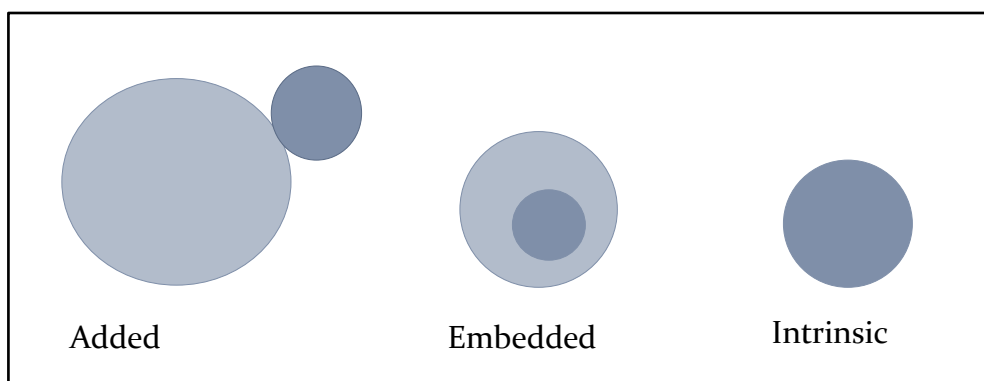


Figure 6.1: Degree of integration of contemplative elements

Another aspect of integration regarded the depth of contemplative engagement required by an activity. This is difficult to measure because individual teachers and students may approach the same task differently. Ethan used a helpful term, 'proto-contemplative,' to describe practice where there was an aspiration towards depth. He perceived a growth in aspirational teaching that he considered extremely positive.

A significant part of Craig's (2010) interviews with Contemplative Fellows discussed implementing contemplative teaching, its reception, and impact. Fellows reported substantial changes in campus climate since 1997, with openness and understanding increasing.

6.8 Disciplinary Contexts (*Praxis 4*)

This section considers participant teaching in the contexts of academic disciplines and tries to further understand the substantial differences in use of pedagogies and practices that were revealed in the survey. Disciplines tend to use somewhat standardised teaching methods, for example, applied sciences have labs, arts and design courses have studio work, and professional courses have placements or internships of some kind. These 'signature pedagogies' (Chick et al., 2012; Gurung et al., 2009) help to transmit key 'threshold concepts' (Meyer & Land, 2003, 2005, 2006) vital to understanding the discipline and to taking on the identity of a practitioner. They help to inculcate the values and mores of the disciplinary community, according to Community of Practice Theory (Lave & Wenger, 1991). Sometimes bottlenecks (Middendorf & Pace, 2004) are experienced in moving through this space. (Also see Chapter 1).

While not using these terms, interview participants reported using contemplative methods to teach the capacities and concepts called for by their disciplines and to overcome teaching challenges in their fields. The application of contemplative teaching to meet these goals is illustrated below through the example of Design.

6.8.1 Design Pedagogy

Carol discussed at length the problem her Design students had in “navigating not-knowing.” The Design process required students to create something new, by definition, unknown. Many students found this unsettling, yet it was the core of the creative process. Similar challenges are revealed through an examination of pedagogical literature related to Design. For example, a five-year longitudinal study of 89 design students (Osmond & Tovey, 2015) identifies “toleration of design uncertainty” as a key threshold concept. The authors also reiterate the importance of the traditional signature pedagogies of studio teaching, and of “practical, embodied, and experiential ways of knowing.” In Design, instruction takes place in classrooms and studios, and is procedural, skills-based, embodied, and creative. Students work with clients on projects and critique their own and others’ designs.

A key conceptual framework is Design Thinking. As explained, the Stanford model includes iterative stages of empathise, define, ideate, prototype, and test (Stanford Design School, 2019). At each point, there is potentially a doorway to contemplative deepening. For example, the initial, ‘empathise’ stage of finding out what stakeholders want requires adopting beginner’s mind, dropping preconceptions, identifying assumptions, listening deeply, engaging in dialogue, and being open to change. The definition stage involves making clear, insightful, actionable statements that capture stakeholder needs. The ideate stage involves radical openness, thinking outside the box, and avoiding shutting creativity down by evaluating too soon. Prototyping involves ironing out bugs, while staying open to ideas. Testing involves empathetically connecting with stakeholders, taking on board their reactions, and sometimes, starting over. (See Table 6.4, below).

Table 6.4: Design signature pedagogies, threshold concepts, and potential teaching bottlenecks

Design Teaching: Threshold Concepts, Signature Pedagogies and Teaching Bottlenecks	
Theoretical Frameworks:	Design Thinking
Threshold Concepts:	Dealing with uncertainty, ambiguity, the unknown; critique; Design Thinking; moving back and forth between creativity and critique (for example in the Double Diamond)
Ways of Knowing:	Procedural, skills-based, aesthetic, embodied, sensory, affective, critical, creative
Setting:	Design studio, classroom
Pedagogies:	Designing to a brief; participating in public critique; use of sketchbook and journal; dialogue and discussion with teacher and students; engaging with a client
Potential Teaching Bottlenecks:	Navigating not knowing and ambiguity may lead to extreme stress; emotional anxiety about public critique

To enhance her Design teaching, Carol incorporated a range of reflective and affective activities. For example, to help students think critically and move back and forth between open acceptance of new ideas and their critical evaluation, she had them use the de Bono (1990) suite of thinking tools. These included the Six Thinking Hats, which are different lenses through which to view a situation (White Hat – information; Red Hat – emotion; Black Hat – devil’s advocate; Yellow Hat – positive aspects; Green Hat – creative; and Blue Hat – process). Usually, without realising it, we are stuck in Black Hat thinking, but need other modes as well, according to Carol.

To address affect, Carol used principles from Psychodrama (Gershoni, 2003), including “warming-up,” the idea that every activity needs to be prepared for and that attention to detail and setting create an atmosphere that fosters success. For example, in a potentially emotional debrief session, she seated students in a circle. To elicit their comments, rather than asking directly, she led them into it

gently, having them write a short comment on a post-it and stick it on the wall, walking in the space, feeling more comfortable in it. She then read from a post-it, asked for the author to explain more, and opened the idea up for discussion. She found that this process was more engaging, less threatening, and elicited deeper discussion. Another Psychodrama principle was using role play to discover a new response in yourself, and how spontaneity can be developed by having new responses to old situations.

The teaching bottleneck that most concerned Carol was student stress and lack of trust in the creative process. She tried to listen deeply to the concerns of students and to show compassion. She was interested in how mindfulness might aid students to cope with stress and anxiety. However, she also thought that structural issues needed to be addressed - particularly in view of general overwhelm and stress among staff as well as students.

6.8.2 Across the Disciplines

Examples of signature pedagogies, threshold concepts, and bottlenecks across the disciplines are summarised below in Table 6.5, below.

Table 6.5: Signature pedagogies, threshold concepts, and teaching bottleneck examples from across the disciplines, as reported by participants

Academic Discipline	Signature Pedagogy Examples	Threshold Concepts Examples	Teaching Bottlenecks Examples	Contemplative/ Reflective Methods Examples
Applied Theatre (Zain)	Co-created community performances often with marginalised groups such as aged or prisoners; Somatic exercises, e.g. Mirror hands	Embodied knowledge, letting go, reflection on practice, putting on and taking off roles	Interacting with community, 'disembodiment,' awareness of perspectives	Reflective journaling; somatic exercises; free-casting
Biology (Steven)	Lab work, lectures	Evolution, osmosis, transpiration, connection with natural world	Physical lab skills, anxiety, connection	Socratic questioning; getting alongside students; reflection on experiential exercises
Communication (Jeanne)	Reading, listening, writing, sensory activities	Finding your voice	Freeing up creativity	Music, movement, dance, light sabres
Design (Carol)	Studio work, Design Thinking, Double Diamond, Consulting with clients	Not knowing; moving between creativity and critique	Navigating not knowing, anxiety	Reflective journals, affective approaches to debriefs, dialogue

Academic Discipline	Signature Pedagogy Examples	Threshold Concepts Examples	Teaching Bottlenecks Examples	Contemplative/ Reflective Methods Examples
Education (Jon, Ben, Dennis)	Inquiry Learning, lectures, teaching practicum	Reflective practice, Identity as a teacher, authenticity	Stress, anxiety, learning from reflection, understanding young learners	Reflective journals; Hidden World of the learner activity
Management (Ethan, Peter)	Lectures, case studies	Management as research-based discipline	Ethical decisions, stewardship	Practical Wisdom (phronesis) engagement
Medicine (Phillip)	Lectures, internships, labs, demonstrations, case conference	Care; reflective practice, Ethical challenges, uncertainty, patient-centredness	Caring, compassion, resilience	Mindfulness and compassion interventions, reflective journaling
Nursing (Stephanie)	Lectures, internships, labs, demonstrations	Care, reflective practice, professional competencies	Caring, resilience	Mindfulness and compassion interventions
Nutrition (Linda)	Lectures, volunteering	Reflective practice, working with clients; public talks	Reflection, confidence, understanding why people make choices	Reflective journals, volunteering, interviewing clients
Occupational Therapy (Anna)	Lectures, demonstrations, practicum	Care, reflective practice	Reflecting, Caring	Mindfulness and compassion interventions, journals
Psychology (Clinical) (Diane)	Lectures, Reflective Learning, Internships	Reflective practice, uncertainty	Fear of not knowing	Ignorance workshops, reflective journaling, Socratic dialogue

Academic Discipline	Signature Pedagogy Examples	Threshold Concepts Examples	Teaching Bottlenecks Examples	Contemplative/ Reflective Methods Examples
Psychology (Culture) (Kiri)	Lectures, tutorials	Cultural understanding	Awareness of being a culture-bearer	Reflective journaling, dialogue
Psychology (Cognitive) (Emily)	Lectures, tutorials, lab work	Nature of attention and memory	Personal attention	Brief mindfulness exercise
Social Work (Rachael, Sophie)	Lectures, tutorials, role plays, reflective journals, practicum	Care, reflective practice, diversity, power relations	Diversity	Reflective journals, life story murals, people sculpts

6.9 Experiencing Implementation (*Reflexivity*)

In answering the research question that asked how they experienced the implementation of contemplative teaching, participants raised issues at all lamination levels (dimensions). They revealed aspects of their personal reflexivity regarding their pedagogical choices (intra-individual level). Considerations included content and available time (micro, inter-subjective). There were several questions about mindfulness involving macro and mega levels. These included instrumentalisation and commodification, potential misuse to mask structural injustices, decontextualisation, the relationship between Buddhist-derived mindfulness and other forms of contemplative education, ethics, and teacher qualifications.

6.9.1 Covering Content versus Deep Learning

One aspect of participant reflexivity regarded making and evaluating pedagogical choices about the amount of content to include. Diane, for example, disagreed with “the model of university teaching that says that you get a bunch of students in the room, and you give them a stockroom volume of information to stuff into their heads in 2 hours, because they won't remember it.” She went on to say, “The time that I have face-to-face with them is so short and so precious that I want to make sure that that time is well used, and that means there has to be time to think, they have to be able to process.” Not only did her Clinical Psychology students need time to process, they also needed time to connect with each other, and to build trust and safety in the environment. She explained:

When you're talking about psychologists learning to work as therapists, you meet yourself in ways that you don't necessarily expect. If they can share that learning, it's much more powerful. They cannot share that learning unless the environment is safe, therefore we put a lot of time and effort into creating a safe learning environment for them. (Diane, Clinical Psychology)

Student feedback, learning, and enjoyment were energising, and many participants seemed to have made a decision that learning should be enjoyable. Enthusiasm for teaching came through powerfully in the comments of Steven, who said he had “a passion” for his subject that was contagious, “... some students said that ... I’d got them excited about plants and now actually some of them were changing their major.” Anna’s Occupational Therapy students made comments like, “This is the first time at the end of a lecture that I have felt refreshed.” Ethan stressed the playful dimension of contemplative teaching. And in the words of Jon, “I’ve never had anybody come to me and go, ‘This stuff you do, it just doesn’t work, can you stop.’ I think they’re having too much fun.” Jeanne echoed this feeling,

Some people love it, absolutely love it, some people, even if they don't have some sort of breakthrough experience, they usually think it's fun and it's exhilarating and even you can see on their face that they're happy. (Jeanne, Communications)

6.9.2 Instrumentalisation of Mindfulness

The Buddhist participants were divided on how they felt about mindfulness in academic teaching. Peter felt strongly that an academic classroom was not a place to learn to meditate, and that interested students should join a sangha and learn the discipline of practice under a skilled teacher. He was very sceptical of mindfulness, believing it to be detached from ethics and instrumental, a view like that of Purser (2019). On the other hand, Don and Vanessa cited the Buddhist idea of ‘skilful means,’ which may be employed to bring people toward greater wisdom (Kabat-Zinn, 2011). This dichotomy of views reflects that in the literature.

Some participants saw a problem in detaching mindfulness from its spiritual and ethical roots. Traditionally, as Anna said, mindfulness was only one part of the Buddhist eight-fold path, practitioners were enveloped in a community and guided by teachers, and the goal was enlightenment. In Don’s words, “The context from which these techniques developed is a spiritual one, and it’s aimed at a kind of transcendence. It’s aimed at attaining some kind of enlightenment or awakening

or spiritual perfection.” He had resolved this conflict for himself by only teaching mindfulness in spiritual contexts.

Decontextualised mindfulness practices in themselves were simply mental training and could be used for any purpose, for example producing samurai warriors who were better killers, according to Emily, who was interested in research on connections between mindfulness and morality. The assumption that decontextualised mindfulness would naturally produce loving kindness and compassion was naive, although this seemed to be the assumption behind mindfulness interventions.

There was another tension in ‘using’ mindful approaches to reduce stress. Vanessa and Stephanie, on the one hand, thought it would be unethical not to share the benefits of mindfulness to reduce the suffering of others. In contrast, Peter questioned whether mindfulness performed for a goal was really mindfulness. He said, “I might be precious by saying that’s not why we practice mindfulness - for stress reduction ... But the problem is if you don’t draw the line somewhere something happens. It’s like Yoga - look what happens to Yoga now.” His decision was to keep mindfulness out of teaching.

6.9.3 Commodification of Mindfulness

Together with instrumentalisation went commodification. Stephanie, an MBSR teacher, joked that some mindfulness products should be labelled, “May contain traces of mindfulness.” Ben, also an MBSR teacher, lamented that the explosion of media coverage of mindfulness did not mean that people understood it. “And now it is just bandied about I think by people who don’t even know what it means. And that is a bit frightening, these are people who are offering mindfulness ...”

Some participants contrasted the buying and selling of mindfulness with mindfulness as Dharma - teaching that should be offered freely to reduce suffering. Richard commended prominent psychologists such as Rick Hansen and Russ Harris for trying to find a balance between earning a living and freely distributing

their knowledge. (Rick Hansen is a neuroscientist and writer of *Buddha's Brain* (Hanson & Mendius, 2009), and many other books and programmes. Russ Harris is a psychologist who both sells and provides freely many resources for Acceptance and Commitment Therapy (ACT) (R. Harris, 2011)).

Don noted that not only could you buy mindfulness itself, but also a whole host of mindfulness products ranging from colouring books to peanut butter. Mindfulness was part of the larger phenomenon of consumer spirituality (Carrette & King, 2005; Wilson, 2016). Don recounted how the sudden appearance of piles of mindfulness colouring books in shops had pushed one of his friends into becoming a researcher on mindfulness branding. Some participants thought however, that we should not dismiss products or practices that moved people, however slightly, towards greater balance or wellness. For example, Richard argued that mindfulness apps might be useful, and said that while mindfulness colouring books were products, they helped some of his therapy clients by “creating some space away from busy minds” The alternative to mindfulness interventions “was not full-blown spiritual practice - it was nothing,” he said.

Some thought that even questionable programmes might have positive side-effects. Ethan raised the idea of ‘aspirational mindfulness,’ saying he did not want to be overly critical, “There might be side-effects and people might get to know about things they’ve never heard about before, and I have heard of stories of people who completely changed their lifestyles.” Anna spoke about an idea she had heard from Shinzen Young, an American monk, who referred to “Mindfulness Light,” having some benefits in calmness and relaxation, whereas “Mindfulness Industrial Strength” has a real potential to radically transform your experience and to [produce] ... unconditional happiness.”

Some participants were philosophical about consumerism. In line with Wilson’s (2016) comment on the ubiquity of commodity in our society, Dennis commented about commercialised programmes, “They’re part of a bigger picture - is anything in the world not commercialised these days?” In the same vein, Don said, “I think as a scholar of Buddhism, a practitioner of Buddhism, for me these things are

neither right nor wrong nor good or bad; it just is what it is ... I mean, the way that it's functioning within a consumer society is interesting all by itself."

6.9.4 Masking Structural Injustice with Mindfulness

Some participants, including Emily, raised the possible danger of institutions running wellness programmes to make people more efficient instead of improving working conditions. Mindfulness might become prescriptive, with people being criticised for letting the company down by not being mindful enough. The growing role of mindfulness in medical education to reduce doctor stress might be a test case. An interesting question was whether mindful doctors would accept the status quo rather than advocating change to systems, as critics have charged occurs in corporations when problems are defined as the responsibility of the individual rather than the company (Purser, 2018).

According to Phillip, the reality on the ground was that doctors were struggling to simply survive, and whether systems changed or not, resilience and compassion were still needed by medical and health professionals in the short term. In the period following these interviews, however, medical professionals did become more political. Junior doctors and nurses took industrial action (Martin, 2019; Roy, 2018). Professional bodies began to acknowledge the need to prioritise personal wellness. However, on the face of it, official acknowledgement of wellness still seems to place responsibility on doctors. For example, The Physician's Oath was modified in 2017 to include the words, "I will attend to my own health, well-being, and abilities in order to provide care of the highest standard," (The World Medical Association, 2017, cited in Moir et al., 2018). Doctors may work under impossible conditions, and simultaneously be held personally responsible for their own wellbeing. Parallel attention to healthcare resourcing would seem to be needed.

The first of its kind in this country, a Compassion in Healthcare Conference was organised by the University of Auckland in 2019. The sold-out conference included talks citing evidence for the beneficial effects of compassionate care on patient

health, but speakers also called for changes to the system. For example, Robin Youngson included these words in his presentation.

While there are many compassionate health workers, our healthcare system is fundamentally incompatible with compassion and caring (for two reasons). 1. Our evidence-based medicine is based on a science that specifically excludes any effects of consciousness or relationship. We have hundreds of guidelines for the treatment of disease, none for care of the whole person. 2. We have industrialised healthcare so that hurried care and throughput is valued more than outcomes. It's a system that rushes to treat symptoms and not underlying causes... We need new healthcare organisations based on a fundamentally different philosophy (Youngson, 2019).

6.9.5 Buddhist and Secular Mindfulness

A tension regarding MBSR is that although it is technically possible for non-Buddhists to become MBSR teachers, trainees must participate in Vipassana retreats and practices. Experience in other forms of meditation does not count towards certification, and Buddhist terms and concepts might make mindfulness less accessible. Further, 'secular,' in MBSR, encompasses Buddhist practices such as loving kindness (*metta*), and reflection on Buddhist *gatha* (poems).

Participant mindfulness teachers including Ben, Vanessa, Anna, and Stephanie, drew on the original MBSR developed by Jon Kabat-Zinn, as well as on his teachings and publications. Ben, a non-Buddhist, had undergone MBSR training, but adapted it for his purposes. For example, in his course, rather than using the Buddhist terms, 'compassion' or 'loving kindness,' he used terminology from Inner Kids (Greenland, 2010). He said, "We talk about sending a friendly wish or sending a friendly thought." Ben did say, though, that Buddhist-derived methods seemed to be regarded as more acceptable in schools than Christian ones because they were considered non-dogmatic. When he began teaching mindfulness in schools, he anticipated objections from parents, but none had materialised.

Kabat-Zinn argues that his framing of mindfulness is entirely medical and secular, a universal principle like gravity, however he has also called it "universal dharma"

and a “glide path into the heart and essence of dharma wisdom” (Kabat-Zinn, 2017, p. 1130). So although MBSR has ostensibly been secularised, it still can come across as quite Buddhist, even as “stealth Buddhism” (Gunther-Brown, 2016). Kabat-Zinn counters that the Buddha himself was not a Buddhist.

MBSR was meant to be a potentially skilful and potent glide path into the heart and essence of dharma wisdom, a first exposure at least, and a direct first-person one at that, based entirely on practice and empirical investigation of one’s direct experience. But it was not, nor was it ever meant to be a vehicle for teaching Buddhism per se, disguised, “stealth,” or of any other variety. Still, it bears keeping in mind that Buddhism itself was and continues to be an evolutionary and historical development, and that the Buddha himself was, arguably, not a Buddhist (Kabat-Zinn, 2017, p. 1130).

Although the literature has so far only discussed this issue in relation to mindfulness, it may be a potential concern for other contemplative education practices.

6.9.6 Teachers of Mindfulness

All participants who taught mindfulness to students were themselves accredited mindfulness teachers, and aware of the need for training to be trauma-sensitive (Treleaven, 2018) and for instructors to be qualified (Crane, Kuyken, Hastings, Rothwell, & Williams, 2010). While there seemed little danger in short relaxation or focusing practices, even these could create a vulnerability and be triggering for some students. As Stephanie stressed, it was important to invite rather than require participation in mindfulness exercises, and to provide alternatives. Don reported knowing a new meditator who had a bad experience during a ten-day retreat. Ten days in silence with reduced food intake was a recipe for both altered states and for psychotic breaks. Don described intense meditation as “extreme sport ... you need to know what you’re getting into ... you wouldn’t think, ‘Triathlons are cool – I’m going to try one tomorrow.’”

6.9.7 Possibilities of Mindfulness

The increased accessibility of mindfulness and other contemplative practices in both secular and spiritual settings presented new possibilities for women, according to Stephanie. In traditional Buddhism, meditation was largely unavailable to women, she said. Further, even though traditionally a few women could become nuns, the structure of meditative systems catered to men. Now, she felt there was more opportunity to acknowledge female models of mindful awareness, for example in motherhood. There was considerable potential for mindful feminist approaches. Studies also argue that mindfulness and Yoga are effective in feminist teaching, helping to identify and unlearn embodied oppression (Berila, 2014, 2015). A recent issue of the Buddhist magazine, the Arrow, is devoted to the need for embodiment and acknowledgment of lineage in teaching about race (Blackwell, 2019).

6.10 Meaningfulness (*Spirituality, Re-enchantment*)

The next moment of the dialectic asserts the meaningfulness of life. Through their incorporation of contemplative education, participants reaffirmed the meaningfulness of higher education and of life. By teaching with presence, they affirmed the value of each moment. By being attentive, listening deeply, and being engaged, they validated each student. For some participants, contemplative teaching seemed to be a kind of re-enchantment of the academic space – a way of including connection, wholeness, and authenticity – and for many, also of transcendence that included spirituality.

How far contemplative education brings spirituality into academia is, however, an open question. Spirituality and enchantment seem to be evolving and contested terms. In the literature review, other avenues of ‘re-enchantment’ were raised, for example, through literature and craft (Landy & Saler, 2009). The Buddhist-derived practices in mindfulness seem to be largely secular, and Western Buddhism itself has left behind cosmologies and liturgies to focus instead on meditation and happiness. Spirituality is taking on scientific nuances from quantum physics and

cosmology. The question is complex, the use of the term, 'spiritual,' often denotes a search for meaningfulness, wholeness, or self-transcendence in an entirely non-deist, secular sense (S. Harris, 2014).

Further, most interviewees taught contemplatively using disciplinary frames not readily identifiable as contemplative, for example, reflectivity (Diane), Practical Wisdom (Ethan), social justice (Zain, Rachael), or co-creative inquiry (Sophie). Their contemplative teaching took place "under the radar," according to Sophie. Most interviewees were not part of a movement or a contemplative teaching community – they worked in relative isolation. Even mindfulness, although gaining acceptability, was still considered "flaky" by many colleagues, according to Stephanie. Some interviewees, such as Sophie and Jeanne, expressed enthusiasm for this research project because they hoped it might help to make contemplative teaching more visible.

Most participants were very careful to frame their contemplative teaching in entirely secular ways, even (perhaps especially) Don, who taught Religious Studies, "When I'm lecturing, I'm always conscious of the fact that it's directed towards conveying information to students in a critical, historical, and philosophical way ... and I don't talk about my own spiritual orientation when I'm in the classroom." Religious Studies as a discipline had gone through a long fight for academic acceptance – it had to be self-consciously objective and critical. This stance contrasted with that of Religious Studies educators who run meditation 'labs' alongside religious studies classes (Roth, 2006). In these, students experience forms of meditation and other practices from the different religions they are studying in class.

In Communications classes, Jeanne felt she generally had to avoid any reference to spirituality in her teaching, although her framework was holistic. She replaced the word, 'spirit,' with 'consciousness' or 'existential meaning.' In Psychology, Kiri lamented the "dearth" of spirituality. The existence of spirituality was largely ignored, surprisingly, because even if you did not believe in it, it was surely a large factor in human psychology. "We have just a complete lack of understanding in

Psychology about the importance of spirituality. It is rarely ever incorporated into undergraduate or postgraduate or professional training programmes,” she said. In her teaching specialty, culture, spirituality was central, and she did address it in her classes. When asked if she thought there was a spiritual aspect in the mindfulness approaches being introduced into Psychology, Kiri replied that they rather seemed to be done in a “materialistic, reductionist way that is exclusive of this other aspect of spirituality, which might relate to the meaning of life, the purpose in life, connection with something greater, and with a sense of transcendence.” Perhaps lending support to Kiri’s point, Sophie said of spirituality in academia, “we are almost underground ...”

This was also a theme in both Duerr et al. (2003) and Craig (2010), where significant numbers of participants felt constrained in discussing spirituality. Craig’s participants framed contemplative practice “in academic terms” (p. 81), such as “stress management” or “epistemology.” They said it had to be translated for different disciplines, for example, ‘meditation’ became “making connections” or “holistic approaches,” depending on the context. In Social Science, participants framed practice as a way of fostering attention and other cognitive skills, or a way to combat societal greed and abuse of power. In professions such as law, they framed it as reflection and self-care. Speaking to students, they used terms such as “unplugging” to “listen to your own voice,” and they respected student boundaries (p. 85).

On the other hand, there were pockets of explicit spirituality in the universities. For example, Anna reported that Occupational Therapy uses an internationally accepted model that “has spirituality as the centre of the human being.” Spirituality was intrinsic to Māori and Pasifika approaches used by Rachael and Kiri. And most of the participants taught contemplatively out of their own spirituality, even though this teaching was framed as secular. And, while all participants thought that it would be unethical to proselytise any view, that did not mean living inauthentic or divided lives. In the words of Steven, “I view myself as a whole person, not a dichotomized one where I’m doing something secular and therefore my spirituality can’t go there with me, but in fact it’s part of who I am.”

6.11 Unity (*Non-Duality*)

The final moment of the dialectic is unity, or non-dual realisation “that at the level of fundamental possibility everything is implicitly contained within everything else ... From there it is but a short step to ... view everything in the universe as enchanted and as ‘in the process of becoming one with its ground-state’” (Hartwig, 2015, p. 3). Mystics and meditators throughout history have tried to experience awareness of non-duality, but according to Bhaskar, everything is always already non-dual, transcendent, and “co-present,” and if we were not already connected at some level, we would not be capable of connection (J. Morgan, 2003). In metaReality, spirituality is an intrinsic part of human beings and may or may not involve a deity – it is ‘in-the-world spiritualism,’ or ‘practical mysticism.’

Many participants personally seemed to draw on non-dual understandings, however, the interviews did not address the question of non-duality. The question remains open whether mindfulness is the “secular hack of non-duality,” described by Arat (2017), or the “glide path to awakening,” proposed by Kabat-Zinn (2017). According to Hartwig (2015), for emancipation of the human being to be possible in CR, non-duality was logically necessary. Bhaskar began with Rousseau’s problem – why is mankind free yet everywhere in chains? Was unsatisfactoriness baked into humanity or was a better state possible? The stance taken by Critical Realism and possibly by some participants is to hope for a better state and in the meantime, work to bring it into being.

6.12 Conclusion

This chapter has reported the findings of the intensive interview phase. In doing so, it has identified many areas of convergence with the literature, including use of contemplative pedagogy and practice to address the problems first raised in the literature review: connection with nature (awareness of being part of nature, sustainable action); connection with others (relationships, compassion, ethics, engaged action); connection with self (wellness, cognition); and connection with the capacity for self-transcendence (transformation, spirituality). The chapter has

identified conceptual framings within which participants taught contemplatively and described many of the pedagogies and practices that they used. Initial discussion has been included of how contemplative methods were integrated in signature pedagogies of disciplines. The chapter has been structured under headings from the moments of the MELDARZ/A dialectic to focus on participant praxis and reflexivity. The following chapter interprets the whole research project together and considers how the literature, survey, and interviews work together to answer the research questions.

7

INTERPRETATION AND DISCUSSION

We cannot transform the behaviour of systems unless we transform the quality of attention that people apply to their actions within those systems, both individually and collectively. (Scharmer & Kaufer, 2013, p. 19)

7.1 Introduction

This study investigated contemplative education at universities in *Aotearoa* New Zealand, looking across the disciplines to better understand its character, extent, context, purpose, and emergence. This chapter reports the final stage of the Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED). This includes the interpretation phase of the Mixed Methods Sequential Explanatory (MMSE)

design, in which the findings of the second stage help to explain the results of the first, and the final stages of the Critical Realist Explanatory Framework, in which inferences are made to causal tendencies (Chapter 4).

Based on the literature review, initial theories about possible use of contemplative teaching and mindfulness in New Zealand universities were formed and a survey was developed. This initial, extensive survey phase ($n = 258$) was successful in locating contemplative educators across the disciplines in universities throughout New Zealand. Through it, participant beliefs, motivations, aims, experiences, and use of pedagogy and practice were explored. The survey raised questions that required further explanation and extended an invitation to potential participants for the second, intensive interview phase of the research ($n = 22$). Participants from several disciplines were interviewed. This chapter considers how the extensive and intensive research phases worked together to answer the research questions. The stages of the research and what each accomplished in terms of the six-stage Explanatory Framework (Chapters 2 and 4) is summarised below, in Table 7.1.

Table 7.1: *Methods, key findings, and stages of explanatory framework (adapted from Zachariadis, 2013, p. 868)*

Method	Key Findings	Assessment and Next Steps	Explanatory Framework Stage
Literature Review	Identified problems discussed in higher education and society; identified researched effects of contemplative pedagogy and practice; reviewed analyses of problems; developed theories about the emergence and potential benefits of contemplative education	Shaped the survey design and provided preliminary theorisations and a model	Description, preliminary Abduction and Retroduction
Survey	Elicited responses from across the disciplines; identified demi-regularities including differences in use of contemplative methods by academic discipline and gender; received responses to interview invitations	Began to answer the research questions, confirmed the relevance of the survey questions and theorisations derived from the literature, but refined these; provided input to shape the interview guide; invited interviewees	Description, Analytic Resolution, Abduction, Retroduction, Comparison
Interviews	Showed in more depth the use of contemplative education: as CI and MBIs; as emerging from and embedded in extant theoretical frameworks and disciplinary pedagogies. Explored experiences of educators, finding these consistent with explanations of emergence previously theorised, and fleshed these out.	Explored the questions in more depth and in specific contexts; allowed preliminary comparison and contextualisation in disciplines; confirmed some theorisations and refined and extended others.	Description, Analytic Resolution, Abduction, Retroduction, Comparison, Concretisation

The overall research question was: What is the character, extent, context, and purpose of contemplative education across the disciplines in *Aotearoa* New Zealand, and what factors have contributed to its emergence? Below, the chapter discusses each sub-question, in turn.

7.2 Educators who Teach Contemplatively

Research Sub-Question 1: Which university educators use contemplative pedagogies and practices?

University educators teaching contemplatively were identified through the survey, which also contained an interview invitation. Strikingly, responses were elicited from educators in all demographic and teaching categories. The inference is that contemplative teaching may have something to offer to diverse types of people in varied academic disciplines and roles. However, it is enacted and adapted differently by different individuals in different situations.

While found in every demographic grouping, survey respondents differed from the overall population of New Zealand university educators in that a greater proportion were female, more were in older age groups, and fewer were of Asian ethnicity. Several possible factors could account for the imbalance in gender. Perhaps it is simply that a higher proportion of contemplatives, in general, are female, as the literature reports (Wilson, 2014). Another possibility is that the imbalance is related to a greater representation of women in professions that seem to have resonance with contemplative teaching, such as Education, Social Work, Veterinary Studies, and some areas of Medical and Health Sciences. Another interesting possibility raised in the interviews is that modern mindfulness presents an opportunity for women to participate more fully in contemplative practice than traditional religion allows, because traditional meditation is tailored for the needs of men. In addition, it may be said that traditional contemplative practice is designed for monks and nuns, while secular mindfulness in daily life provides opportunities for the laity, both male and female.

Regarding the greater numbers of respondents in older age groups, historical studies point to the influence of Eastern meditation on people growing up in the 1970s (McMahan, 2008; Wilson, 2014). Another possibility is that people in older groups are more likely to have a foundation in traditional Christian religious practice, including contemplation. A further factor is that, according to interview participants, it was easier for educators well-established in their careers to adopt methods regarded by the university as alternative, than it was for younger staff. The lower proportions of Asian respondents may reflect the unease expressed by some Buddhist writers (Purser & Milillo, 2014), about how practices originating in Asian religions have been secularised and incorporated in mindfulness interventions. Possibly secularised mindfulness practice is redundant to many ethnic Buddhists. On the other hand, it may simply be that many Asian academics are in fields such as Business Studies, where fewer survey responses were elicited.

About half of the respondents reported identifying as spiritual, as did most interviewees. Many identified with more than one religion or spirituality, and several interviewees reported changing religions. This phenomenon is reflected in the literature, which points to a decline in traditional religious adherence alongside a human need for spiritual connection (Landy & Saler, 2009). These two forces are argued to produce attempts to achieve meaningfulness and connection, both through new religions, and through secular and non-traditional kinds of 're-enchantment.' They also result in a greater need to make reflexive choices about secularity and spirituality (Gorski, 2016), resulting in either functional meta-reflexivity, or dysfunctional fractured reflexivity (Maccarini, 2013).

The questions about spirituality also revealed definitions ranging from traditional, to non-dogmatic, to secular meanings focusing on connection. This range reflects changes in the meaning of this term in the wider society (S. Harris, 2014). In New Zealand, aspects of Māori culture, inclusive of spirituality (both Indigenous and Christian), are incorporated in academia as part of honouring the Treaty of Waitangi. Some survey respondents either questioned why other spiritualities were not welcome in the same way or alternatively, argued that education should be entirely secular. Several interviewees lamented what they felt was a lack of

acceptance of spiritual aspects of the human being in academia. One argued that it was not possible to understand human psychology without understanding spirituality, and that spirituality should be regarded as a fundamental part of the field of Psychology, regardless of a Psychologist's personal beliefs. Except for educators working within explicitly holistic paradigms such as Occupational Therapy, all survey respondents and interview participants reported teaching contemplatively in an entirely secular manner.

A substantial number of participants described themselves as Buddhist, and a few of these objected to what they saw as the instrumentalisation and denaturing of mindfulness. Similar views are expressed by Purser (2018), for example. Other participants, in the same manner as Gunther-Brown (2016), wondered if it was possible to separate mindfulness from Buddhism. Some noted the hegemony of Buddhist mindfulness in MBSR teacher training, commenting that other wisdom traditions also had deep meditative approaches. In contrast, approaches from non-Buddhist traditions seem to be a more usual part of Contemplative Inquiry, or classroom teaching (Barbezat & Bush, 2013; Gunnlaugson et al., 2014; Keator, 2017; Lin et al., 2013). Methods from other spiritual traditions include, for example, *lectio divina* from Christianity, and the circle process from Indigenous traditions.

Respondents and participants using contemplative methods were found across the disciplines. In keeping with the literature (Ergas & Hadar, 2019), they were broadly divided into two groups: Contemplative Inquiry (CI), taking place as class pedagogy; and Mindfulness Based Interventions (MBIs), taking place either parallel to class teaching to augment professional education, or in entirely separate interventions run by student counselling or health services. More CI took place among Social Sciences, Humanities, and Education participants, while MBIs were important in professional education, including Medicine, Nursing, and Education.

7.3 Why Educators Teach Contemplatively

Research Sub-Question 2: What aims do university educators have for adopting contemplative pedagogies and practices and what are the influences on their decisions?

Participants taught contemplatively and reflectively first, because this kind of teaching flowed naturally from who they were (Palmer et al., 2010). Many had been unaware of a formal ‘contemplative’ framing of teaching. Survey respondents reported having had experiences and trainings related to contemplative teaching ranging from visualisation for goal setting, to studying Greek philosophy. Mindfulness, Yoga, and Buddhist and Christian meditation were frequently mentioned. Some had been trained as teachers of MBSR or similar interventions. Most drew on practices from a range of origins, but a few drew solely on Buddhism or Christianity.

Aims for incorporating contemplative methodologies were addressed in several survey items. The highest number of respondents reported targeting critical thinking, then focus, creativity, physical/sensory awareness, diversity teaching, and finally listening and dialogue. Survey respondents who were contemplative practitioners highly rated the motivations of fostering creativity, transformation, and focus. They rated moderately the motivations of inspiring activism, reducing stress, and fostering connection to nature.

Discussions with interviewees shed light on how motivations might change in importance depending upon the context. For example, if faced with a class of 300 first year students who appeared distracted by their cell-phones, a lecturer might prioritise attention. When teaching a small class of professional students, the same lecturer might prioritise reflective practice and ethical engagement. In professions where high stress and burnout were important, such as Medicine and Education, participants would prioritise reducing stress and increasing wellbeing, perhaps through MBIs. In areas such as Social Work and Applied Theatre, where social justice was an important aim, participants prioritised critical reflective tasks.

Interviewees also highlighted two motivations not foregrounded in the survey items, namely, compassion and ethics. Fostering the compassion necessary for physicians was a strong motivator for medical educators, who were described as dealing with “a crisis” because of physician shortages, workload, stress, and burnout. In Management, ethical engagement was a primary motivator for

interviewees concerned with developing leaders who would make wise decisions in the context of climate change and global inequity. Table 7.2, below, integrates survey data and indicative interview comments about aims for teaching.

Table 7.2: Aims of survey respondents and interview participants for contemplative teaching

Aims:	Survey* Mdn (1-5)	Survey** (%)	Interview Comment
WELLNESS:			
Stress reduction	3	NA	“... they shared their stress and exhaustion ... and... we kind of sagged into it ... And I said just ... come to yourself and follow your breathing ... and feel grounded...” (Sophie, Social Work)
COGNITION:			
Attention/ Focus	4	81.4%	“[we used] ... breath focus and <i>karakia</i> , ... the wind representing each of us coming in to focus together on what we were learning” (Ben, Teacher Education).
Critical thinking	4	84.1%	“[I use a] ... a series of questions and provocations that help bring about a deeper engagement...” (Zain, Applied Theatre).
Creativity	4	NA	“When you’re trying to create something from nothing ... it triggers that fight, flight or fear response ... I have to reveal that the creative process in itself means that we can’t be at ease and we can’t be totally comfortable” (Carol, Design).
Physical/ Sensory (Embodied)	NA	75.2%	“The shift into felt sense is like perceiving atmospheric qualities. So sometimes I invite students to ... just be bodily aware of where you are? ... How are you attuned or not?” (Ethan, Management).
CONNECTION:			
Nature	3	NA	“[They needed to see] beauty, to take time and moments of reflection in nature ... This is very, very basic and essential” (Ethan, Management).

Aims:	Survey* Mdn (1-5)	Survey** (%)	Interview Comment
Others (Listening, Dialogue)	NA	57.0%	“[The work of nurses is about] ... being with patients, families ... in lives that include suffering, bearing witness to suffering” (Stephanie, Nursing).
Compassion	NA	NA	There is a crisis of compassion in medicine. I don't mean to exaggerate but looking at the data we can see a high incidence of fatigue, and along with that goes compassion fatigue. And burnout “(Phillip, Medicine).
Ethics (Diversity)	NA	57.4%	“I very much see the practice of my meditation as having a spiritual component to it ... a certain set of ethical ideals of compassion and loving kindness ... “ (Don, Religious Studies).
Action	3	NA	So how to teach students ... to bring forth the world as opposed to destroying it?” (Sophie, Social Work).
TRANSFORMATION			
Self-transcendence	4	NA	“There's a quote by Kabat-Zinn which talks about mindfulness being the long slow work of bucketing out a pond... it's the work of a moment and the work of a lifetime” (Vanessa, Teaching and Learning).
<p>Note: NA = There was no corresponding survey item. Note*: Survey item asked how important each aim was. Likert-type answer 1 (least important) to 5 (most important) Note **: Percent of respondents who reported using teaching methods targeting this aim</p>			

7.4 How Educators Frame and Use Contemplative Methods

Research Sub-Question 3: How do university educators use and conceptualise contemplative pedagogy and practice?

7.4.1 Conceptual Framing

The most important broad framings of contemplative education were as Mindfulness-Based Interventions (MBIs) taking place outside of classrooms on the one hand, and various forms of Contemplative Inquiry (CI) taking place through

class teaching, on the other. The primary focus of participants teaching in these two categories differed in the same way as did that of educators in the literature. MBI educators were most concerned with resilience, compassion, and wellbeing (Schonert-Reichl & Roeser, 2016), while CI educators in this study and in the literature were concerned with criticality, reflective practice, creativity, and inter-subjectivity (Barbezat & Bush, 2013; Gunnlaugson et al., 2014). However, these goals were inter-related, and for professional educators, were inseparable. Wellbeing supported learning and professional practice.

Within MBI, the versions taught by participants had been adapted for New Zealand schools in the form of *Pause Breathe Smile* (Rix & Bernay, 2014), and for emerging adults, in the form of *Koru Mindfulness* (Greeson, Juberg, Maytan, James, & Rogers, 2014; Rogers, 2013). Compassion was highlighted in Medical education interventions. Another means of addressing wellbeing reported by participants was through neuro-scientifically informed contemplative psychotherapy (Hanson & Mendius, 2009). Those participants accredited as mindfulness teachers generally taught mindfulness outside of content classes, and within their classes, included only short practices such as relaxation breathing before a test.

Within the category of class teaching, or Contemplative Inquiry, the most important framing by an overwhelming margin, both in the survey and interview data, was Reflective Practice. This involved professional practice in a range of disciplines including Medicine, Psychology, Nursing, Teaching, and Social Work. Reflectivity was also intrinsic to critical social justice teaching, for example, in Social Work and Applied Theatre, and as part of the creative process in courses such as Design and Communications. Reflectivity is also foregrounded in the literature about academic teaching and professional practice (Barnard & Ryan, 2017; Brookfield, 1995; Church, 2017; Fielden, 2005; Grushka, McLeod, & Reynolds, 2005; Hargreaves, 2016; Harshman, 2017). Reflection thus acts as a doorway to contemplative practice. By creating vulnerability and openness, it may engender deeper insights.

Participants observed that despite their best intentions, student reflection could take place on a continuum, moving from a tick-the-box exercise to deep engagement and insight. One end of the continuum could include simply thinking about something - moving along, there could be deep interrogation of one's own assumptions and openness to perspectives - and at the continuum's other end, perhaps mindful awareness of the inner mental emotional landscape. Further, the same reflective exercise, conducted by the same teacher, could be superficial one day, reflective on another, and deeply contemplative on a third. Ethan's terms, 'proto-contemplative,' and 'aspirational mindfulness' are useful in thinking about these variations in manifestation.

In this context, the work of John Miller (2014) is helpful because it deals with the movement from reflection to contemplation. What may be missing in Reflective Practice is Presence, he says (p. 23). Reflection-in-action already improves professional practice by moving beyond Technical Rationality to a state where "[p]ractice and theory are interwoven in a dialectical process of framing the problem and on-the-spot experimenting in a reflective conversation with the unique situation at hand" (p. 25). However, if we add Presence to the picture, another depth is invoked, he goes on to say. "From the perspective of Presence, there is a synthesis of theory/practice and duality disappears. Theory and practice are experienced as a unity" (25). This unity is accessed through contemplative practice and may be cultivated by a "meditative stance" involving openness, release, being not doing, acceptance, and seeing meditation "as a grace or gift" (p. 35).

Phenomenologically, Presence is experienced as unmediated awareness ... characterised by openness, by a sense of relatedness, and by awe and wonder ... duality drops away, and as teachers, we see part of ourselves in our students. At the deepest level, we may experience brief moments of communion with our students. (Miller, 2014, p. 26)

Most participants used extant theoretical frameworks to incorporate contemplative teaching. Some were unaware of the emergence of a 'Contemplative Education' philosophy, but nevertheless taught contemplatively. In addition to

Reflective Practice, other frames that participants referred to and that were also found in the literature, included: Transformative Learning (Zajonc, 2006a); Teacher Inquiry (Darling-Hammond & Oakes, 2019; Michael Ryan et al., 2017); Practical Wisdom (phronesis) (Pitman & Kinsella, 2012; Ramsey, 2014); Socratic teaching (Chesters, 2012; Küpers & Pauleen, 2013; Saarinen & Lehti, 2014); Design Thinking (T. Brown, 2008); 6 Hats (de Bono, 1990); and Communicative Language Teaching (Hymes, 1972). In keeping with the literature, many framings particularly emphasised holistic approaches. These included Spiritual (Simmer-Brown & Grace, 2011); Integral (Esbjörn-Hargens et al., 2010; Ferrer, Romero, & Albareda, 2005; Gidley, 2007); Indigenous (R. Bishop, 1999; Brantmeier et al., 2010); and Whole-Person Learning (Illeris, 2009). Occupational Therapy was reported to have an explicitly holistic framework (Occupational Therapy Board of New Zealand, 2015). Feminist contemplative framings appeared in Nursing Studies, and also appear as teaching frameworks in published studies (Berila, 2014; Gray, Coates, Yellow Bird, & Hetherington, 2013; Masuda, 2014; Thompson, 2018). In teacher training, Māori holistic frameworks were part of the New Zealand curriculum and embedded in mindfulness interventions (Mental Health Foundation, 2012). Māori and Pasifika cultural framings were also important in Psychology (Pitama et al., 2017). Social Work was said to incorporate holistic approaches through Māori cultural framings (Gray et al., 2013), diversity teaching, anti-racism teaching (Rendón, 2009), and Freirean social justice work (hooks, 1994). Like interviewees, survey respondents rated holistic teaching and reflectivity as extremely important to their teaching.

7.4.2 Pedagogy

Within these conceptual framings held by participants, common contemplative elements included pausing, leaving wait-time, being silent, listening, dialogue, reflection, meditation, experiential activities, and physical and sensory practices. These elements were reported by participants to foster openness to new ideas, openness to others, perspective taking, identification of assumptions, and tolerance of ambiguity. They also allowed inquiring within to explore meaning, and to seek ethical alignment.

Academic discipline was a strong factor in influencing the ways the educators in this study taught contemplatively. Across disciplines, contemplative pedagogies were most often incorporated within existing teaching methods, rather than as stand-alone activities. Contemplative methods enhanced signature pedagogies (Chick et al., 2012; Crowther, 2013; Gurung et al., 2009) and were used to more effectively target threshold concepts (Meyer & Land, 2006).

Survey analysis showed different disciplinary profiles in the use by respondents of methods involving critical thinking, attention, diversity teaching, reading and writing, speaking and listening, and physical or sensory activities. The interviews explained some data provided by the survey. For example, large numbers of survey respondents reported that they used labs in a reflective or contemplative manner, and the interviews helped to explain what they might have meant by this. Steven, for example, reported using an approach to train Biology lab supervisors that now involved his whole department. This used empathy and questioning to get alongside students and assist them as needed. His questions were designed so that students always knew the answers and were scaffolded to produce insights and build confidence. Some suggestions were also found in the literature, for example, where Michelle Francl (2016) reports having students pause upon entering a Chemistry lab, and become aware of the environment including its hazards and possibilities before taking their place at a table. She also has students ponder the meaning and implications of diagrams and experiments before studying content about them.

In another example, reflectivity was reported as being very important by both survey participants and interviewees. For example, Diane provided insights into how the Reflective Practitioner model (Schön, 1983, 1987) might be deepened. Her Clinical Psychology classes formed tight cohorts and trust was built through activities and dialogue. Students kept private journals in which they used reflective cycles to consider their professional practice and chose entries for sharing with the lecturer and others. Reflective questions and tasks were built into all stages of the course materials, provoking reconsideration of assumptions and opening to other perspectives. Practitioner lack of knowledge was faced head-on through Ignorance

Workshops (Kerwin, 2016), in which visiting experts talked about what they did not know. Students were schooled in developing questions, and in acknowledging that they knew about only a tiny slice of their client's lives.

Reflective practice also provided the opportunity to grapple with ethical questions. Contemplative practices including mindfulness enhanced the ability to reflect in participant courses including Teacher Education, Medicine, and Nursing, for example. This interconnection of ethics and professionalism may partly answer criticisms that mindfulness has been detached from its ethical foundations in Buddhism (Forbes, 2019). While this may be true, mindfulness is now being placed within new ethical frameworks in professional education, and these may be robust guides to decisions and behaviour.

7.5 How Educators Experience Contemplative Teaching

Research Sub-Question 4: How do university educators experience the implementation of contemplative teaching?

The next research question asked about educator experience of implementing contemplative teaching. Survey and interview participants reported experiencing little support or hindrance in their teaching. Some participants said their work as contemplatives was largely invisible. Potential critics or supporters were possibly unaware that framings such as Practical Wisdom or critical social justice teaching involved deep inner reflection, for example.

Interviewees teaching MBIs found support in some areas of the university, but also used caution, given concerns about commercialisation of mindfulness, the role of Buddhist practice within it, critiques of research, and potential for harm as reported in the 'dark night' studies (Lindahl et al., 2017). When incorporating brief practices within class teaching, participants stressed the need to be 'invitational,' to offer alternatives, and to focus on evidence-based benefits. In the same manner, Craig's (2010) Contemplative Practice Fellows stressed the importance of 'academic' framing.

Participant praxis and reflexivity are highlighted in Chapter 6, which is structured according to the stages of the Critical Realist dialectic, and discusses the situation as it was for participants, the problems and opportunities they perceived, their decisions to incorporate contemplative pedagogies and practices, and their reflexivity about this practice. The chapter reports how participants fostered meaningfulness, connection, and transformation through praxis. Participants incorporated contemplative methods in response to problems they discerned, such as stress and lack of attention, and from a desire to foster deeper reflection, action, and transformation.

Participants talked about the way that contemplative teaching fostered wholeness and an undivided life. Similarly, the most important effect of contemplative teaching reported in Craig's (2010) study of contemplative Fellows was the integration of personal and public lives. This was also important in Duerr et al. (2003).

The invisibility of research participants and lack of support networks involving contemplative pedagogy perhaps should not have been a surprising finding, given the initial difficulty experienced in this study in identifying contemplative educators. Few were part of any kind of support system and few worked with like-minded colleagues. Many were unaware of the existence of other contemplative educators. Duerr et al. (2003) and Craig (2010) also noted the isolation of some educators. The participants in Craig's study stressed the value of the support they were receiving from the Contemplative Practice Fellowship programme. In their mapping study, Ergas and Hadar (2019) also note that the mindful educators they found in higher education tended to work in isolation. Their view is that mindfulness as education is potentially profound, but rare, and likely to remain so:

... The examples of contemplative pedagogy we came across ... were heavily dependent on lecturers and teachers that were themselves grounded in mindfulness practice and were highly committed activist educators. It is a pattern that is characterised by a grassroots movement that depends on the drive and charisma of these individuals. This inevitably makes mindfulness as education a more unique phenomenon that is unlikely to 'scale up.' (Ergas & Hadar, 2019, p. 32)

Certainly, in New Zealand, communities of practice seem to revolve around mindfulness rather than contemplative pedagogy, although there is some overlap. The Mindfulness Interest Group at AUT University, for example, was active for several years, holding weekly mindfulness practice sessions and yearly mini conferences. A community of practice is forming among medical educators and psychologists who use mindfulness interventions – the inaugural Compassion in Medicine Conference held in 2019 at the University of Auckland, previous symposiums at University of Otago, and several recent masters' and doctoral theses in Psychology are perhaps evidence of this. Mindfulness is now offered in many New Zealand schools and perhaps a community of practice is forming around primary and secondary educators. The 'Mindfulness for Change Group' (<https://www.mindfulnessforchange.co.nz/>), made up of mindfulness teachers and researchers, was recently formed around an interest in advocacy. Universities, like other workplaces, are becoming more aware of the need to factor in staff and student wellbeing to learning and teaching. Mindfulness interventions (mindfulness *in* education) may have a clear future.

In the area of classroom pedagogy (mindfulness *as* education), contemplative teaching networks remain somewhat elusive. The Teaching Circles found on some campuses, and Tertiary Education Research in New Zealand (TERNZ) groups and conferences, however, seem open to any approaches that enhance teaching and learning, and could potentially become an avenue for the development of contemplative education.

7.6 Factors Influencing Emergence and Enactment

Research Sub-Question 5: How do contextual factors (institutional, social, economic, political, religious, cultural, and historical) influence the emergence and implementation of contemplative teaching?

The final research question asked what wider contextual factors had influenced the emergence of contemplative education. This question demanded inference. The following discussion continues the iceberg metaphor (Scharmer & Kaufer, 2013)

introduced in Chapter 3 to illustrate an analysis of world problems and then adapted to provide an organising frame for the literature. The adapted model (Table 3.3), applied to the case of contemplative education, presented four overarching disconnects visible at the Empirical level: with nature, with people, with self, and with the capacity for self-transcendence. These are manifest in the stratum of the Actual, varying in different contexts, disciplines, roles, and university settings. Beneath this, at the level of the Real, the mismatches that act as causal tendencies, were identified. These include consumption beyond limits; prioritising of individual needs over collective; overloads of information, busyness, and choice over capacity; and lack of ability to find meaning in an alienating world, alongside a need for meaning and purpose. The figure also suggested that contemplative practice could affect this deep level of mismatch by helping practitioners to reconnect with a ground state, termed, 'Source.'

Figure 7.1, below, is refocused to highlight the operation of causal tendencies. Thus, the arrows indicate that mismatches at the Real level give rise to disconnects in Empirical and Actual levels. Arrows from the level of Source indicate that connection and re-grounding may enact healing of mismatches.

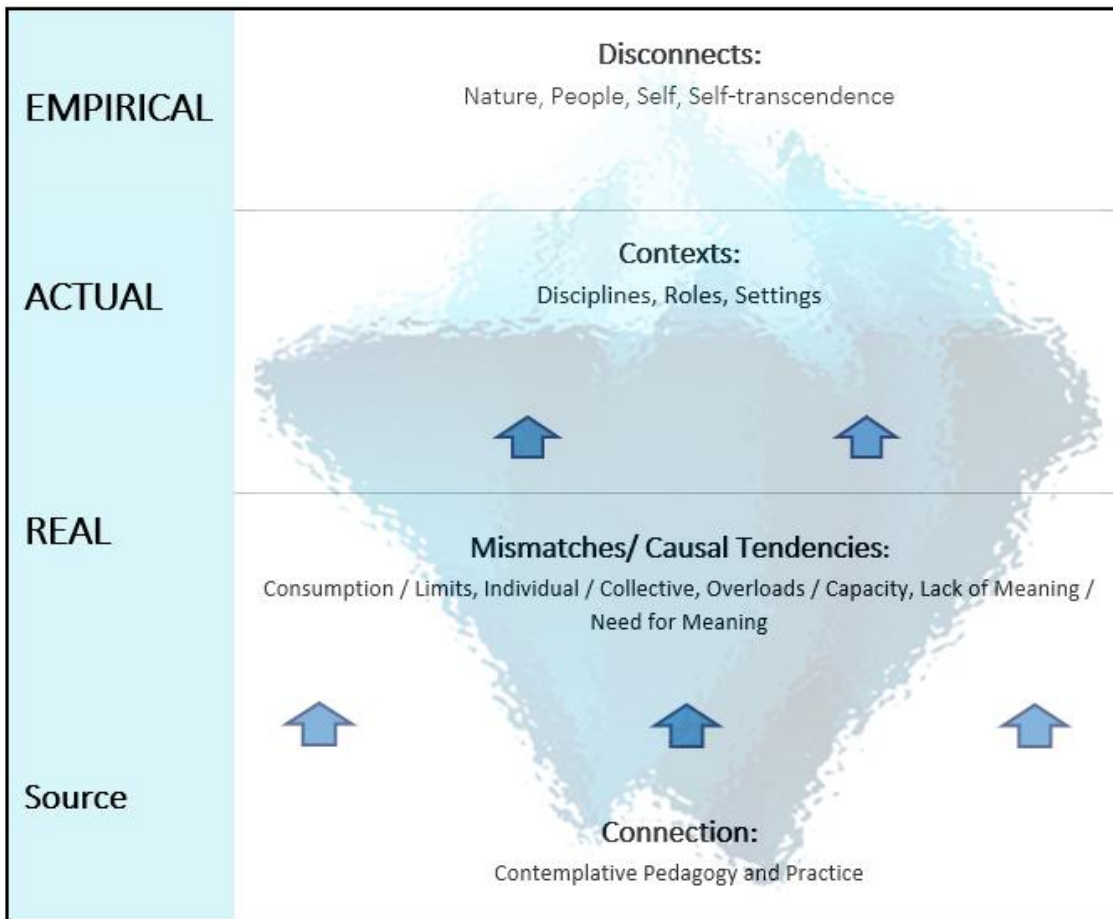


Figure 7.1: Disconnects, contexts, causal tendencies, and re-connection in the strata of the Empirical, Actual, Real and Source

Figure 7.1 thus summarises possible causes for the emergence of contemplative education. One goal of Critical Realist research is to identify causal tendencies. Maxwell (2004) explains that causation is not conceptualised in positivist terms or derived from statistical correlations. Rather, tendencies to causation are tentatively inferred and understood to be changing, emergent, contextual, and uncertain. The need to infer these tendencies is based on Critical Realism’s emancipatory aim, and the fact that we need to understand the causes of problems to solve them.

Aspects of these causal tendencies were explored in this study, through the survey ($n = 258$) and interviews ($n = 22$). Situations and disciplines varied, so priorities varied. For example, in Medicine, priorities were to re-connect with compassion and self-care, and in Design the priority was to connect with creative cognition

through navigating unknowing. In each case, contemplative methods positively influenced the situation.

Laminations

Each causal tendency listed in the figure is implicated in all lamination levels (Chapters 2 and 3), including: intra-individual (physical, psychological, emotional, mental, and spiritual); micro (relational); meso (institutional); macro (policies, research, professional mores and practices); mega (socio-economic, political); and planetary/global. For example, one aspect of the disconnect with self, is stress. This manifests as unwellness and lack of resilience and has an impact on relationships, organisational effectiveness, the workings of all aspects of society, the economy, and government, and the decisions that result in climate change. At the same time, factors contributing to stress include global problems, social breakdown, failing economies, government policies, reflexive modernity, workplace relations, and family and personal relations. Contemplative pedagogy and practice have the potential to affect each dimension.

While factors at all lamination levels are inextricably inter-linked, particular factors contributing to contemplative education's emergence have been identified. At the inner, intra-individual level, these include attempts to address challenges to health, mental health, and resilience (Kabat-Zinn, 2005). At the level of personal biography, they include the influence of powerful individuals such as Jon Kabat-Zinn, the Dalai Lama, and Thich Nhat Hanh (Wilson, 2014). At the micro, relational level, they include contemplative pedagogy (Barbezat & Bush, 2013), responses to attentional challenges (Ergas, 2017b), and grassroots activism (Presencing Institute, 2009-2020). At the meso, institutional and organisational level, they include university courses and mindfulness interventions. At the macro level, they include: educational curricula (Rix & Bernay, 2014); government policy (The Mindfulness All-Party Parliamentary Group, 2015); mindfulness research (Davidson et al., 2003; de Vibe et al., 2012); mindful education (Ergas & Hadar, 2019); Contemplative Inquiry (Zajonc, 2013); and reflective practice (Schön, 1983). At the mega level, they include: digitalisation and information overload (Levy,

2007b, 2016); the commodification and capture of attention (Doran, 2013; Moulier-Boutang, 2011); East-West interaction (Ergas, 2016); the influence of consumer capitalism (Purser, 2019); secular modernism (McMahan, 2008; McMahan & Braun, 2017); and the impulse to seek post-secular re-enchantment (Landy & Saler, 2009). At the global/ planetary level, they include responses to urgent global challenges, particularly climate change (Eaton et al., 2017; Wapner, 2018). At the cosmic/ non-dual level, they include attempts to restore spiritual connection, and to seek enlightenment (Arat, 2017). At each level, there are attempts to seek wholeness and healing of individuals and society. Contemplative education is thus shown to be a complex, multi-layered phenomenon.

7.7 Conclusion

This chapter has interpreted the survey results and interview findings together to answer the research questions. These questions asked which educators teach contemplatively at New Zealand universities, with what aims and conceptual framings, how they implement pedagogy and practice, how they experience this implementation, and what larger contextual factors influence the emergence of contemplative education. The contributions, limitations, and implications of this study are discussed below in Chapter 8, along with suggestions for further research.

8 Conclusion

... there is in all things ... a hidden wholeness. (Merton, 1974, as cited in Palmer, 2004, p. 3)

This final chapter concludes by discussing the contributions, limitations, and implications of this study, and by suggesting future directions for research.

8.1 Contribution

Through its findings and design, this study makes both empirical and theoretical contributions to research. First, the study provides the first overview of contemplative and mindful education in New Zealand universities, an area where little previous research has taken place. Second, the study discusses pedagogy in a wider range of academic disciplines than in previous studies in other parts of the

world, which have focused more on Humanities and Social Sciences. Third, the study contributes to the field by examining different conceptual framings of contemplative teaching and looking at how contemplative methods are integrated within existing academic approaches. Further, the study considers how educators use contemplative methods within existing signature pedagogies to address threshold concepts and skills and teaching bottlenecks.

By developing an integrated Critical Realist Mixed Methods Sequential Explanatory Design (CRMMSED), the study has helped to clarify the implications of combining Critical Realist and Mixed Methods approaches to sequential studies. Implementation of the phases of the MMSE design in parallel with iterative cycles of the Critical Realist six-stage Explanatory Framework (Description, Analytic Resolution, Abduction, Retroduction, Contextualisation, and Comparison) has been explained. The complexities of emergent and multi-layered laminated dimensions of reality implicated in contemplative education have been considered at levels from intra-individual to global/cosmic. Possible tendencies to causation influencing the emergence of contemplative education have been identified. Contemplative and Critical Realist approaches have been used to analyse global challenges. Ways that contemplative and mindful education provide responses to these challenges have been examined.

At every stage, Critical Realist meta-theory and the Mixed Methods approach have been interwoven. The mixed perspective has allowed the research to draw on both quantitative and qualitative studies including the creative, critical, and scientific. The statistical results of the initial, extensive survey have been used as provocations for further, in-depth investigations and abductive inference. This first phase helped to shape the second, intensive interview phase. There, the qualitative data were analysed both thematically, and through the 'moments' of the Philosophy of meta-Reality (PMR) dialectic. Using this dialectic has enabled the analysis of contemplative educators' decisions and teaching to be seen as arising from their identification of *absences* and *constraints*, their *praxis* and *reflexivity*, and their search for meaningfulness and transformation.

CR's emancipatory aim has facilitated understanding of contemplative education as transformative. Building on previous analyses, and in line with CR philosophy, this study has developed a model of contemplative education seen as arising in response to four overarching disconnects, with nature, other people, the self, and the capacity for self-transcendence. Ways that contemplative approaches may assist in addressing these disconnects and challenges have been identified.

The study may be of use to future applied Critical Realist researchers. The rationale for incorporating each aspect of the Critical Realist design has been explained, and the study has aimed to be transparent and thorough in detailing its use of CR tools, throughout. The CR goal of inferring to causal tendencies in underlying strata of the Real, has been pursued. The six stage Explanatory Framework has been employed as a vehicle of analysis and inference. Critical Realist dialectic has guided the analysis and presentation of interview findings, focusing on educator *praxis*, *reflexivity*, and *meaning* making.

8.2 Limitations

Although this research design has the term, 'explanatory,' in its name, it also very much engaged in 'exploration'. This exploratory character is perhaps the main strength of the research but also its main limitation. The research has been exploratory in every sense – in needing to identify a research population, in developing an integrated research design, in experimenting with application of Critical Realist tools of inference and dialectical analysis, in incorporating considerations of how factors at different lamination levels have given rise to contemplative education, and in attempting to infer causal tendencies. Little guidance was available for applying these tools, and undoubtedly improvements could be made. Staying within the word limit of an Education Doctorate was also a challenge, with so many exploratory balls in the air.

Other limitations are that the sample was self-selected rather than representative, and the results may not be applied to the wider population. Also, the study is cross-sectional, so provides a slice of life rather than a developmental picture of

participant practice. Further, while the cross-disciplinary approach enabled comparisons, it limited the ability to drill down into any one academic area.

8.3 Future Research

Future research could examine more deeply the enactment of contemplative teaching within academic disciplines and existing theoretical framings. Scholarship of Teaching and Learning (SoTL) researchers could investigate the interactions of contemplative pedagogy and practice with signature pedagogies, threshold concepts, and teaching bottlenecks. Under-researched areas could be investigated, such as contemplative pedagogy (as opposed to mindfulness interventions) in the sciences. Future Mixed Methods researchers could use Critical Realist meta-theory and expand upon their design choices. Future applied Critical Realist researchers could experiment with incorporating stratified ontology, laminations, or dialectical processes in their studies. They could study the reflexive imperative in relation to contemplative practice.

8.4 Implications

The implications of this study are that while contemplative pedagogy and practice are not a panacea, they may be of benefit to educators and students across the disciplines. Contemplative education may enhance teaching within theoretical framings and signature pedagogies. Other potential benefits may be to enhance wellbeing, foster cognitive skills, improve connection with nature, develop relationships, and contribute to finding solutions to human problems.

Indications are, however, that contemplative educators would benefit from support networks. Contemplative and mindful educators in higher education appear to work in relative isolation. Transformative Learning networks, which foster contemplative teaching to some degree in North America, are limited in New Zealand and have not given rise to programmes and qualifications. The work of the Contemplative Mind in Society (CMind) and the Association for Contemplative Mind in Higher Education (ACMHE) in building supportive networks and

resources has been particularly important overseas, however local networks appear lacking. Possibly, Teaching Circles, Tertiary Education Research in New Zealand (TERNZ) groups, and staff mindfulness practice groups could provide support networks and avenues for the development of contemplative teaching approaches.

I hope that mindfulness interventions will become routinely available in tertiary settings to address wellbeing, not only in areas of crisis but across campuses. Further, I hope that education across disciplines will increasingly harness the potential of contemplative approaches to foster attention, criticality, and creativity, and to re-enchant reflexive modernity, thereby helping to address environmental and social challenges.

8.5 Conclusion

This study has pointed to the growing phenomenon of contemplative education in *Aotearoa* New Zealand and the complex circumstances of its emergence. The aim has been to understand more about contemplative educators – who they are – and how they conceptualise contemplative education. The diverse and complementary theoretical framings that contemplative education draws upon have been explored, along with its different enactments across academic disciplines and its emergence in response to multiple, sometimes contradictory influences. The potential of contemplative methods to foster skills and attributes needed by tertiary staff and students alongside subject content has been examined: the underlying resilience and wellness that enable learning; the focus and creativity required to find new answers to compelling global and local problems; the compassion that stimulates action; and the insight into behaviours that often seem at odds with conscious intent. The study has focused on teaching methods that foreground thinkers, their thinking processes, and the social and emotional factors that affect them. Further, it has highlighted the transformative potential of contemplative teaching.

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Appendices

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APPENDIX 4.1: Massey University Human Ethics Documentation

APPENDIX 4.1.1 Massey University Human Ethics Committee Approval



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

10 April 2015

Heather Thomas
[REDACTED]

Dear Heather

**Re: HEC: Southern B Application – 15/13
Pedagogies of presence: Contemplative education and mindfulness in university
teaching in Aotearoa New Zealand**

Thank you for your letter dated 10 April 2015.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Prof Julie Boddy, Chair
Massey University Human Ethics Committee: Southern B

cc Prof Margaret Walshaw
Institute of Education
PN500

Dr Julia Budd
Institute of Education
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Dr Clare Mariskind
Institute of Education
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Prof John O'Neill, Director
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Accredited by the Health Research Council

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Appendix 4.1.2: Email Invitation to Potential Survey Respondents

***Pedagogies of Presence. Contemplative Education and Mindfulness in
University Teaching in Aotearoa New Zealand***

Email Invitation to Potential Survey Respondents:

Dear University Educator,

I would like to invite you to respond to this survey, which is part of research towards a Doctor of Education degree. Its aim is to find out more about the use of 'Contemplative Education' in New Zealand universities.

Contemplative Education (CE) is an emerging field, which incorporates new and traditional methods involving mindfulness, reflection and introspection. You may be using some of these methods without realising that they are being included in CE, so please take part.

Even if you are not using these methods, your answers will be very important in helping to determine the extent of use of contemplative teaching methods.

If you would like further information about this study, please contact me by sending an email.
LINK TO EMAIL

Please click here to complete the survey:
LINK TO SURVEY

Researcher:

Heather Thomas
Doctor of Education Candidate, Massey University
LINK TO EMAIL

Supervisor:

Prof Margaret Walshaw
Institute of Education, Massey University
LINK TO EMAIL

ETHICS:

Your responses will be completely anonymous and used only to build an overall picture of the use of mindful and contemplative education in NZ universities.

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 15/13. If you have any concerns about the conduct of this research, please contact Prof Julie Boddy, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 86055, email humanethicsouthb@massey.ac.nz

Appendix 4.1.3: Information Sheet for Interviews (Initially Emailed)



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MATĀURANGA

Pedagogies of Presence: Contemplative Education and Mindfulness in University Teaching in Aotearoa New Zealand

INFORMATION SHEET

Researcher Introduction

My name is Heather Thomas and I am conducting this project as part of research for a Doctorate in Education (EdD) through the Massey University Institute of Education in Palmerston North. The project aims to explore the extent and type of use of Contemplative Education (CE) in universities in New Zealand. This kind of education includes mindfulness and other reflective pedagogies.

Project Description and Invitation

The emerging field of Contemplative Education (CE) shows promise in equipping tertiary students to meet the challenges presented by multi-tasking, digital distraction, and the complex problems of our age. Tools of CE, such as mindfulness, centring, introspection, reflection, and focusing, were used traditionally, but more recently, their use has received impetus from an explosion of mindfulness research in medicine, psychotherapy and neuroscience. Little research has been done about CE in higher education in this country.

The study has three phases: first a large-scale survey, which has already been completed; second, interviews with 12 educators; and third, class observations of 3 of these educators.* The project is in its second phase, and I would like to invite you to take part in an interview.

Participant Identification and Recruitment

Interview participants are being recruited through the online survey, and through snowball sampling. You may have volunteered to be an interviewee through a survey response, and if so, thank you very much again. If you did not volunteer through the survey, your name will have been suggested to me by a friend, student or colleague because you exemplify mindful teaching in some way.

Project Procedures

If you agree, you will take part in one semi-structured interview lasting approximately one hour. The interview will be recorded and transcribed, and you will be given the opportunity to review the transcript before signing a transcript release. You will also be asked to supply teaching materials related to particular pedagogies or practices that are discussed, if these are available. These would be used only in extract form to illustrate or explicate themes of the study. You may also be invited to volunteer for the observation phase of the study however, there is no expectation of this.

Te Kunenga
ki Pūrehuroa

Institute of Education
Cnr Albany Drive & Collinson Road, Private Bag 11222 (PN900), Palmerston North 4442, New Zealand T +64 6 356 9099 www.massey.ac.nz

[*Note: Interview numbers were increased to 22 and the observation phase was not carried out because the study had already become large.]

Data Management

Participation in this study will be confidential. Names will be removed, and numbers or pseudonyms used to identify data. The university and teaching unit will not be identified. Data, including any interview content and responses will be stored securely and will not be discussed with anyone apart from my supervisors. If you prefer that your contributions in terms of specific teaching approaches or materials be acknowledged by using your name, this will be done, while keeping your other comments confidential.

At the completion of the study, raw data will be stored securely for 5 years and then destroyed in a secure and confidential manner. Research output will be in the form of thesis chapters outlining findings and may inform journal articles or conference presentations.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.
- ask for the recorder to be turned off at any time during the interview.

Project Contacts

If you have any comments or questions regarding the study, please contact me at h.g.thomas@massey.ac.nz (06 3576550) or speak with my supervisors:

- Prof Margaret Walshaw M.A.Walshaw@massey.ac.nz, Extn 84404
- Dr Julia Budd J.M.Budd@massey.ac.nz, Extn 84412
- Dr Clare Mariskind C.J.Mariskind@massey.ac.nz, Extn 84396.

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 15/13. If you have any concerns about the conduct of this research, please contact Prof Julie Boddy, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 86055, email humanethicsouthb@massey.ac.nz

Thank you very much for taking the time to consider this request.

Yours sincerely,

Heather Thomas
 Massey University Doctorate of Education Candidate
 Email: h.g.thomas@massey.ac.nz
 Phone: 06 356 9099 extn 84131

Appendix 4.1.4: Consent Form for Interview Participants



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MATĀURANGA

***Pedagogies of Presence: Contemplative Education and
Mindfulness in University Teaching in Aotearoa New Zealand***

INTERVIEW PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/ do not agree (please circle one) to the interview being sound recorded.

[I require/ do not require (please circle one) that my contribution of specific methods or materials be acknowledged by use of my name.]

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Date:

.....

**Full Name -
printed**

.....

Appendix 4.1.5: Confidentiality Agreement for Transcribers



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MATĀURANGA

Pedagogies of Presence. Contemplative Education and Mindfulness in University Teaching in Aotearoa New Zealand

TRANSCRIBER'S CONFIDENTIALITY AGREEMENT

I (Full Name - printed) agree to transcribe the recordings provided to me.

I agree to keep confidential all the information provided to me.

I will not make any copies of the transcripts or keep any record of them, other than those required for the project.

Signature: **Date:**

Appendix 4.1.6: Authority for the Release of Interview Transcripts



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MATĀURANGA

Pedagogies of Presence. Contemplative Education and Mindfulness in University Teaching in Aotearoa New Zealand

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and amend the transcript of the interview(s) conducted with me.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

Signature: **Date:**

Full Name - printed
.....

Appendix 4.2: Auckland University of Technology (AUT) Ethics Documentation

Appendix 4.2.1: Auckland University of Technology (AUT) Ethics Committee Approval



AUTEC Secretariat

Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

28 January 2016

Heather Thomas
Massey University

Dear Heather

Re: Ethics Application: **16/03 Pedagogies of presence: Contemplative education and mindfulness in university teaching in Aotearoa New Zealand.**

I am pleased to advise that the Deputy Vice-Chancellor of Auckland University of Technology has approved your application for access to staff of this University.

This delegated approval is made in accordance with Appendix R of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement by AUTEC at its meeting on 15 February 2016. Your application is now approved for a period of three years until 27 January 2018.

I advise that as part of the ethics approval process, you are required to submit to AUTEC the following:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 27 January 2018;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 27 January 2018 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible

for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact me by email at ethics@aut.ac.nz or by telephone on 921 9999 at extension 6902.

On behalf of the AUTEK and ourselves, we wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

A handwritten signature in black ink, appearing to read 'K O'Connor', written in a cursive style.

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Appendix 4.2.2: Auckland University of Technology (AUT) Survey Invitation

Survey Invitation for Staff Newsletter, AUT University:**16 March 2016****Nation-wide University Survey on Contemplative Education and Mindfulness****SURVEY LINK:****https://www.research.net/s/contemplative_education_and_mindfulness_a1**

Invitation to respond to survey: Educators at AUT University are invited to respond to a survey on reflective, contemplative, introspective and mindful teaching methods, in the first phase of a comprehensive doctoral study on Contemplative Education (CE) in this country. The nation-wide survey explores the use and experience of contemplative methods in a wide range of disciplines and teaching activities.

Contemplative Education (CE) is an emerging field which draws on the wisdom of traditional philosophy and religion as well as on the insights of modern medicine, psychology and neuroscience. Reasons suggested for its emergence include the pace of modern life, digital distraction and the promising results of mindfulness research studies.

Whether or not you are using 'contemplative' teaching methods, you are invited to respond to the survey. Your response will help to establish the extent of use and will make a valuable contribution to this study.

All responses will be completely anonymous. The study has received ethical approval from Massey University and permission has been granted through AUTEK. For further information, if required, please contact the researcher, Heather Thomas (h.g.thomas@massey.ac.nz) or the first supervisor, Prof Margaret Walshaw (m.a.walshaw@massey.ac.nz).

Please go to this website to complete the survey:

https://www.research.net/s/contemplative_education_and_mindfulness_a1

Appendix 4.2.3: Auckland University of Technology (AUT) Interview Participant Information



Interview Participant Information Sheet

a) Date Information Sheet Produced:

14 January 2016

b) Project Title:

Pedagogies of presence: Contemplative Education and mindfulness in university teaching in Aotearoa New Zealand

An Invitation

My name is Heather Thomas and I would like to invite you to take part in this research project which is part of my study towards a Doctorate in Education (EdD) through the Massey University Institute of Education in Palmerston North. Your participation would be voluntary and you would be able to withdraw at any time prior to the completion of the data collection (December 2016).

c) What is the purpose of this research?

The project aim is to explore the extent and type of use of Contemplative Education (CE) in universities in New Zealand. This kind of education includes mindfulness and other reflective pedagogies.

The emerging field of Contemplative Education (CE) shows promise in equipping tertiary students to meet the challenges presented by multi-tasking, digital distraction, and the complex problems of our age. Tools of CE, such as mindfulness, centring, introspection, reflection, and focusing, were used traditionally, but more recently, their use has received impetus from an explosion of mindfulness research in medicine, psychotherapy and neuroscience. Little research has been done about CE in higher education in this country.

The study has three phases: first, a large-scale survey; second, interviews with a smaller number of educators; and third, class observations of 3 of these educators. *

The study is intended to be the basis of a doctoral thesis, conference presentations, and journal article publications.

d) How was I identified and why am I being invited to participate in this research?

Interview participants are being recruited through an online survey, and through snowball sampling. You may have volunteered to be an interviewee through a survey response, and if so,

[*Note: Interview numbers were increased to 22 and the observation phase was not carried out because the study had already become large.]

thank you very much again. If you did not volunteer through the survey, your name will have been suggested to me by a friend, student or colleague because you make use of mindful teaching in some way.

e) What will happen in this research?

If you agree, you will take part in one semi-structured interview lasting approximately one hour. The interview will be recorded and transcribed. You will also be asked to supply teaching materials related to particular pedagogies or practices that are discussed, if these are available. These would be used only in extract form to illustrate or explicate themes of the study. You may also be invited to volunteer for the observation phase of the study, however there is no expectation of this.

f) What are the discomforts and risks?

I will attempt to minimise any discomfort in terms of time spent participating in this research, and also to protect your confidentiality. I do not anticipate any other risks involved in participation.

g) How will these discomforts and risks be alleviated?

Participation in the interview will be confidential. Names will be removed, and numbers or pseudonyms used to identify data. The university and teaching unit will not be identified. Data, including any interview content and responses will be stored securely and will not be discussed with anyone apart from my supervisors.

At the completion of the study, raw data will be stored securely for 5 years and then destroyed in a secure and confidential manner.

h) What are the benefits?

Your participation will be of great benefit to me because it will enable me to complete my Doctorate of Education and hopefully to publish articles and/or book chapters and present findings at conferences. The research will hopefully also be of benefit to the wider academic community because it will provide information in an area where very little research has been done. I also hope that your participation will be of benefit to you in providing an opportunity to share your views and experiences.

i) How will my privacy be protected?

As explained above, your participation will be confidential. However, if you would like your contributions in terms of specific teaching approaches or materials to be acknowledged by use of your name, I will do this while keeping your other comments confidential. I will give you an opportunity to approve any use of your name or other details in this situation.

j) What are the costs of participating in this research?

There may be some investment of time to participate in the interview, to think about the pedagogies and materials you will discuss, and to check the transcript of the interview to ensure that it is accurate.

k) What opportunity do I have to consider this invitation?

Thank you very much for taking the time to consider this request. I would be very grateful if you could respond to the request within 3 weeks.

l) How do I agree to participate in this research?

If you have any comments or questions, please contact me (details below). Before participating, you will need to sign a Consent Form. A copy of this is attached here for your information. I will bring a copy to the interview and ask you to sign it before we begin.

m) Will I receive feedback on the results of this research?

At the completion of this research, I will send you a summary, and all going well, a link to my thesis.

n) What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisors, Prof Margaret Walshaw M.A.Walshaw@massey.ac.nz, 64 6 356 9099 Extn 84404; Dr Julia Budd J.M.Budd@massey.ac.nz, 64 6 356 9099 Extn 84412 or Dr Clare Mariskind C.J.Mariskind@massey.ac.nz, , 64 6 356 9099 Extn 84396.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

o) Whom do I contact for further information about this research?

Researcher Contact Details:

Heather Thomas
Massey University Doctorate of Education Candidate
Email: h.g.thomas@massey.ac.nz
Phone: 64 6 356 9099 extn 84131

Project Supervisor Contact Details:

- First Supervisor: Prof Margaret Walshaw M.A.Walshaw@massey.ac.nz, 06 356 9099, Extn 84404
- Dr Julia Budd J.M.Budd@massey.ac.nz, 06 356 9099, Extn 84412
- Dr Clare Mariskind C.J.Mariskind@massey.ac.nz, 06 356 9099, Extn 84396.

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted*, AUTEK Reference number 16/03.

Many thanks again for considering this request.

Kind regards,

Heather Thomas

Appendix 4.2.4: Auckland University of Technology (AUT) Interview
Consent Forms



Consent Form: Interviews

Project title:

Pedagogies of presence: Contemplative Education and mindfulness in university teaching in Aotearoa New Zealand

Project Supervisors:

- Prof Margaret Walshaw M.A.Walshaw@massey.ac.nz, 06 356 9099, Extn 84404
- Dr Julia Budd J.M.Budd@massey.ac.nz, 06 356 9099, Extn 84412
- Dr Clare Mariskind C.J.Mariskind@massey.ac.nz, 06 356 9099, Extn 84396.

Researcher:

Heather Thomas
h.g.thomas@massey.ac.nz
06 356 9099 extn 84141

- I have read and understood the information provided about this research project in the Information Sheet dated 14 January 2016.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.
- I wish to receive a copy of the report from the research (please tick one): Yes No
- I wish to have my pedagogies or materials acknowledged by use of my name: Yes No

Participant’s signature:

Participant’s name:

Participant’s Contact Details (if appropriate):
.....
.....

Date: _____

Approved by the Auckland University of Technology Ethics Committee on type the date on which the final approval was granted AUTEK Reference number 16/03

Note: The Participant should retain a copy of this form.

Appendix 4.2.5: Auckland University of Technology (AUT) Transcriber Confidentiality Agreement



Transcriber’s Confidentiality Agreement

Project title:

Pedagogies of presence: Contemplative Education and mindfulness in university teaching in Aotearoa New Zealand

Project Supervisors:

- Prof Margaret Walshaw M.A.Walshaw@massey.ac.nz, 06 356 9099, Extn 84404
- Dr Julia Budd J.M.Budd@massey.ac.nz, 06 356 9099, Extn 84412
- Dr Clare Mariskind C.J.Mariskind@massey.ac.nz, 06 356 9099, Extn 84396.

Researcher:

Heather Thomas
h.g.thomas@massey.ac.nz
 06 356 9099 extn 84141

-
- I understand that all the material I will be asked to transcribe is confidential.
 - I understand that the contents of the tapes or recordings can only be discussed with the researchers.
 - I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber’s signature:

Transcriber’s name:

Transcriber’s Contact Details (if appropriate):

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on type the date on which the final approval was granted AUTEK Reference number 16/03

Note: The Transcriber should retain a copy of this form.

Appendix 4.3: Survey Invitation for University Staff Newsletters

Survey Invitation for Staff Newsletter

Nation-wide University Survey on Contemplative Education and Mindfulness

SURVEY LINK:

LINK

Invitation to respond to survey: University educators at _____ are invited to respond to a survey on reflective, contemplative, introspective and mindful teaching methods, in the first phase of a comprehensive doctoral study on Contemplative Education (CE) in this country. The nation-wide survey explores the use and experience of contemplative methods in a wide range of disciplines and teaching activities.

Contemplative Education (CE) is an emerging field which draws on the wisdom of traditional philosophy and religion as well as on the insights of modern medicine, psychology and neuroscience. Reasons suggested for its emergence include the pace of modern life, digital distraction and the promising results of mindfulness research studies.

Whether or not you are using 'contemplative' teaching methods, you are invited to respond to the survey. Your response will help to establish the extent of use and will make a valuable contribution to this study.

All responses will be completely anonymous. The study has received ethical approval from Massey University and permission from this university. For further information, if required, please contact the researcher, Heather Thomas (h.g.thomas@massey.ac.nz) or the first supervisor, Prof Margaret Walshaw (m.a.walshaw@massey.ac.nz).

Please go to this website to complete the survey:

LINK

Appendix 4.4: Survey

Contemplative Education and Mindfulness in University Teaching

Welcome to the Survey

Thank you for taking the time to participate in this survey on university teaching. The survey is part of doctoral research, and will help to establish the extent and type of contemplative, reflective and mindful teaching methods being used at universities throughout Aotearoa New Zealand.

Internal, external or short course teaching

The questions could apply to both internal and distance teaching, and to both full-semester courses or shorter more intensive ones.

Please respond whether or not you are using contemplative methods

Also, whether or not you are using contemplative methods yourself, your answers will be very important in helping determine the extent of their use.

Anonymity and timing

Your responses will be completely anonymous. The survey will take between 10 and 15 minutes depending on the extent of your involvement with contemplative teaching methods and whether or not you choose to write comments.

If there is a question that does not apply to you or that you prefer not to answer, please move to the next question. If you need to stop and continue the survey at a later time, your responses will be saved, provided that you use the same browser and computer. Click "Done" when you have finished to submit your responses.

Consent

Your responses to the survey will constitute consent.

Resource link

At the end of the survey, a link is provided to the website of the Association for Contemplative Mind in Higher Education (ACMHE), which has many resources for using contemplative methods in university teaching.

Contemplative Education and Mindfulness in University Teaching

Demographic Questions

The first section includes demographic questions. Your answers are important because they will allow comparisons to be made between groups of people. Responses will be anonymous, and will be reported only in the aggregate.

1. What is your general disciplinary or subject area? (Choose more than one, if applicable).

- Agricultural Sciences
- Business
- Creative Arts
- Education
- Engineering
- English Language Teaching (ELT)
- Humanities
- Law
- Maori Studies
- Medical & Health Sciences
- Science
- Social Sciences
- Student Learning Support or Library Support
- Veterinary Studies
- Other (please specify)

2. What is your specific subject area (for example, International Finance, Specialist Education, etc)?

3. What is your position (e.g. "lecturer")

4. About how many years have you been teaching (full or part-time) in the tertiary sector?

- 1-5
- 6-10
- 11-15
- 16-25
- 26 or more

Comment (optional)

5. What level are the programmes that you teach? (Please select all that apply).

- Postgraduate
- Undergraduate
- Bridging (pre-degree)
- English language
- Professional courses
- Other (please specify)

6. What is your gender?

- Female
- Male
- Gender diverse

7. What is your age?

- under 30
- 30 - 49
- 50 - 59
- 60 - 64
- 65 and over

8. Do you identify with any of the following religions? (Please select all that apply).

- Catholic
- Protestant (e.g. Anglican, Presbyterian, Reformed, Methodist)
- Pentecostal
- Quaker
- Inter/Non-denominational Christian
- Māori Christian (e.g. Rātana)
- Buddhist
- Hindu
- Islamic
- Jewish
- New Age spirituality
- Spiritual but not religious
- No religion
- Other (please specify)

9. Which ethnic group or groups do you identify with? (Please select as many as apply).

- NZ European/ Pākehā
- Māori
- Pasifika
- Chinese
- Indian
- Other (please specify)

Contemplative Education and Mindfulness in University Teaching

Personal Views and Experience

Thank you very much for answering the demographic questions. The next section asks for your views about university teaching and your personal experience of contemplative and mindful methods.

10. In your view, how important is the teaching approach taken by the university educator to overall student learning?

Very important Quite important Moderately important A little important Not important

Comment (optional)

11. In your view, how much can the way we teach at university affect the following outcomes for students?

	Very much	Quite a lot	Moderately	Slightly	Not at all
Ability to focus attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to cope with study stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement with important issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acceptance of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

12. In your view, to what degree should university teaching incorporate the following aspects?

	Very great degree	Quite a high degree	Moderate degree	Slight degree	Not at all
Physical (Taha tinana)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental/ Emotional (Taha hinengaro)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family and social (Taha whānau)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spiritual (Taha wairua)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

13. How important is the concept of reflective practice in your discipline?

Very important	Quite important	Moderately important	Slightly important	Not at all important
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

14. Use of Contemplative Education and mindfulness seems to have increased recently in universities. Following are listed some reasons which have been suggested for this. How important do you think the listed reasons are?

	Very important	Quite important	Moderately important	Slightly important	Not at all important
It is a calming response to the increased stress levels in modern life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is an attempt to reclaim control over our personal attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a response to digital distraction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a spin-off from the success of mindfulness-based approaches in psychology and medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a response to the decline in participation in organised religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a fad driven by media coverage of mindfulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other

15. Have you ever taken part in reflective, contemplative, meditative or mindfulness training using any of the following? (Please select all that apply).

	Yes	No
Sports training or coaching using methods such as visualisation or focusing	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Personal development goal setting using methods such as visualisation or focusing	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Management training using methods such as Theory U or Presence-Based Coaching	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Greek philosophy, for example Socratic dialogue or self-questioning	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Professional practice, for example, wellness training for social workers	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
School-based programmes such as MindUp, Koru, BREATHE, Mindfulness in Schools, Mindful Schools, or Modern Mindfulness	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Mindfulness-based interventions such as Mindfulness-Based-Stress-Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-integrated-Cognitive -Behaviour-Therapy (MiCBT), Acceptance and Commitment Therapy (ACT), or Hakomi	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Literature associated with your discipline	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Self-help trainings based on neuro-scientific findings (for example, in books such as Daniel Siegel's <i>The Mindful Brain</i> or Rick Hansen's <i>Buddha's Brain</i>)	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	
Brain entrainment (listening to audio tracks that include monaural or binaural beats which synchronise brain waves at specific frequencies to aid focus, creativity, sleep, or meditation)	<input type="radio"/>	<input type="radio"/>
(If yes, please specify if possible)	<input style="width: 100%;" type="text"/>	

Yes No

16. How often do you experience flow (a state of concentrated attention where you lose track of time) through doing everyday activities or hobbies such as jogging, diy, crafts, gardening, or other?

Very often Quite often Moderately often Occasionally Never

Comment (optional)

17. Have you ever taken part in contemplative, meditative or mindfulness training or practice involving any of the following? (Please select all that apply).

- Centring prayer
- Christian meditation
- Quaker silence
- Māori spirituality
- Buddhist meditation
- Hindu meditation
- Islamic meditation
- Jewish meditation
- Shamanic meditation
- Transcendental Meditation (TM)
- Integral Life Practice (ILP)
- Yoga
- Taichi
- Qigong
- Other (please specify)

Contemplative Education and Mindfulness in University Teaching

Teaching

Thank you for answering the questions about your views and experience. The next section contains questions about your teaching. Please interpret the questions to include both face-to-face and distance teaching. If a question does not apply to you, please move on to the next question.

18. Thinking of physical or sensory aspects of learning, has your teaching included any of the following? (Please select all that apply).

- Music or song
- Dance
- Haka
- Waiata
- Physical demonstrations
- Labs
- Volunteering (service learning)
- Other (please specify)

19. In order to encourage focus, have you ever used reflective or contemplative teaching techniques such as the following? (Please select as many as apply).

- Pausing for a moment at the start of class
- Beginning with a karakia
- Leaving Wait-Time after asking a question
- Building in silence for reflection
- Encouraging students to sit with texts or items before analysing them (e.g. art, architecture, literature, photography, diagrams of chemical or physical processes)
- Other (Please specify)

20. Have you ever used any of these reflective or contemplative teaching methods which involve reading and writing? (Please select as many as apply).

- Reflective or contemplative reading
- Freewriting (letting ideas flow freely, keeping the pen moving without worry about correctness)
- Reflective writing (e.g. in response to an inquiry or problem)
- Journal writing
- Other (please specify)

21. Have you used reflective or contemplative listening activities such as the following in your teaching? (Please select as many as apply).

- Dialogue activities set up so that parties listen to each person without judgement
- Active listening (Stages of: listening; reflecting back to check understanding; asking questions to explore further)
- Other (please specify)

22. In your teaching, have you used reflective activities to foster any of these underlying dispositions of critical thinking? (Please select as many as apply).

- Perspective taking (looking at all sides of an issue or problem)
- Mulling over a question or problem or text before analysing it
- Recognising contradictions that cannot be ironed out
- Identifying and letting go of previously unexamined assumptions
- Being open to novelty
- Other (please specify)

23. If your courses have involved fostering acceptance of diversity, have you ever used any of these methods in a reflective manner? (Please select all that apply).

- Dialogue
- Active listening
- Unlearning attitudes
- Visits to culturally significant places
- Other (please specify)

Contemplative Education and Mindfulness in University Teaching**Contemplative or Mindful Practice and Teaching**

Thank you very much for your answers to the teaching questions. Your responses will be extremely helpful.

Your answer to the next question will take you either to the end of the survey or to a final section on teaching in relation to a contemplative or mindfulness personal practice.

24. Do you have a personal contemplative or mindfulness practice of any kind?

Yes

No

Comment (optional)

Contemplative Education and Mindfulness in University Teaching

Contemplative or Mindfulness Practice and Teaching Questions

This set of questions asks about your personal contemplative, meditative or mindfulness practice in relation to your teaching. If a question does not apply to you, please move on to the next question.

25. Briefly, what is your main contemplative or mindfulness practice (or practices)?

26. How much, if at all, do you think that your personal contemplative or mindfulness practice has influenced the following aspects of your teaching?

	Very much	Quite a lot	Moderately	A little	Not at all
Ability to be present to my teaching and students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to leave outside stresses behind and focus on teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to communicate with students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to create an accepting space for learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

27. Have you ever specifically incorporated meditative practices such as the following into your teaching of students? (Please select as many as apply).

- Mindfulness meditation
- Centring or stilling by focusing on the breath
- Focusing on sensory input, for example, listening to sounds
- Compassion meditation
- Guided visualisation
- Mindful eating
- Mindful walking
- Labyrinth walking
- Mindful drawing or tracing
- Yoga
- Qigong
- Taichi
- Use of meditation apps (e.g. Insight Timer or The Mindfulness App)
- Other (please specify)

28. If applicable, please briefly describe a mindful, reflective or contemplative teaching method or practice that you have used in your teaching of students and would like to use again.

29. How significant have the following motivations for the use of mindfulness or contemplative methods been in your teaching?

	Very significant	Quite significant	Moderately significant	Slightly significant	Not at all significant
To help students to focus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To help students to deal with stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To foster creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To help students to connect with nature, thereby increasing environmental awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To inspire students to activism, for example, for environmental or social justice causes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be transformative in the personal lives of students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

30. In your experience, when contemplative or mindful teaching methods are used, how strongly do students seem to experience any of the following?

	Very strongly	Quite strongly	Moderately strongly	Slightly	Not at all	N/A
Discomfort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amusement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostility or resistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Psychological distress or dissociation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

31. In your experience, when contemplative or mindful teaching methods are used, how strongly do students seem to experience these effects?

	Very strongly	Quite strongly	Moderately strongly	Slightly	Not at all	Not sure
Increased presence or engagement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduced stress over assignments or exams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greater acceptance of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greater effectiveness in group-work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transformative insight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

32. If applicable, how difficult have you found the following when developing lessons using mindful or contemplative methods?

	Very difficult	Quite difficult	Moderately difficult	Slightly difficult	Not at all difficult
Finding or making appropriate materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drawing a line between secular practice and the religious origins of many contemplative practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding class-time to include both content and contemplative activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deciding whether and how to assess student participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

33. In what way do you think the use of mindful or contemplative methods affects student academic achievement?

Improves it a great deal	Improves it somewhat	Neither helps nor harms	Can have a slightly negative impact	Can have a very negative impact
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

Contemplative Education and Mindfulness in University Teaching

Decisions to use Mindfulness or Contemplative Methods

Finally, please think about your decisions whether or not to use mindful or contemplative teaching methods.

34. Thinking of your decisions to use or not use mindful or contemplative teaching methods, how much, if at all, were you influenced by any of the following?

	Very much	Quite a lot	Moderately	A little	Not at all
Concern whether I was qualified to use mindful or contemplative teaching methods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that students would resist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that colleagues would disapprove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that superiors or institutions would disapprove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that the religious origins of some practices would not be acceptable to some students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that the secularisation of some practices would offend some students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

35. What are your feelings about the current increase in marketing of products and services related to mindfulness?

Very supportive	Quite supportive	Slightly supportive	Neither supportive nor concerned	Slightly concerned	Quite concerned	Very concerned
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

36. How much support from colleagues or other practitioners have you had in adopting and implementing contemplative or mindful methods?

Very much	Quite a lot	A moderate amount	A little	None
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

37. How much do you think the following would help you in your adoption and implementation of mindful or contemplative methods in your teaching?

	Very much	Quite a lot	Moderately	A little	Not at all
Training in teaching methods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of model curricula, materials and activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to develop a stronger personal contemplative practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from like-minded educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other

Contemplative Education and Mindfulness in University Teaching

Invitation to Participate in Interview Study

Thank you very much for your answers and for helping to further the understanding of contemplative education at university. I would be very interested in learning more about your experience.

Interview Invitation

If you have used mindfulness or contemplative methods in your teaching in any way, I invite you to take part in an interview.

Interviews will last about one hour and will be scheduled in the early part of 2016. Responses and participation will be confidential. As an interviewee, you would make a valuable contribution to our understanding of an emerging field.

If you are interested in receiving more information, please send an email to H.G.Thomas@massey.ac.nz with INTERVIEW in the subject line.

Your responses to this survey will remain anonymous. Your contribution is greatly appreciated!

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Comments, Questions or Concerns

38. Do you have any other comments, questions, or concerns?

Contemplative Education and Mindfulness in University Teaching

Thank you and Link

**Link to Contemplative Education resources on the website of the
Association for Contemplative Mind in Higher Education
(ACMHE):**

<http://www.contemplativemind.org/programs/acmhe>

Thank you very much for your participation!

You have made a valuable contribution to this research.

Please click "Done" to submit your answers.

Appendix 4.5 Semi-Structured Interview Guide

SEMI-STRUCTURED INTERVIEW GUIDE: Pedagogies of Presence: Contemplative Education and Mindfulness in University Teaching in Aotearoa New Zealand

Thank you very much for agreeing to take part in this interview. Before we start, here is a hard copy of the **information sheet** that you received by email. Notice your **rights** on the second page... Do you have any **questions or comments**?

Could you please sign this **Consent form**? (Please circle 'agree.' Notice that the interview is **confidential** BUT **if you would like to be acknowledged for particular techniques or courses or materials** that can be done also).

Thank you. I will send a **transcript** for your approval when it is complete. Also, if you think of anything you would like to add after the interview, **please email or ring me**.

Introduction:

As you know, my research is about Contemplative Education. This is a holistic philosophy of higher education which includes first-person ways of knowing including reflection, introspection, contemplation and mindfulness. It draws upon practices from traditional philosophy and religion and uses these in a secular way. Contemplative pedagogies can help students to better know themselves, and also can reduce stress, increase focus, increase creativity, and increase compassion.

Questions:

1. **Could you please tell me about your involvement with Contemplative Education/** reflective/ or mindfulness methods in teaching? (What term would you use?)
2. **Many streams are feeding into the Contemplative Education** movement, for example, mindfulness from in medicine and psychology (e.g. MBSR); revival of Greek philosophers (e.g Socratic dialogue); traditional meditation practices (e.g. lectio divina); management coaching (e.g. presence-based coaching, Theory U); sports coaching; creativity research; environmental awareness through experiencing nature; etc. There are also people researching the effects of the internet and mobile phones on our brain and considering how we can best interact with our technology mindfully.
 - **Is there a particular stream or streams that you draw upon?**
 - **How/Does your own contemplative/ reflective/ mindfulness practice feed into your teaching?**

3. **How/Does your mindful/contemplative/reflective approach affect your overall approach to teaching?** (e.g. using silence; creating a space for ... to emerge, fostering wellness and self-care; fostering the predispositions to critical thinking such as identifying unexamined assumptions, etc.)

4. **Do you/ how do you specifically build contemplative/reflective/mindful methods or practices into your classroom lessons or your online materials or study guides?**
 - Has anything/ any experience/ any resource particularly helped you in this?

5. **Could you tell me about a course where you use/ or have used these methods?**
 - What sort of students, level, number, etc.?
 - What did you do? What did the students do? ... Was it online or offline?
 - Did you target any particular skills or competencies?
 - Do you use any particular methods or exercise to build r/m/c into your online teaching?
 - Could you notice any impact on the students or their learning or relationships?
 - Any negative impressions?
 - Any transformational impact?
 - How did you form these impressions? How did you know?

6. **Could you tell me about a face-to-face situation where you used contemplative /reflective /mindful methods?**
 - Could you share any specific materials or exercise or activities with me?
 - How did the students respond?
 - What seemed to be the impact on the class? The atmosphere?
 - Impact on student relationships or ability to work together?
 - Learning? Attitudes?

7. **How did you come to start using contemplative /reflective /mindful methods in teaching?** Was it in response to a **need** you perceived in students, e.g.:
 - Need to focus and overcome distraction (e.g. bridging students)
 - Need for wellness and stress reduction (e.g. professional practice)

Or a skill you wanted to teach or an attitude you wanted to impart, e.g.

 - Openness to diversity
 - Compassion for others
 - Critical thinking
 - Increased ability of students to know themselves

- Awareness of nature
- Or a desire to share the benefits you had experienced?**
Was it already part of the assumptions of your programme?
8. **How do you develop your own mindfulness/ contemplative practice?**
Have you done any training in contemplative /reflective /mindfulness -- formal or informal – e.g., MBSR? Meditation? Professional practice?
 9. **What sort of reception have you experienced?** (From students? Colleagues? Superiors? What has that been like? Encouraging? Discouraging?)
 - **Have you hesitated to use CE for any reasons?** Please explain. (Curriculum? Worry about acceptance? Expertise? Etc.)
 - Have you felt especially supported or encouraged by any particular response or event?
 10. **Do you have any concerns about mindfulness, for example, media coverage, teacher training, marketing of mindfulness products?**
 11. **Is there anything you would like to add?**
 12. **Do you have any questions about the research study?**

Thank you very much for your time today.

Appendix 4.6: Survey Structure and Analysis Tables

Table 4.6.1: Research questions and sub-questions with survey topics

Research Questions and Sub-Questions with Survey Topics
What is the character, extent, context, and purpose of Contemplative Education across the disciplines in Aotearoa New Zealand, and what factors have contributed to its emergence?
Research Sub-Questions:
1. Which university educators use contemplative pedagogies and practices? (What are their demographic characteristics, teaching profiles, and contemplative backgrounds?)
<i>Respondent Background:</i>
1.1 Demographic Characteristics:
1.1.1 Gender
1.1.2 Age Group
1.1.3 Ethnicity
1.1.4 Religious Identification
1.2 Teaching Characteristics:
1.2.1 Subject Discipline
1.2.2 Position
1.2.3 Years of Teaching
1.2.4 Level of Programmes Taught
1.3 Experience:
1.3.1 Flow
1.3.2 Spiritual Training or Practice
1.3.3 Professional Mindfulness Training
1.3.4 Personal Meditative Practice
2. What aims do university educators have for adopting contemplative pedagogies and practices, and what are the influences on their decisions?
2.1 Beliefs:
2.1.1 Beliefs about Teaching & Learning
2.1.2 Beliefs about Holistic Teaching
2.1.3 Beliefs about Reflective Practice
2.1.4 Beliefs about Contemplative and Mindful Practices
2.2 Teaching Aims:

Research Questions and Sub-Questions with Survey Topics

2.2.1 To Reduce Stress

2.2.2 To Enhance Focus

2.2.3 To Foster Creativity

2.2.4 To Foster Connection with Nature

2.2.5 To Foster Engagement with Social Justice

2.2.5. To Foster Transformation

3. How do university educators use and conceptualise contemplative methods?

Teaching Pedagogies and Practices:

3.1 Reading & Writing

3.2 Listening

3.3 Critical Thinking

3.4 Diversity

3.5 Physical Activities

3.6 Pausing & Silence

3.7 Meditation

3.8 Other Methods

4. How do university educators experience the implementation of contemplative education? (How is it use enabled and constrained? What are the perceived effects on teaching and learning?)

Experience:

4.1 Support

4.2 Challenges

4.3 Concerns

4.4 Needs

4.5 Perceived Effects

4.5.1 Perceived Effects on Teaching & Learning

4.5.2 Perceived Effects on Achievement

5. How do contextual factors (institutional, social, economic, political, religious, cultural, and historical) influence the emergence of contemplative teaching?

Insights inferred from items throughout the survey

Table A4.6.2: Structure of survey

Survey Section	No. of Items	Open to:
<i>Welcome page</i>		All
<i>Part One:</i>		All
Teaching characteristics	5	
Demographic characteristics	4	
Beliefs about teaching	5	
Experience and training	3	
Use of contemplative methods	6	
Navigation Question on contemplative practice	1	
Sub-total	24	
<i>Part Two:</i>		Contemplatives
Personal practice	2	
Use of pedagogies and practices	2	
Perceived impacts	3	
Motivation	1	
Implementation and support	5	
Sub-total	13	
<i>Closing Section</i>		All
Interview Invitation		
Thank you-page with link to ACMHE		
Comment	1	
TOTAL	38	

Table A4.6.3: Methods of survey distribution, by university

University	Dates	Survey Distribution	Follow-up
University One	27 July, 2015; 10 August, 2015; 24 August, 2015	Email survey invitation to all educators (the database provided to researcher was cleaned)	2 emails
University Two	10 August, 2015	Email survey invitation sent to all educators by HR staff	None
University Three	3 August, 2015	Email survey invitation sent to all educators by HR staff	None
University Four	3 August, 2015	Survey invitation ad placed in online staff newsletters	NA
University Five	21 March, 2016	Survey invitation ad placed in online staff newsletters	Repeated ad
University Six	25 January, 2016	Survey invitation ad placed in online staff newsletters	Repeated ad
University Seven	March, 2016	Survey invitation ad placed in online staff newsletters	NA

Note: For University One, the initial list of 1,385 names was first cleaned to remove names with no email addresses and those in non-teaching roles, resulting in 1,229 names. To maximise responses, the list was emailed three times over a period of four weeks. The number of emails that were undeliverable all three times were deducted from the total, resulting in a total of 1,165.

Table A4.6.4: Cohen's effect size

Effect size	Strength
0.1 < .03	Low
0.3 < .05	Medium
0.5	Large

Table A4.6.5: Epsilon squared effect size

Effect Size	Strength
0.00 < 0.01	Negligible
0.01 < 0.04	Weak
0.04 < 0.16	Moderate
0.16 < 0.36	Relatively strong
0.36 < 0.64	Strong
0.64 < 1.00	Very Strong

Appendix 4.7: Conference Presentations, Posters, and Workshops

2013:

Thomas, H. G. (2013, November). *Mindfulness means less stress and more learning*. Round Table Discussion presented at the New Zealand Association for Research in Education (NZARE 2013) Conference, Creativity in Research: Generative Inquiries for Educational Futures, University of Otago, Dunedin, New Zealand.

2014:

Thomas, H. G. (2014, July). *Mindful English Language Teaching (Mindful-ELT/ MELT)*. Workshop presented at the 14th National Conference for Community Languages and ESOL Conference (CLESOL), Victoria University of Wellington, Wellington, New Zealand.

Thomas, H. G. (2014, August). *Mindful English Language Teaching (Mindful-ELT/ MELT)*. Invited Workshop presented at the Manawatu Teaching English to Speakers of Other Languages (ManaTESOL) Community Day, Palmerston North, New Zealand.

2015:

Thomas, H. G. (2015, November). *Contemplative education and diversity: Reports from a nation-wide study of tertiary teachers*. Paper presented at the 4th International Language, Education and Diversity (LED 2015) Conference, University of Auckland, Auckland, New Zealand.

Thomas, H. G. (2015, November). *What Plato, Buddha, St. Teresa, medicine and neuroscience can offer tertiary writing teachers*. Paper presented at the 14th International Symposium on Second Language Writing, Learning to Write for Academic Purposes, AUT University, Auckland, New Zealand.

2016:

Thomas, H. G. (2016, July). *Freewriting: Bridging gaps between inner voice and outward expression*. 5-minute idea presented at the 15th National Conference for Community Languages and ESOL Conference (CLESOL 2016), University of Waikato, Hamilton, New Zealand

Thomas, H. G. (2016, July). *Peaceful approaches to traditional tasks: Bridging interpersonal gaps*. Workshop presented at the 15th National Conference for Community Languages and ESOL Conference (CLESOL), University of Waikato, Hamilton, New Zealand.

2016:

Thomas, H. G. (2016, October). *"Not knowing" in Aotearoa New Zealand*. Poster session presented at the 8th Annual Association for Contemplative Mind in Higher Education (ACMHE) Conference, Transforming Higher Education: Fostering Contemplative Inquiry, Community, and Social Action, University of Massachusetts Amherst, Amherst, MA.

2017:

Thomas, H.G. (2017, March). *Contemplative teaching across the disciplines in Aotearoa New Zealand: A Mixed Methods study*. Paper presented at ManaTESOL Symposium, Palmerston North, New Zealand.

Thomas, H.G. (2017, August). *Pedagogies of presence: Contemplative teaching across the disciplines in Aotearoa New Zealand*. Paper presented at IPU Staff Research Day, Institute of the Pacific United New Zealand, Palmerston North, New Zealand.

Thomas, H. G. (2017, November). Attention-enhancing pedagogies for focus, connection, and critical thinking. *Proceedings of the Tertiary Education Research New Zealand (TERNZ) Conference*. Massey University, Palmerston North, New Zealand.

2019:

Thomas, H. G. (2019, January). *Contemplative pedagogy and practice across the disciplines in Aotearoa New Zealand*. Paper presented at the Professional and Continuing Education National Staff Conference, Massey University, Palmerston North, New Zealand.

Thomas, H. G. (2019, February). *Calm, caring, critical, and creative: Mindfulness framings across the disciplines in Aotearoa New Zealand*. Paper presented at the International Conference on Mindfulness Asia Pacific, AUT University, Auckland, New Zealand.

Thomas, H. G. (2019, February). *Mindful English Language Teaching (MELT): Foundations and practice*. Poster session presented at International Conference on Mindfulness Asia Pacific, AUT University, Auckland, New Zealand.

Thomas, H. G. (2019, December). *Reconceptualising Mixed Methods Sequential Explanatory Design for Critical Realism*. Poster session presented at the Inaugural Australasia and Pacific Regional Mixed Methods International Research Association Conference on Expanding Conceptual and Methodological Boundaries, Massey University, Wellington, New Zealand. [Best Poster Award]

Thomas, H. G. (2019, December). *What is and is not: Dialectic in a Critical Realist Mixed Methods Sequential Explanatory study of contemplative academic educators*. Paper presented at Inaugural Australasia and Pacific Regional Mixed Methods

International Research Association Conference on Expanding Conceptual and Methodological Boundaries, Massey University, Wellington, New Zealand.

Chapter 5: APPENDIX

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Appendix 5.3: Significant Differences between Groups on Responses to Survey Questions

Table A5.3.1: Gender, statistically significant differences in survey responses, shown by results of Independent-Samples Mann-Whitney *U* Tests, ($p = .05$)

Table A5.3.2: Contemplative practice or no reported regular contemplative practice, statistically significant differences in survey responses, showing results of Independent-Samples Mann-Whitney *U* Tests, ($p = .05$)

Table A5.3.3: Age groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with *post hoc* Dunn's-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Table A5.3.4: Ethnic groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with *post hoc* Dunn's-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Table A5.3.5: Disciplinary groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with *post hoc* Dunn's-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Table A5.3.6: Position groups, statistically significant differences between

responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with *post hoc* Dunn's-Bonferroni adjustment and pairwise comparisons, in SPSS 24, ($p = .05$)

- Table A5.3.7: Gender, significant differences in responses, as shown by *Chi*-square test of independence ($p = .05$)
- Table A5.3.8: Contemplative practice reported and not reported, significant differences in responses, as shown by *Chi*-square test of independence ($p = .05$)
- Table A5.3.9: Academic discipline, significant differences in responses, by discipline, shown by *Chi*-square test of independence, ($p = .05$)

A5.1 Demographic and Teaching Characteristics Tables

Table A5.1.1: Demographic characteristics of respondents (Questions 6-9)

CHARACTERISTIC:	Count	Percent
GENDER		
Female	152	60.3%
Male	100	39.7%
Total	252	100.0%
Missing	6	
AGE GROUP		
under 30	4	1.6%
30-49	108	43.2%
50-59	86	34.4%
60-64	37	14.8%
65 and over	15	6.0%
Total	250	100.0%
Missing	8	
ETHNICITY (Responses)		
European	230	84.2%
Asian	18	6.6%
Maori	14	5.1%
Pacific Peoples	6	2.2%
Other	5	1.8%
Subtotal	273	100.0%
Total	256	
Missing	2	
Note: Some respondents as some identified with more than one choice.		
RELIGIOUS IDENTIFICATION (Responses)		
No Religion	100	37.6%
Christian	74	27.8%
Spiritual not Religious	29	10.9%
Christian, Catholic	24	9.0%
Buddhist	21	7.9%
Other	18	6.8%
Subtotal	266	100.0%
Total	235	
Missing	23	
Note: Some respondents identified with more than one choice.		
RELIGION REPORTED / NOT REPORTED (Respondents)		
Religion(s)	135	57.4%
No Religion	100	42.6%
Total	235	100.0%
Missing	23	
TOTAL	258	

Table A5.1.2: Demographic characteristics of respondents reporting and not reporting a contemplative practice

CHARACTERISTIC	Count	Percent
GENDER		
CONTEMPLATIVE PRACTICE REPORTED		
Female	85	68.0%
Male	40	32.0%
Subtotal	125	100.0%
CONTEMPLATIVE PRACTICE NOT REPORTED*		
Female	66	52.0%
Male	61	48.0%
Subtotal	127	100.0%
Missing gender response	6	
AGE GROUP		
CONTEMPLATIVE PRACTICE REPORTED		
Under 30	2	1.6%
30-49	46	37.4%
50-59	45	36.6%
60-64	21	17.1%
65 and over	9	7.3%
Subtotal	123	100.0%
CONTEMPLATIVE PRACTICE NOT REPORTED*		
Under 30	2	1.6%
30-49	61	48.4%
50-59	41	32.5%
60-64	16	12.7%
65 and over	6	4.8%
Subtotal	126	100.0%
TOTAL	249	
Missing	9	

Note*: Data includes 7 respondents who skipped the question.

Note: Data for gender, age, or practice could be missing for the 128 respondents reporting a contemplative practice.

Table A5.1.3: Demographic characteristics of respondents compared to all NZ university educators

CHARACTERISTIC	Survey Respondents		All NZ University Educators	
	Count	Percent	Count	Percent
GENDER				
Female	152	60.3%	4,750	47.2%
Male	100	39.7%	5,305	52.8%
Total	252	100.0%	10,055	100.0%
Missing	6	2.4%		
TOTAL	258			
$\chi^2 (1, N = 252) = 17.291, p < .001$				
AGE GROUP	Count	Percent	Count	Percent
under 30	4	1.6%	1,305	13.1%
30-49	108	43.2%	4,315	43.2%
50-59	86	34.4%	2,480	24.8%
60-64	37	14.8%	1,030	10.3%
65 and over	15	6.0%	860	8.6%
Total	250	100.0%	9,990	100.0%
Missing	8	3.2%		
TOTAL	258			
$\chi^2 (4, N = 250) = 41.245, p < .001$				
ETHNICITY	Count	Percent	Count	Percent
European	227	88.7%	6,385	69.2%
Maori	10	3.9%	500	5.4%
Pasifika	2	0.8%	200	2.2%
Asian	14	5.5%	1,240	13.4%
Other	3	1.2%	900	9.8%
Total	256	100.0%	9,225	100.0%
Missing	2		830	
TOTAL	258		10,055	
$\chi^2 (4, N = 256) = 48.799, p < .001$				
Note: Dark and light shading shows differences significant with Bonferroni correction ($p = .005$)				

Table A5.1.4: Teaching characteristics of respondents (Questions 1-5)

TEACHING CHARACTERISTICS OF RESPONDENTS			
CHARACTERISTIC:	Count		Percent
SUBJECT			
Sciences	74		28.8%
Humanities	72		28.0%
Education	41		16.0%
Social Sciences	38		14.8%
Business	32		12.5%
Total	257		100.0%
Missing	1		
POSITION			
Professor	16		6.3%
Associate Professor	23		9.1%
Senior Lecturer	96		38.1%
Lecturer	47		18.7%
Other Academic Staff	70		27.8%
Total	252		100.0%
Missing	6		
YEARS TERTIARY TEACHING			
1 to 5	42		16.4%
6 to 10	54		21.1%
11 to 15	50		19.5%
16-25	74		28.9%
26 or more	36		14.1%
Total	256		100.0%
Missing	2		
TYPE OF COURSES			
Undergraduate	229		97.4%
Postgraduate	176		74.9%
Professional	35		14.9%
English Language & Bridging	15		6.4%
Other	11		4.7%
Total	235		100.0%
Missing	23		
Note: The total number of responses exceeds the number of respondents as some identified with more than one choice.			
TOTAL	258		

Table A5.1.5: Academic disciplines of respondents

SUBJECTS	Count	Percent
Education	41	15.9%
Medicine	17	6.6%
English Language Teaching & Bridging	15	5.8%
Psychology	15	5.8%
Creative & Fine Arts	11	4.3%
Design	10	3.9%
Management	10	3.9%
Veterinary Studies	10	3.9%
Communication	8	3.1%
Engineering	8	3.1%
Social Work	7	2.7%
Environmental Studies	5	2.0%
Economics	5	1.9%
Geography	5	1.9%
Nursing & Health Studies	5	1.9%
Accounting	4	1.6%
Computer Studies	4	1.6%
Engineering	4	1.6%
Finance	4	1.6%
Mathematics & Statistics	4	1.6%
Anthropology	3	1.2%
Aviation	3	1.2%
Dentistry	3	1.2%
Student learning	3	1.2%
Total	204	79.1%
Respondents in subjects with 1 or 2 respondents	53	20.5%
Missing	1	0.4%
TOTAL:	258	100.0%

Table A5.1.6: College/Unit of respondents compared to all educators at each university

UNIVERSITY ONE				
COLLEGE/UNIT	Respondents		All University One	
Business	23	13.1%	202	18.2%
Creative Arts	16	9.1%	100	9.0%
Health	7	4.0%	140	12.6%
HumSocSci incl. Ed.	96	54.9%	299	27.0%
Sciences	33	18.9%	368	33.2%
Total	175		1,109	
Missing	3			
TOTAL	178			
$\chi^2 (4, N = 175) = 74.118, p < .001$				
UNIVERSITY TWO				
COLLEGE/UNIT	Respondents		All University Two	
Commerce	1	2.4%	118	9.9%
Health	5	12.2%	502	42.3%
Humanities	9	22.0%	308	25.9%
Sciences	26	63.4%	260	21.9%
Total	41		1,188	
Missing	1			
TOTAL	42			
$\chi^2 (3, N = 41) = 43.645, p < .001$				
<p>Note 1: Dark and light shading shows significant differences with Bonferroni correction ($p = .005$)</p> <p>Note 2: HumSocSci = Humanities and Social Sciences, including Education</p> <p>Note 3: University One numbers are based on Full-Time-Equivalents (FTE).</p> <p>Note 4: University Two College staff numbers were derived from staff student ratios reported in the annual report.</p>				

Appendix 5.2 Beliefs, Experiences, and Teaching Results

Table A5.2.1: Potential impact of teaching approach on student outcomes

QUESTION 11:

In your view, how much can the way we teach at university affect the following outcomes for students?

IMPORTANCE OF TEACHING APPROACH FOR STUDENT OUTCOMES:	Count (<i>n</i> = 254)	Median (<i>Mdn</i>) 1-5	Inter-Quartile Range (<i>IQR</i>)
Critical thinking	253	5	1(4-5)
Engagement with important issues	254	4	1(4-5)
Ability to focus attention	253	4	1(4-5)
Creativity	252	4	2(3-5)
Acceptance of diversity	252	4	2(3-5)
Ability to cope with study stress	254	4	1(3-4)

Answers: Not at all (1), A little (2), Moderately (3), Quite a lot (4), Very much (5)

Table A5.2.2: Degree to which holistic aspects should be incorporated in teaching

QUESTION 12:

In your view, to what degree should university teaching incorporate the following aspects?

HOLISTIC ASPECT	Count (<i>n</i> = 243)	Median (<i>Mdn</i>) 1-5	Inter-Quartile Range (<i>IQR</i>)
Mental/emotional (Taha hinengaro)	240	4	2(3-5)
Family/social (Taha whānau)	238	3	2(2-4)
Physical (Taha tinana)	239	3	2(2-4)
Spiritual (Taha wairua)	233	3	2(2-4)

Answers: Not at all (1), To a slight degree (2), To a moderate degree (3), To quite a high degree (4), To a very great degree (5)

Table A5.2.3: Reported importance of reflective practice in subject discipline of respondents

QUESTION 13:
How important is the concept of reflective practice in your discipline?

REFLECTIVE PRACTICE	Count (n = 249)	Median (Mdn) 1-5	Inter- Quartile Range (IQR)
Reflective practice	249	5	1(4-5)

Answers: Not at all important (1), Slightly important (2), Moderately important (3), Quite important (4), Very important (5)

Table A5.2.4: Perceived reasons for the increased popularity of contemplative education and mindfulness at universities

QUESTION 14:
Use of Contemplative Education and mindfulness seems to have increased recently in universities. Following are listed some reasons which have been suggested for this. How important do you think the listed reasons are?

CAUSES OF GROWING POPULARITY OF MINDFULNESS AT UNIVERSITIES:	Count (n = 228)	Median (Mdn) 1-5	Inter- Quartile Range (IQR)
It is a calming response to the increased stress levels in modern life	221	4	1(3-4)
It is an attempt to reclaim control over our personal attention	219	4	1(3-4)
It is a response to digital distraction	216	3	2(2-4)
It is a spin-off from the success of mindfulness-based approaches in psychology and medicine	217	3	2(2-4)
It is a response to the decline in participation in organised religion	215	2	2(1-3)
It is a fad driven by media coverage of mindfulness	214	2	2(1-3)

Answers: Not at all important (1), Slightly important (2), Moderately important (3), Quite important (4), Very important (5)

Table A5.2.5: Respondent reported experience of flow

QUESTION 16:
 How often do you experience flow (a state of concentrated attention where you lose track of time) through doing everyday activities or hobbies such as jogging, DIY, crafts, gardening, or other?

FLOW	Count (n = 258)	Median (Mdn) 1-5	Inter-Quartile Range (IQR)
Frequency of experience of flow	246	3	2(2-4)

Table A5.2.6: Navigation question on presence or absence of reported contemplative practice

NAVIGATION QUESTION 24
 Do you have a personal mindfulness or contemplative practice of any kind?

Response	Count	Percent
Yes	128	51.0%
No	123	49.0%
Total	251	100.0%
Missing	7	
TOTAL	258	

Table A5.2.7: Influence of contemplative practice on teaching

QUESTION 26:
 How much, if at all, do you think that your personal contemplative or mindfulness practice has influenced the following aspects of your teaching?

ASPECTS INFLUENCED:	Count (n = 128)	Median (1-5)	Inter- Quartile Range (IQR)
Ability to leave outside stresses behind and focus on teaching	119	4	2(3-5)
Ability to be present to my teaching and students	117	4	2(3-5)
Ability to create an accepting space for learning	117	4	2(3-5)
Ability to communicate with students	120	4	2(3-5)

Answers: Not at all (1), A little (2), Moderately (3), Quite a lot (4), Very much (5)

Table A5.2.8: Motivations for use of mindful and contemplative teaching methods

QUESTION 29:
How significant have the following motivations for the use of mindfulness or contemplative methods been in your teaching?

MOTIVATIONS:	Count (n = 128)	Median (1-5)	Inter- Quartile Range (IQR)
To foster creativity	81	4	2(3-5)
To be transformative in the personal lives of students	77	4	2.5(2.5-5)
To help students to focus	90	4	3(2-5)
To inspire students to activism, for example, for environmental or social justice causes	77	3	3(1-4)
To help students to deal with stress	73	3	3(2-5)
To help students to connect with nature, thereby increasing environmental awareness	71	3	3(1-4)

Answers: Not at all significant (1), Slightly significant (2), Moderately significant (3), Quite significant (4), Very significant (5)

Table A5.2.9: Perceived student experiences when contemplative teaching methods are used

QUESTIONS 30 & 31:
 In your experience, when contemplative or mindful teaching methods are used, how strongly do students seem to experience any of the following?

STUDENT EXPERIENCES	Count (n = 128)	Median (Mdn) (1 to 5)	Inter-Quartile Range (IQR)
Increased presence or engagement	79	4	1(3-4)
Greater effectiveness in group-work	78	4	4(0-4)
Greater acceptance of diversity	77	3	4(0-4)
Transformative insight	78	3	4(0-4)
Reduced stress over assignments or exams	78	2	3(0-3)
Discomfort	66	2	1(2-3)
Amusement	65	2	1(1-2)
Hostility or resistance	63	2	1(1-2)
Psychological distress	54	1	1

Answers: Not at all (1), Slightly (2), Moderately strongly (3), Quite strongly (4), Very strongly (5)

Table A5.2.10: Perceived impact of contemplative pedagogy on student achievement

QUESTION 33:
 In what way do you think the use of mindful or contemplative methods affects student academic achievement?

EFFECT ON ACHIEVEMENT	Count (n = 128)	Median (Mdn) (-2 To +2)	Inter- Quartile Range (IQR)
EFFECT ON ACADEMIC ACHIEVEMENT	85	1	2(0-2)

Answers: Can have a very negative impact (-2), Can have a slightly negative impact (-1), Neither helps nor harms (0), Improves it somewhat (1), improves it a great deal (2)

Table A5.2.11: Reported difficulties in developing lessons using mindful or contemplative methods

QUESTION 32:
 If applicable, how difficult have you found the following when developing lessons using mindful or contemplative methods?

	Count (<i>n</i> = 128)	Median (<i>Mdn</i>) (1 to 5)	Inter-Quartile Range (<i>IQR</i>)
Finding or making appropriate materials	64	2	2(1-3)
Drawing a line between secular practice and the religious origins or many practices	63	1	2(1-2.5)
Finding class time	65	3	3(1-4)
Deciding whether and how to assess student participation	59	2	3(1-3.5)

Answers: Not at all (1), A little (2), Moderately (3), Quite a lot (4), Very much (5)

Table A5.2.12: Influences on decisions to use contemplative teaching methods

QUESTION 34:
Thinking of your decisions to use or not use mindful or contemplative teaching methods, how much, were you influenced by the following potential concerns?

CONCERNS	Count (<i>n</i> = 128)	Median (<i>Mdn</i>) (1 to 5)	Inter- Quartile Range (<i>IQR</i>)
Concern that students would resist	91	3	3(1-4)
Concern that religious origins of some practices would not be acceptable to some	86	2	3(1-4)
Concern whether I was qualified to use mindful/contemplative teaching methods	90	2	3(1-4)
Concern that superiors or institutions would disapprove	89	2	3(1-4)
Concern that the secularisation of some practices would offend some students	86	2	2(1-3)
Concern that colleagues would disapprove	89	1	2(1-3)

Answers: Not at all (1), A little (2), Moderately (3), Quite a lot (4), Very much (5)

Table A5.2.13: Support received implementing contemplative or mindful teaching

QUESTION 36:
How much support from colleagues or other practitioners have you had in adopting and implementing contemplative or mindful methods?

SUPPORT RECEIVED	Count (<i>n</i> = 128)	Median (<i>Mdn</i> (1 to 5))	Inter- Quartile Range (<i>IQR</i>)
AMOUNT OF SUPPORT	90	2	2(1-3)

Answers: None (1), A little (2), A moderate amount (3), Quite a lot (4), A great deal (5)

Table A5.2.14: Support that would be helpful in implementing contemplative or mindful teaching methods

QUESTION 37:
How much do you think the following would help you in your adoption and implementation of mindful or contemplative methods in your teaching?

SUPPORT NEEDED	Count (<i>n</i> = 128)	Median (<i>Mdn</i> (1 to 5))	Inter-Quartile Range (<i>IQR</i>)
Support from like-minded educators	93	4	2(3-5)
Training in teaching methods	92	4	3(2-5)
Availability of model curricula, materials, and activities	90	4	3(2-5)
Support from colleagues	88	4	3(2-5)
Opportunity to develop a stronger personal contemplative practice	93	3	3(2-4)

Answers: Not at all (1), A little (2), Moderately (3), Quite a lot (4), Very much (5)

Appendix 5.3 Significant Differences between Groups on Responses to Survey Questions

Table A5.3.1: Gender, statistically significant differences in survey responses, shown by results of Independent-Samples Mann-Whitney U Tests, ($p = .05$)

Survey Question	<i>n</i>	Mann-Whitney U Test	Significance	Standardised Test Statistic	Female Median	Female IQR	Male Median	Male IQR	Effect Size (<i>r</i>) ¹
<i>Holistic Teaching</i>									
• Family & Social	233	$U = 4,596.000$	$p < .001$	-3.880	4	1(3-4)	3	2(2-4)	0.25 Small
• Spiritual	228	$U = 4,523.000$	$p < .001$	-3.600	3	2(2-4)	2	2(1-3)	0.24 Small
Reflective Practice importance	243	$U = 5,650.500$	$p = .003$	-2.959	5	1(4-5)	4	2(3-5)	0.19 Small
<i>Reasons for Increased Popularity of Mindfulness:</i>									
• Stress reduction	218	$U = 4,591.000$	$p = .021$	-2.312	4	2(3-5)	3	2(2-4)	0.16 Small
• Response to digital distraction	213	$U = 4,490.500$	$p = .030$	-2.169	4	1(3-4)	3	2(2-4)	0.15 Small
<i>Training and Experience</i>									
• Flow	241	$U = 5,000.500$	$p < .001$	-3.751	4	1(3-4)	3	3(2-4)	-0.24 Small
<i>Influence of Contemplative Practice on Teaching</i>									
• Leaving stress behind	116	$U = 1,079.000$	$p = .017$	-2.396	4	1(4-5)	4	1(3-4)	0.22 Small
• Ability to be present to teaching & students	76	$U = 317.000$	$p = .003$	-2.261	4	1(4-5)	4	2(3-5)	0.21 Small
• Creating accepting space	114	$U = 1,052.000$	$p = .025$	-2.245	4	2(3-5)	3	3(2-5)	0.21 Small
<i>Motivations for using Contemplative Methods</i>									
• Focus	76	$U = 338.000$	$p = .007$	-2.702	4	2(3-5)	3	2.75(1.25-4)	0.31 Medium
• Stress management or reduction	71	$U = 317.000$	$p = .012$	-2.522	4	3(2-5)	2.5	2(1-3)	0.30 Medium

Note: Effect size is calculated as ($r = z / \sqrt{N}$); interpreted as: $\geq .10$ small, $\geq .30$ medium, $\geq .50$ large

Table A5.3.2: Contemplative practice or no reported regular contemplative practice, statistically significant differences in survey responses, showing results of Independent-Samples Mann-Whitney U Tests, ($p = .05$)

Survey Question	<i>n</i>	Mann-Whitney <i>U</i> Test	Significance	Std Test Statistic	Practice Mdn	Practice IQR	No Practice Mdn	No Practice IQR	Effect Size (<i>r</i>) ¹
<i>Educator potential impact on student learning outcomes:</i>									
• Acceptance of diversity	245	$U = 6,171.500$	$p = .012$	-2.512	4	1(4-5)	4	2(3-5)	-0.16 Small
<i>Holistic Teaching</i>									
• Mental/ Emotional	234	$U = 5,231.500$	$p = .001$	-3.261	4	1(4-5)	4	1(3-4)	-0.21 Small
• Family & Social	232	$U = 5,305.500$	$p = .001$	-2.871	3.5	1(3-4)	3	2(2-4)	-0.19 Small
• Spiritual	227	$U = 4,278.500$	$p < .001$	-4.480	3	2(2-4)	2	2(1-3)	-0.30 Medium
Reflective Practice importance	243	$U = 6,080.500$	$p = .021$	-2.572	5	1(4-5)	4	2(3-5)	-0.16 Small
<i>Reasons for Increased Popularity of Mindfulness:</i>									
• Stress reduction	216	$U = 3,920.500$	$p < .001$	-4.281	4	2(3-5)	3	2(2-4)	-0.29 Small
• To reclaim attention	214	$U = 3,891.500$	$p < .001$	-4.188	4	1(3-4)	3	2(2-4)	-0.29 Small
• Response to digital distraction	211	$U = 4,208.500$	$p = .002$	-3.142	4	1(3-4)	3	2(2-4)	-0.22 Small
• Mindfulness research	213	$U = 4,184.000$	$p = .002$	-3.432	3.5	1(3-4)	3	2(2-4)	-0.24 Small
• Decline in religion	211	$U = 4,129.500$	$p = .001$	-3.414	2	2(1-3)	1	2(1-3)	-0.24 Small

Note 1: Effect size is calculated as ($r = z / \sqrt{N}$); interpreted as: .01 < .30 (Small); .30 < .50 (Medium); .50 < 1.0 (Large)

Note 2: Where Medians are equal, the significant difference is the IQR

Table A5.3.3: Age groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with post hoc Dunn’s-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ϵ^2)	Pairwise Comparisons of Groups Showing Significant Differences					
				Age Groups	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r)
<i>Potential impact on learning outcomes:</i>									
• Attention	246	$H(4) = 12.598, (p = .013)$	0.05 Moderate	30-39 and 50-59	4 5	1(4-5) 1(4-5)	-3.175	.015	-0.20 Small
<i>Holistic Teaching:</i>									
• Spiritual	227	$H(4) = 14.243, (p = .007)$	0.06 Moderate	30-49 & 60-64	2 4	1(2-3) 2(2-4)	-2.935	.033	-0.19 Small
	227			50-59 & 60-64	2.5 4	1.25(1.75-3) 2(2-4)	-2.829	.047	-0.19 Small
<i>Reflective Practice</i>									
	242	$H(4) = 9.666, (p = .046)$	0.04 Moderate	>30 30-49 50-59 60-64 65+	3 4 5 5 5	2.25(2.25-4.5) 2(3-5) 1(4-5) 1(4-5) 1(4-5)	NA	NA	

Note 1: Epsilon squared effect sizes are interpreted as follows: 0.00 < 0.01 (Negligible); 0.01 < 0.04 (Weak); 0.04 < 0.16 (Moderate); 0.16 < 0.36 (Relatively Strong); 0.36 < 0.64 (Strong); 0.64 < 1.00 (Very Strong) (Rea & Parker, 1992)

Note 2: Effect size r is calculated as ($r = z / \sqrt{N}$); interpreted as: .01 < .30 (Small); .30 < .50 (Medium); .50 < 1.0 (Large)

Table A5.3.4: Ethnic groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with post hoc Dunn’s-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ϵ^2) ¹	Pairwise Comparisons of Groups Showing Significant Differences					
				Ethnicity	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²
<i>Potential impact on learning outcomes:</i>									
• Critical thinking	251	$H(4) = 12.434, (p = .014)$	0.05 Moderate	Asian and European	4 5	1.5(3-25-4-75) 1(4-5)	3.272	.011	0.21 Small
<i>Holistic Teaching:</i>									
• Physical	237	$H(4) = 9.913, (p = .042)$	0.04 Moderate	European & Maori	3 4	2(2-4) 1(3-4)	-2.868	.041	-0.19 Small
<i>Perceived effects of personal contemplative practice</i>									
• Ability to communicate with students	120	$H(4) = 10.662, (p = .031)$	0.09 Moderate	European Maori Pasifika Asian	4 5 2.5 5	2(3-5) 1(4-5) .5(2-2.5) 0(5-5)	NA	NA	NA
<i>Motivations for using Contemplative Methods:</i>									
• Group-work effectiveness	78	$H(4) = 9.813, (p = .044)$	0.13 Moderate	European Maori Pasifika Asian	3 4.5 4 4	4(0-4) 1(4-5) 1(3-4) 2(2.25-4.25)	NA	NA	NA

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ϵ^2) ¹	Pairwise Comparisons of Groups Showing Significant Differences								
				Ethnicity	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²			
• Materials development/ availability	64	$H(4) = 9.489, (p = .050)$	0.15 Moderate	European	1	2(1-3)	NA	NA	NA			
				Maori	2.5	1(2-3)						
				Pasifika	1.5	.5(1-1.5)						
				Asian	3	2.25(2-4.25)						
• Secular/ religious confusion	63	$H(4) = 14.629, (p = .006)$	0.236 Relatively Strong	Maori & Asian	1 5	1(2-3) 1.5(3.5-5)	-3.188	.014	-0.40 Medium			
	63			European & Asian	1 5	1.25(1-2.25) 1.5(3.5-5)				-3.006	.003	-0.38 Medium
• Religious origins	86	$H(4) = 11.936, (p = .018)$	0.140 Moderate	Maori & Asian	1 5	.75(1-1.75) 3(2-5)	-2.981	.029	-0.32 Medium			
				European & Asian	2 5	3(1-4) 3(2-5)				-2.855	.043	-0.31 Medium
				European & Asian	1 5	2(1-3) 3(2-5)						

Note 1: Epsilon squared effect sizes are interpreted as follows: 0.00 < 0.01 (Negligible); 0.01 < 0.04 (Weak); 0.04 < 0.16 (Moderate); 0.16 < 0.36 (Relatively Strong); 0.36 < 0.64 (Strong); 0.64 < 1.00 (Very Strong) (Rea & Parker, 1992)

Note 2: Effect size is calculated as $(r = z / \sqrt{N})$; interpreted as: .01 < .30 (Small); .30 < .50 (Medium); .50 < 1.0 (Large)

Table A5.3.5: Disciplinary groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with post hoc Dunn’s-Bonferroni adjustment, and pairwise comparisons, in SPSS 24, ($p = .05$)

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ϵ^2) ¹	Pairwise Comparisons of Groups Showing Significant Differences					
				Subject Discipline	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²
<i>Potential impact on learning outcomes:</i>									
• Attention	253	$H(4) = 11.649, (p = .020)$	0.05 Moderate	Sciences & Education	4	2(3-5) 1(4-5)	3.193	.014	0.20 Small
• Acceptance of diversity	252	$H(4) = 30.377, (p \leq .0001)$	0.12 Moderate	Sciences & Business	3.5 4	1(3-4) 1(4-5)	2.838	.045	0.18 Small
	252			Sciences & Education	3.5 5	1(3-4) 1(4-5)	4.684	<.001	0.29 Small
	252			Sciences & Humanities	3.5 4	1(3-4) 2(3-5)	3.777	.002	0.24 Small
	252			Sciences & Social Sciences	3.5 4	1(3-4) 1(4-5)	-3.979	.001	-0.25 Small
<i>Holistic Teaching:</i>									
• Physical	239	$H(4) = 10.508, (p = .033)$	0.04 Moderate	Business	3	1(2-3)			
				Education	3	1(3-4)			
				Humanities	3	2(2-4)	NA	NA	NA
				Sciences	3	2(2-4)			
				Social Sciences	3	1(3-4)			
• Mental/ Emotional	240	$H(4) = 9.779, (p = .044)$	0.04 Moderate	Business	4	2(3-5)			
				Education	4	1(4-5)			
				Humanities	4	2(3-5)	NA	NA	NA
				Sciences	4	1(3-4)			
				Social Sciences	4	2(3-5)			

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ε²) ¹	Pairwise Comparisons of Groups Showing Significant Differences					
				Subject Discipline	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²
• Family & Social	238	H(4) = 15.774, (p = .003)	0.07 Moderate	Sciences & Education	3 4	2(2-4) 1(3-4)	3.491	.005	0.23 Small
• Spiritual	233	H(4) = 16.835, (p = .002)	0.07 Moderate	Sciences & Education	2 3	2(1-3) 2(2-4)	3.424	.006	0.22 Small
<i>Reflective Practice</i>	249	H(4) = 32.463, (p = .000)	0.13 Moderate	Sciences & Social Sciences	4 5	2(3-5) 1(4-5)	-3.101	.019	-0.20 Small
	249			Sciences & Education	4 5	2(3-5) 0(5-5)	5.401	.000	0.34 Medium
	249			Business & Education	4 5	2(3-5) 0(5-5)	-3.626	.003	-0.23 Small
	249			Humanities & Education	4 5	1(4-5) 0(5-5)	3.572	.004	0.23 Small
	<i>Increased Popularity of Mindfulness:</i>				Business Education	4 3	1(3-4) 2(2-4)	NA	NA
• Response to digital distraction	217	H(4) = 11.722, (p = .020)	0.05 Moderate	Humanities Sciences	4 3	1(3-4) 2(2-4)	NA	NA	NA
• Decline in religion	215	H(4) = 13.668, (p = .008)	0.06 Moderate	Social Sciences	4	1.5(2.5-4)			
<i>Motivations for using Contemplative Methods:</i>				Sciences & Humanities	1 2	1.25(1-2.5) 2(1-3)	3.393	.007	0.23 Small
				• Creativity	81	H(4) = 13.823, (p = .008)	0.02 Weak	Sciences & Humanities	3 4

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ε ²) ¹	Pairwise Comparisons of Groups Showing Significant Differences					
				Subject Discipline	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²
• Activism <i>Influences in decisions to use methods</i>	77	H(4) = 10.931, (p = .027)	0.14 Moderate	Sciences & Social Sciences	1 4	2(1-3) 3(2-5)	-2.878	.040	-0.33 Medium
• Institutional disapproval	89	H(4) = 16.263, (p = .003)	0.19 Relatively Strong	Social Sciences & Business	1 4	1(1-2) 3(2-5)	3.505	.005	0.37 Medium
	89			Sciences & Business	1 4	2(1-3) 3(2-5)	3.320	.009	0.35 Medium
	89			Education & Business	1 4	2(1-3) 3(2-5)	3.169	.015	0.34 Medium
	89			Humanities & Business	1 4	3(1-4) 3(2-5)	3.214	.013	0.34 Medium

Note 1: Epsilon squared effect sizes are interpreted as follows: 0.00 < 0.01 (Negligible); 0.01 < 0.04 (Weak); 0.04 < 0.16 (Moderate); 0.16 < 0.36 (Relatively Strong); 0.36 < 0.64 (Strong); 0.64 < 1.00 (Very Strong) (Rea & Parker, 1992).

Note 2: Effect size is calculated as (r = z/ √N); interpreted as: .01 < .30 (Small); .30 < .50 (Medium); .50 < 1.0 (Large)

Table A5.3.6: Position groups, statistically significant differences between responses to Likert-type survey questions, shown by Independent-Samples Kruskal Wallis tests with post hoc Dunn’s-Bonferroni adjustment and pairwise comparisons, in SPSS 24, ($p = .05$)

Survey Item	n	Kruskall Wallis (H)	Effect Size: Epsilon Squared (ϵ^2) ¹	Pairwise Comparisons of Groups Showing Significant Differences					
				Groups	Median (Mdn)	Inter-Quartile Range (IQR)	Std. Test Statistic	Adj. Significance	Effect Size of Significant Pairwise Comparison (r) ²
<i>Holistic Teaching:</i>									
• Family & Social	235	$H(4) = 14.437, (p = .006)$	0.0620 Moderate	Professor & Other	2.5 4	1.25(2-3.5)	-3.140	.017	-0.20 Small
	235			Senior Lecturer & Other	3 4	2(2-4) 2(3-5)	-2.989	.028	-0.19 Small
<i>Reasons for Increased Popularity of Mindfulness:</i>									
• To reclaim attention	217	$H(4) = 20.323, (p = .000)$	0.094 Moderate	Professor & Senior Lecturer	2 4	2(1-3) 2(2-4)	-3.075	.024	-0.21 Small
	217			Professor & Lecturer	2 4	2(1-3) 2(3-5)	-3.652	.003	-0.25 Small
	217			Professor & Other	2 4	2(1-3) 1(3-4)	-4.185	.000	-0.28 Small
• Response to digital distraction	214	$H(4) = 11.718, (p = .020)$	0.055 Moderate	Professor & Other Staff	2 4	2(1-3) 1(3-4)	-2.924	.035	-0.20 Small

Note 1: Epsilon squared effect sizes are interpreted as follows: 0.00 < 0.01 (Negligible); 0.01 < 0.04 (Weak); 0.04 < 0.16 (Moderate); 0.16 < 0.36 (Relatively Strong); 0.36 < 0.64 (Strong); 0.64 < 1.00 (Very Strong) (Rea & Parker, 1992)

Note 2: Effect size is calculated as ($r = z / \sqrt{N}$); interpreted as: .01 < .30 (Small); .30 < .50 (Medium); .50 < 1.0 (Large)

Table A5.3.7: Gender, significant differences in responses, as shown by Chi square test of independence ($p = .05$)

Survey Item	Chi-Square Test (χ^2)	Female n (%)	Female Expected Count	Male n (%)	Male Expected Count	Effect Size: Cramer's V
<i>Experience or Training in Contemplative Practices</i>						
<ul style="list-style-type: none"> Personal development goal setting using methods such as visualization 	$\chi^2 (1, N = 241) = 7.384, (p = .007)$	60(45.5%)	50.3	25(27.5%)	34.7	.18 Small
<ul style="list-style-type: none"> Yoga 	$\chi^2 (1, N = 241) = 13.617, (p < .001)$	61(41.8%)	47.9	18(18.9%)	31.1	.24 Small
<i>Critical Thinking Methods</i>						
Perspective taking	$\chi^2 (1, N = 241) = 10.553, (p = .001)$	108(67.9%)	96.3	51(53.7%)	62.7	.21 Small
<i>Diversity Methods</i>						
Unlearning attitudes	$\chi^2 (1, N = 241) = 5.773, (p = .016)$	39(26.7%)	31.5	13(13.7%)	20.5	.16 Small
<i>Focusing Methods</i>						
<ul style="list-style-type: none"> Beginning with a karakia 	$\chi^2 (1, N = 241) = 7.221, (p = .007)$	27(18.5%)	20.	6(13.75%)	13	.17 Small
<ul style="list-style-type: none"> Leaving wait-time after asking a question 	$\chi^2 (1, N = 241) = 11.721, (p = .001)$	100(68.5%)	87.2	44(59.8%)	56.8	.22 Small
<ul style="list-style-type: none"> Building in silence for reflection 	$\chi^2 (1, N = 241) = 12.179, (p < .001)$	73(50%)	60	26(27.4%)	39	.23 Small
<ul style="list-style-type: none"> Encouraging students to sit with texts before analyzing 	$\chi^2 (1, N = 241) = 6.955, (p = .008)$	45(30.8%)	36.3	15(15.8%)	23.7	.17 Small

Note: the Cramer's V effect size for 1 degree of freedom is interpreted as follows: .10 < .30 (small); .30 < .50 (medium); .50 (large) (Kim, 2017)

Survey Item	Chi-Square Test (χ^2)	Female n (%)	Female Expected Count	Male n (%)	Male Expected Count	Effect Size: Cramer's V
<i>Reading and Writing Methods</i>						
• Reading contemplatively	$\chi^2 (1, N = 241) = 7.584, (p = .006)$	64(43.8%)	53.9	25(26.3%)	35.1	.18 Small
• Freewriting	$\chi^2 (1, N = 241) = 9.555, (p = .002)$	55(37.7%)	44.2	18(18.9%)	28.8	.20 Small
• Writing journals	$\chi^2 (1, N = 241) = 4.708, (p = .030)$	73(50.0%)	64.8	34(35.8%)	42.2	.14 Small
<i>Listening and speaking</i>						
Dialogue with deep listening	$\chi^2 (1, N = 241) = 15.564, (p < .001)$	69(47.3%)	54.5	21(22.1%)	35.5	.25 Small
Active listening (with stages of listening, reflecting back...)	$\chi^2 (1, N = 241) = 14.758, (p < .001)$	83(56.8%)	68.5	30(31.6%)	44.5	.25 Small
Do you have a personal contemplative or mindfulness practice of any kind?	$\chi^2 (1, N = 234) = 7.740, (p = .005)$	82(57.7%)	71.6	36(50.4%)	46.4	.18 Small
<i>Meditative methods used in teaching students</i>						
• Mindfulness meditation	$\chi^2 (1, n = 64) = 4.439, (p = .035)$	10(6.8%)	6.7	1(1.1%)	4.3	.14 Small
• Sensory input focus	$\chi^2 (1, n = 64) = 5.878, (p = .015)$	27(18.5%)	20.6	7(7.4%)	13.4	.16 Small
• Guided visualisation	$\chi^2 (1, n = 64) = 5.166, (p = .023)$	19(13.0%)	13.9	4(4.2%)	9.1	.15 Small

Note: the Cramer's V effect size for 1 degree of freedom is interpreted as follows: .10 < .30 (small); .30 < .50 (medium); .50 (large) (Kim, 2017)

Table A5.3.8: Contemplative practice reported or not reported, significant differences in responses as shown by Chi-square test of independence ($p = .05$)

Survey Item	Chi-Square Test (χ^2)	Practice n (%)	Practice Expected Count	No Practice n (%)	No Practice Expected Count	Effect Size: Cramer's V^1
<i>Critical Thinking Methods</i>						
Identifying and letting go of previously unexamined assumptions	$\chi^2 (1, N = 251) = 8.105, (p = .017)$	71(55.5%)	60.7	48(39.0%)	58.3	.18 Small
<i>Diversity Methods</i>						
Unlearning attitudes	$\chi^2 (1, N = 251) = 6.067, (p = .048)$	37(28.9%)	29.6	21(17.1%)	28.4	.16 Small
<i>Listening and speaking</i>						
Dialogue with deep listening	$\chi^2 (1, N = 251) = 7.700, (p = .006)$	67(52.3%)	56.1	43(35.0%)	53.9	.18 Small
Active listening (with stages of listening, reflecting back...)	$\chi^2 (1, N = 251) = 6.799, (p = .033)$	57(44.5%)	47.9	37(30.1%)	46.1	.17 Small

Note: the Cramer's V effect size for 1 degree of freedom is interpreted as follows: .10 < .30 (small); .30 < .50 (medium); .50 (large) (Kim, 2017)

Table A5.3.9: Academic discipline, significant differences in responses shown by Chi-square test of independence, ($p = .05$)

Survey Item	Chi-Square Test (χ^2)	Discipline 1 n (%)/(Standardized Residual) ¹	Expected Discipline 1 Count	Discipline 2 n (%)/(Standardised Residual) ¹	Expected Discipline. 2 Count	Effect Size: Cramer's V ²
<i>Critical Thinking Methods</i>						
<ul style="list-style-type: none"> Perspective- taking (looking at all sides of an issue or problem) 	$\chi^2 (4, N = 246) = 31.194, (p < .001)$	Humanities 58(86.6%) (2.0)	25.2	Sciences 32(44.4%) (-2.3)	47.7	.36 Large
<ul style="list-style-type: none"> Recognising contradictions that cannot be ironed out 	$\chi^2 (4, N = 246) = 16.575, (p = .002)$	Humanities 44(65.7%) (1.9)	33.0	Sciences 23(31.9%) (-2.1)	35.4	.26 Medium
<ul style="list-style-type: none"> Identifying and letting go of previously unexamined assumptions 	$\chi^2 (4, N = 246) = 15.542, (p = .004)$	Education 23(60.5%) (1.2) Humanities 39(58.2%) (1.4)	17.8 31.3	Sciences 21(29.2%) (-2.2)	33.7	.25 Large
<i>Focusing pedagogies</i>						
<ul style="list-style-type: none"> Beginning with a karakia 	$\chi^2 (4, N = 246) = 42.658, (p < .001)$	Education 14(36.8%) (3.7) Social Sciences 13(35.1%) (3.4)	5.4 5.3	Business 1(3.1%) (-1.7) Humanities 5(7.5%) (-1.5) Sciences 2(2.8%) (-2.6)	4.6 9.5 10.2	.42 Large

Survey Item	Chi-Square Test (χ^2)	Discipline 1 n (%)/(Standardized Residual) ¹	Expected Discipline 1 Count	Discipline 2 n (%)/(Standardised Residual) ¹	Expected Discipline. 2 Count	Effect Size: Cramer's V ²
• Building in silence for reflection	$\chi^2 (4, N = 246) = 23.284, (p < .001)$	Education 25(65.8%) (2.3)	15.9	Sciences 15(20.8%) (-2.8)	30.1	.31 Large
• Encouraging students to sit with texts or items before analyzing them	$\chi^2 (4, N = 246) = 12.810, (p = .012)$	Humanities 25(37.3%) (1.9)	17.2	Sciences 10(13.9%) (-2.0)	18.4	.23 Medium
<i>Physical</i>						
• Labs	$\chi^2 (4, N = 257) = 54.798, (p < .001)$	Sciences 46(62.2%) (5.1)	22.2	Education 5(12.2%) (-2.1) Humanities 11(15.3%) (-2.3) Business 4(12.5%) (-1.8)	12.3 21.6 9.6	.46 Large
<i>Reading and writing</i>						
• Reading contemplatively	$\chi^2 (4, N = 246) = 20.239, (p < .001)$	Education 19(50.0%) (1.3) Humanities 34(50.7%) (1.8)	14.2 25.1	Sciences 13(18.1%) (-2.7)	26.9	.29 Large

Survey Item	Chi-Square Test (χ^2)	Discipline 1 n (%) / (Standardized Residual) ¹	Expected Discipline 1 Count	Discipline 2 n (%) / (Standardised Residual) ¹	Expected Discipline. 2 Count	Effect Size: Cramer's V ²
• Freewriting	$\chi^2 (4, N = 246) = 20.675, (p < .001)$	Humanities 33(49.3%) (2.7)	20.7	Sciences 11(15.3%) (-2.4)	22.2	.29 Large
• Writing reflectively in response to an inquiry or problem	$\chi^2 (4, N = 246) = 32.791, (p < .001)$	Education 31(81.6%) (2.1)	21.5	Sciences 22(30.6%) (-2.9)	40.7	.37 Large
• Writing journals	$\chi^2 (4, N = 246) = 25.303, (p < .001)$	Humanities 44(65.7%) (1.0)	37.9	Sciences 18(25.0%) (-2.6)	32.8	.32 Large
<i>Diversity Methods</i>						
• Dialogue	$\chi^2 (4, N = 246) = 30.518, (p < .001)$	Education 28(73.7%) (2.6)	17.3	Sciences 15(20.8%) (-2.8)	30.7	.35 Large
• Unlearning attitudes	$\chi^2 (4, N = 246) = 16.568, (p = .002)$	Education 16(42.1%) (2.5)	8.7	Sciences 7(9.7%) (-2.3)	16.4	.26 Large
• Visits to culturally significant places	$\chi^2 (4, N = 246) = 14.530, (p = .006)$	Humanities 19(28.4%) (1.0)	15.3	Sciences 8(11.1%) (-1.8)	14.9	.24 Medium
		Education 14(36.8%) (2.2)	7.9			

Survey Item	Chi-Square Test (χ^2)	Discipline 1 n (%)/(Standardized Residual) ¹	Expected Discipline 1 Count	Discipline 2 n (%)/(Standardised Residual) ¹	Expected Discipline. 2 Count	Effect Size: Cramer's V ²
<i>Listening and dialogue</i>						
• Dialogue with deep listening	$\chi^2 (4, N = 246) = 22.224, (p < .001)$	Education 24(63.2%) (2.5)	14.5	Sciences 15(20.8%) (-2.4)	27.5	.30 Large
• Active listening	$\chi^2 (4, N = 246) = 19.029, (p = .001)$	Education 20(52.6%) (1.6)	13.9	Sciences 15(20.8%) (-2.2)	26.3	.27 Large

Note 1: The Discipline columns 1 and 2 show disciplines that were significantly different from each other. The residuals with an absolute value of 2 or greater, written in **bold**, show areas of greatest difference. Other differences may appear statistically significant because of the large sample size, but may lack practical significance.

Note 2: the Cramer's V effect size for Chi square test with 4 degrees of freedom is interpreted as follows: .05 < .15 (small); .15 < .25 (medium); .25 < (large) (Kim, 2017)

